Inpatient substance user's care and treatment: innovative guiding Principles for nurses

by

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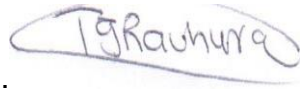
DECLARATION

I Grace Tshilidzi Ravhura, Student Number: 34092412, declare that:

INPATIENT SUBSTANCE USERS' CARE AND TREATMENT: INNOVATIVE GUIDING PRINCIPLES FOR NURSES

is my own work, and that all the sources that I have used or quoted have been indicated and acknowledge by means of complete references, and that this work has not been submitted before for any other degree at any other institution.

Signature: …  ……Date: …January 2020

ABSTRACT

Substances use is an increasing national concern. Various forms of harmful disorders have also been noted as posing a national health crisis. Against this background, the aim of the study was to explore, identify, describe and analyse inpatient substance addiction and its disorders, and to propose a relevant framework of principles to guide and improve nursing care in this regard.

The study adopted a combined mixed-methods research approach involving qualitative, quantitative, using convergent research design in order to maximise both the efficacy of the methods and sources of data collection and their concurrent analysis, as well as the eventual findings of the study, which was conducted at three substance addiction treatment centres in Gauteng Province.

The quantitative aspect of the study was facilitated by means of a comprehensive review and analysis of admission records belonging to 244 substance addicted inpatients at one of the selected three treatment centres. The quantitative variables reflected in the admission records represented the entire range of sociodemographic, help seeking, substance abuse history, family support, and medical and psychological characteristics of substance abusers. On the other hand, the study's qualitative aspect was facilitated by means of three (3) unstructured in-depth focus groups with selected nurses providing care to inpatient people addicted to substances. An investigation of 5 (five) inpatient treatment programmes at the self-same three treatment centres complemented the qualitative aspect of the study.

For the majority cases of occurrence/ frequency at the treatment centre from which 244 admission records were obtained, the quantitative findings revealed, among others, that the majority of inpatients (n=224, 91.8%) were Blacks; single (n=223, 90%); at secondary school (n=207, 84.8%); unemployed (n=232, 95.1%); with the heroin as the most abused substance by 88.9% (n=217) inpatients followed by cannabis (n=205, 83.6%). The most critical of these variables was that the majority of the inpatients (n=74, 30.5%) were those who had been substance abusing for 7-10 years. The implication is most young people were the most at-risk group as they started substance abuse during the adolescent stages of their live, which increased the chances of progressing to substance abuse disorders and poor mental health.

Meanwhile, the qualitative findings derived from the focus group discussions with the nurses and the five treatment programmes yielded five focal themes and associated multiple sub-categories. These principal/global themes are: psychological and emotional impediments to inpatient care; attitudes of patients' relatives; quality of care by nurses to support inpatients; nurses' attitudes; and challenges experienced by nurses. Collectively, both the quantitative and qualitative findings indicate that substance abuse disorder is a complex and multifaceted physiological and psychosocial challenge for both the sufferers and society as a whole. For its management and treatment, nurses should be adequately trained, and multi-professional teams should be part of a concerted and dedicated effort to provide care and eradicate the problem convincingly.

The study envisages that its recommendations will contribute towards effective policy development and implementation based on a viable framework of inmate substance abuse guidelines to innovatively guide nursing care and management of substance abuse treatment centres. Such innovation should incorporate continuing professional development guidelines for different categories of nurses to enhance their skills and also improve knowledge on mental health implications as well.

Key words: guiding principles, inpatients, treatment, socio-Demographic, Addiction nursing, Substance Use Disorder, Substance Use care and treatment

DEDICATION

This work is dedicated with love and appreciation to the following:

- All those who need love, the orphaned, and the indigent widows, sons and daughters of love for availing themselves to help others; and to those who always look around to find someone in need of help and avail their help. May God bless them richly!
- In memory of my late mother, Mukanangalwo Josephinah Nepfumbada, for doing her best to ensure that my brothers and I went to school supported only by her disability grant and some money from the jerseys she knit and sold. Whenever I face the challenges of life, I always remember her courage. Despite her physical challenges, she always pulled through. ***May her soul rest in peace!***

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LIST OF ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
APA	American Psychiatric Association
ARV	Antiretroviral
CBI	Cognitive Behaviour Intervention
CBT	Cognitive Behaviour Therapy
CM	Contingency Management
CNS	Central Nervous System
DSM-V	Diagnostic Statistical Manual of Mental Disorder 5th edition
DSD	Department of Social Development
DUDs	Drug Use Disorders
EMCDA	European Monitoring Centre for Drugs and Addiction
FT	Family Therapy
GST	General Systems Theory
HIV	Human Immune Virus
HOI	Head of Institution
ICD 10	International Classification of Disease
INBR	International Narcotics Board Report
MDT	Multidisciplinary team
MEC	Member of Executive Committee
MET	Motivational Enhancement Therapy
MI	Motivational Interview
MM	Mixed Methods
NHA	National Health Act
NIDA	National Institute on Drug Abuse
RHT	Refusal of Hospital Treatment
OST	Opioids substance Therapy
QOL	Quality of Life
SA	Substance Abuser/s
SACENDU	South African Epidemiology Network on Drug Use
SADHS	South African Demographic and Health Survey
SASHS	South African Stress and Health Survey
SBIRT	Screening Brief Intervention and Referral to Treatment
SID	Substance Induced Disorder
SIMD	Substance Induced Mental Disorder
SRD	Substance Related Disorder
STIs	Sexually Transmitted Infections
SUD	Substance Use Disorder
TB	Tuberculosis
TSF	Twelve Step Facility
UNISA	University of South Africa
UNODC	United Nations Office on Drugs and Crime
WDR	World Drug Report
WHO	World Health Organisation

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CHAPTER ONE: OVERVIEW OF THE STUDY

1.1 INTRODUCTION AND BACKGROUND

Substances use (the misuse and abuse of legal or illegal substances such as nicotine, alcohol, over-the-counter and prescription medication, alcohol concoctions, indigenous plants, solvents, and inhalants) is a growing global health concern (Ramlagan, Peltzer & Matseke, 2010). Tension in the family and abusive behaviours are said to be as a result of substance-related disorders which can harm one's personal, familial and social behaviour (Nies & McEwen, 2011). The United Nations (2012) reported 230 million drug users all around the world, accounting for about 5% of the world's population. The rich and poor countries have increasingly developed a trend of addiction to drugs and alcohol which has become a worldwide trend in lifestyle. Such abuse often leads to substance use disorder (SUD), with the attendant risk of affecting persons of all ages and contributing to the development of other chronic diseases (Ammit, 2016). Among adults, some of the catastrophic effects of SUD have been noted at the personal, social, and financial levels, all of which ultimately interfere with the affected individuals' responsible citizenship roles, with incalculable life expectancy reduction (Nilsen & Burleson, 2013).

The worldwide growth in the scale, intensity and magnitude of substance addiction and its attendant emotional, mental and psychological disorders has contributed to the increase in the number of inmates receiving health care at the appropriate treatment centres (American Psychiatric Association/ APA, 2010: 24; Felicilda, 2015). Inpatients are defined as admitted persons at an addiction care providing facility for the duration of their treatment (APA, 2010: 41; Groshkova, Best & White, 2013). According to the Prevention and Treatment of Substance Abuse Act (No. 70 of 2008, inpatient treatment refers to "residential treatment services provided at a treatment centre". Socio-economic and environmental factors are contributory factors to drug abuse as well as relapse due to the combined effects of accessibility and availability of illicit drugs, poverty unemployment and peer pressure (Social Work, 2015: 52).

There are considerable negative impacts caused by drug use and relapse on social development in Gauteng, where young adults have high incidences of inmate re-admission into treatment centres by more than 20% (Khademiyan & Ganaatiyan, 2009: 64). According to Marlatt and Donovan (2015), Gauteng Province recorded a huge amount of relapse cases following treatment in 2014. Most drug users (75%), relapse between 3-6 months following discharge (Adinoff, Talmadge, Williams, Schreffer, Jackley

& Krebaum, 2010: 140). The South African Community Epidemiology Network on Drug Use (SACENDU) (2015) mentions further that Gauteng Province had 24% of the re-admission intakes into treatment centres, 22% in Cape Town, 20% in the Northern Region and 32% in Port Elizabeth. However, SACENDU (2015) confirmed an increase in Gauteng of repeat admissions by 60% between June and December 2017. Furthermore, young adults ranging from ages 20-29 years were found to be more vulnerable than other age groups (SACENDU, 2015). These statistics reveal that Gauteng Province has a challenge of relapse after initial treatment for drug abuse, especially within young adults.

The implication of Gauteng Province as the epicentre of high-risk factors for relapse associated with drug use in South Africa, depicts an ever-increasing inmate population in the substance abuse treatment centres (Van Der Westhuizen, Alpaslan & De Jager, 2011). Some of these treatment centres are poorly resourced, which causes a negative impact on the achievement of social development goals and delayed health care service delivery among young adults' inpatient treatment for drug abuse in Gauteng Province (Geyer & Lombard, 2014: 329; Swanepoel, Geyer & Crafford, 2015).

1.1.1 Magnitude of Substance Abuse and Required Responses

Irrefutably, the levels of substance use are astronomical, both locally and internationally (United Nations Office on Drugs and Crime/ UNODC, 2015: 1). The global scale and scope of the drug and substance abuse problem is demonstrated by the UNODC's (2015:1) statement that in 2013, an estimated quarter of a billion people aged between the ages of 15 and 64 years around the world have used an illicit substance or drug at least once in their lifetime. This statistical estimate was a global prevalence of 5.2%. Given such alarming statistical facts derived from a very early age by users, together with the social and economic costs, there is an urgent need for the adoption of proactive and concomitant interventions, with more concerted efforts involving multi-professional and inter-disciplinary collaborations across countries (Milliken-Tull & McDonnell, 2017: 24). Any assertion to the contrary is tantamount to prolonging the problem itself. The International Narcotics Board Report/ INBR (2015) unequivocally mentions that cannabis, heroin and cocaine were respectively the primary substances of abuse in Africa, and were major causes of drug dependency and its resultant drug-use disorders.

That the majority of substance users took more than a single substance during the time of use, is confirmed in a study conducted in Dhaka, Bangladesh by Zamani, Ahmed, Hossain and Kamal (2014: 37), which found that 68% of the respondents had actually indulged in the use of about 2-5 types of substances in their lifetime; and 38% had used more than one drug. The self-same study linked substance use to a variety of problems to individuals and to the societies in which they lived. For instance, the majority of substance abusers in that study were suffering from psychological problems such as depression (92%), insomnia (91%), and reduced appetite (69%). In addition, another study by Khajedaluee, Dagarmoghaddam, Erfanian, Alipourtabrizil and Khdem-Rezaiyan (2015: 4) found that substance use was linked to further social problems in the form of unsafe sexual practices, with married people indulging in extra-marital sexual relations - a high-risk factor of contracting HIV. Furthermore, Islam, Biswas, Bhuyan, Rahman and Nessa (2015:5), found that injecting drug users' sharing of needles was the most likely cause of vulnerability to the acquiring and spreading of HIV/AIDS due to their lack of information.

In the South African context, the proliferation of illegal substances and drugs has prompted the development and implementation of legislative interventions to thwart the scourge of substance use and its related disorders from reaching the proportions of a national crisis (Department of Social Development/ DSD, 2013). Accordingly, the Prevention of Substance Abuse Act (No. 70 of 2008) requires that the Minister should consult with the relevant Member of Executive Committee (MEC) for the purpose of establishing, maintaining and managing at least one public substance abuse treatment centre in each of the country's nine provinces. Such centres would receive, treat, rehabilitate and inculcate or develop the necessary skills for the service of those using such facilities as part of fighting off recidivism (South African Community Epidemiology Network on Drug Use/ SACENDU, 2015: 5). In this regard, substance abuse centres would then combine treatment services and skills development as a contribution to society, such that service users themselves are rehabilitated through various programmes and become useful members of society following their completion of the rehabilitation programmes (Greaves, Poole & Boyle, 2015).

A holistic SUD inpatient treatment approach requires medical interventions that address the physiological and psychiatric needs of the service users; including psychosocial programmes that focus on their inter-personal relationships, emotions, feelings, attitudes,

beliefs, thoughts and behaviour patterns; while also preparing service users for reintegration into society through the development of skills (Department of Social Development, 2013). Against this background, it is evident that any meaningful and effective treatment of the illicit drug and substance abuse pandemic requires comprehensive and inter-professional collaborative approaches. The eleven diagnostic criteria of the DSM-V (Diagnostic Statistical Manual of Mental Disorder, 5th edition) have over time, been associated with the credible treatment needs of people diagnosed with SUD. The DSM-V diagnostic criteria involves, but is not limited to: impaired control, social impairment, risky use and pharmacological criteria (World Health Organisation/ WHO, 2010).

1.2 STATEMENT OF THE RESEARCH PROBLEM

The most central tenets of the investigated phenomenon in this study relate to ***the capacity of treatment centres*** to provide adequate services for the treatment of inpatients suffering from disorders caused by the abuse of illicit drugs and licit substances. Substance use disorders require a comprehensive solution that includes a multi-disciplinary approach from healthcare providers, policy makers, public health officials, law enforcement and social services (Parr, 2015: 6). Accordingly, “capacity” is broadly translated to include adequacy of human, financial and infrastructural resources, with specific emphasis on the training of nurses and enhancement of their competencies and skills equal to the task of caring for substance and drug addicted patients (Gouse, Magidson, Burnhams, Remmert, Myers, Joska & Carrico, 2016). It is the study’s fundamental concern that there appears to be a response mismatch/ imbalance between the magnitude of substance abuse prevention, treatment and management on the one hand; and resource capacity on the other (Amoore, 2016). With regard to nurses, addiction nursing does not form part of basic or general nursing training hence nurses are required to provide addiction care to inpatient substance abusers.

Therefore, and given the above, the motivation for undertaking this study is already manifested and encapsulated in the researcher’s concern with the capacity of substance addiction treatment centres to effectively provide the required levels of quality care to their inpatients. As such, policy and resource related factors constitute the central tenets of the reasons for innovative guidelines and principles incorporating nurses, inpatients and treatment programmes themselves (Elias, 2016). According to authors such as Geyer &

Lombard (2014) and Swanepoel et al. (2015), any meaningful investigation of 'the inpatient factor' in substance abuse treatment should ***necessarily*** also relook the relapse factor; that is the inmates' capacity to conform to normal life and refrain from recidivism for at least 3-6 months after discharge from the treatment centre.

A study by Zhu and Whu (2018) on American national trends and characteristics of inpatient detoxification for drug use disorders (DUDs) from 2003-2011 found, amongst others, that there were insufficient recovery programmes for SUD inmates to succeed after their discharge. Therefore, the risk of relapse by inmates was greater in this case. In its drug incidences report, the UNODC (2017) mentions that only one in six persons (about 17%) with SUD related problems seek proper scientifically sound treatment options. The latter assertion is in stark contrast with the findings of the current study, which found that 94% of the patients came voluntarily at the Gauteng Province substance abuse treatment centre from which 244 admission records were obtained and analysed.

Gauteng Province is viewed as the epicentre of substance drug abuse relapses (Elias, 2016; Geyer & Lombard, 2014). As stated earlier, these relapses have a negative effect on delivery of health care and social services. In fact, the evidence from the inpatient admission records in this study irrefutably showed that most of the inpatients (n=74, 30.5%) at one of the three selected Gauteng Province treatment centres had been using substance for 7-10 years. That 97% (n=236) of these inmates in the study brought themselves for admission voluntarily to the treatment centres, provides a glimpse of the problem, and further reasons for the study to have been conducted. This reflects the quantum population of inmates, the level of human, financial and infrastructural support services required; as well as the quality of the treatment programmes themselves (Swanepoel et al., 2015).

1.3 RATIONALE AND SIGNIFICANCE OF THE STUDY

For purposes of this study, the mismatch/ imbalance problem (cited in Section 1.2 above) is viewed as more of a policy imperative than a clinical/ practice issue. The implication is that, while nurses discharged their practice-related duties as expected, it was in the realm of substance abuse treatment policy guidelines that some further (and more important) disjuncture was observed by the researcher. From previously conducted research and observations during benchmarking of several inpatient substance use treatment centres in South Africa, the researcher was unable to find uniform nursing guidelines applicable

to inpatient service users, which prompted the researcher to undertake the current study as a means towards that particular end - proposing universally acceptable care guidelines in the treatment and management of addicted and recovering substance users at the respective treatment centres.

At the epistemological level, it is anticipated that the findings of the study will contribute to the body of knowledge concerning nursing care guidelines and innovative principles that will promote the health status of inpatient substance abuse service users (Degenhardt, Whiteford & Hall, 2014). As proposed in Chapter Seven, the implementation of the guiding innovative principles will contribute towards improvements in the rehabilitation of substance abuse inpatients. For policy makers within the non-government sector and relevant government departments (e.g. Health, Basic Education, and Social Development), the developed guidelines should serve as a framework of guiding innovative principles to provide support to nurses caring for inpatient service users at treatment centres (Felicilda, 2015). At the organisational level, the proposed guidelines will contribute towards the capacitation of nursing and administrative personnel and the promotion of quality nursing care at substance use treatment centres directed by guidelines founded on coherent and cohesive principles. In a practical sense, the adoption of the proposed guidelines in Chapter Seven translates into gradual erosion of recidivism; therefore, full citizenship responsibility by the recovering substance abusers equipped with skills to make a meaningful contribution to society (Nemutandani, Hendricks & Mulaudzi, 2018).

1.4 RESEARCH AIM/ PURPOSE AND OBJECTIVES

The research aim/ purpose specifically relates to the general intention of the researcher in undertaking this study, while the objectives relate categorically to the activities and processes undertaken to actualise the aim or purpose of the research (Tappen, 2016).

1.4.1 Research Aim/ Purpose

The overall aim/ purpose, or general intention of the study was to explore, identify, describe, and analyse both the theoretical/ conceptual and practical domains of inpatient substance use and to propose relevant nursing care guidelines in this regard.

1.4.2 Research Objectives

The objectives of this study relate to the specific and measurable activities undertaken to realise and attain the research aim as stated in sub-section 1.4.1 above (Adams & Callahan, 2014). In that regard, the research objectives were:

- To explore, identify and describe the characteristics of inpatient substance use and addiction in both its theoretical/ conceptual and practical contexts;
- To explore, describe and analyse nurse's experiences regarding the provision of nursing care to inpatient substance users at selected inpatient treatment centres; and
- To develop principles and guidelines for the capacitation of nurses and improvement of substance user's inpatients' health status.

The specificity and measurability of the above-stated objectives is encapsulated in varying degrees of detail in both Chapter Five and Chapter Six of this research investigation, both of which are also a reflection of the extent of the study' worth (Swart, Kramer, Ratale and Seedat, 2019).

1.4.3 Research Questions

The research questions are fundamentally the interrogative version of the research objectives, and were articulated thus (Austin & Sutton, 2015).

- What are the specific or known theoretical and practical characteristics of inpatient substance users?
- What are the experiences of nurses when providing care to inpatient substance users? and
- How could the capacitation of nurses be improved as well as inpatients' health status?

1.5 DEFINITION OF KEY CONCEPTS

The key concepts defined in this section were selected on the strength of their thematic inter-connectedness with both the theoretical and empirical domains of the current investigation on substance abuse and the quality of care provided to substance abuse victims (Anney, 2014). The definitions allocated to these key concepts are both denotative (actual) and connotative (context-specific).

***Addiction*:**
A compulsive, uncontrolled dependence on a chemical substance, resulting in loss of control and continued use despite adverse social, physical, psychological, occupational, or economic consequences. Tolerance is critical, and the withdrawal syndrome frequently occurs when substance use occurs (Reid & Mash, 2014).

***Craving*:**
An intense, strong desire, a powerful urge that increases an individual's urge to use an addictive substance (Blobaum, 2013).

***Dependence*:**
The difficult stage of being overwhelmed by cravings, withdrawals and complete physical and psychological reliance on the substance of use (Ford, 2010).

***Detoxification*:**
A medically supervised process by which physical withdrawal from a substance is managed through administration of individually prescribed medicines by a medical practitioner in a health care establishment, including a treatment centre authorised to provide such service under the National Health Act (Department of Social Development, 2013).

Inpatients:
Admitted persons resident in an appropriate ward at a health care facility providing treatment for the duration of their treatment (APA, 2010; Groshkova et al., 2013). Mental health inpatients are generally admitted and treated at either psychiatric institutions or rehabilitation centres. In this study, inpatients refer to those admitted at rehabilitation/treatment centres.

***Inpatient service*:**
A residential treatment service provided at a treatment centre (Alford, 2014).

***Problem drug use*:**
The high-risk consumption of drugs involving excessive daily usage with imminent drug use disorders due to escalated drug-dependency (Buchman, Skinner & Illes, 2010).

***Physical dependence*:**
A state of physiological adaptation to a drug which then needs to be taken to prevent adverse symptoms (Gouse et al., 2016).

***Public treatment centre*:**
An inpatient or out-patient treatment centre that is owned and financed by government or an organ of state and is established for the treatment and rehabilitation of service users who abuse, or are dependent on substance (UNODC, 2015).

***Relapse*:**
The reuse of substances for which a treatment regime was prescribed following a reasonable period of abstinence (Courtwright, 2015).

***Services*:**
Prevention, early intervention, treatment reintegration and after-care and any other substance and treatment intervention (Wood & Ross-Kerr, 2011).

***Service users*:**
A person using or dependent/addicted on illegal or legal substance/s and receives services in a treatment centre following assessment (Tshitangano & Tosin, 2016).

***Substance*:**
Psychoactive chemical substances that are prone to be used, including tobacco, alcohol, over the counter drugs, and prescription medication. In the context of this study, "drugs" in the context of this study has a similar meaning (Stanhope & Lancaster, 2012).

***Treatment*:**
In the context of this study, this refers to a process aimed at promoting the quality of life of the drug dependent person and his/her body system with the help of a multi-professional team (Ulrich & Kear, 2014).

1.6 THEORETICAL PERSPECTIVES

The theoretical perspectives adopted by the study provided the philosophical premises or boundaries in terms of which the scientific 'orientation' of the study and its research processes and definition of key concepts derived its significance (Mellish, 2012). This aspect of the study is discussed in more detail in Chapter Three of this study and reflects a triangulated (inter-theory) philosophical mode of discussion. The inter-theory philosophical mode is a representation of more than one theory focusing on specific tenets of the research topic, its stated problem, and the study objectives (Miles, Huberman & Saldaña, 2014).

The literature reviewed in this study was instrumental in the identification of relevant theoretical perspectives, their backgrounds, dominance and implications for a study encompassing both substance use and nursing health care (Gentles, Charles, Ploeg & McKibbon, 2015). The inter-theory approach was also helpful in the development and formulation of the research questions and hypothetical assumptions made in the course of better understanding the two phenomena, substance use disorder and quality of nursing care. Accordingly, both the characteristic and particularities of inpatient substance abuse and the experiences of nurses could be explored and described with the guidance of the fundamental principles identified and obtained from the inter-theory perspectives during content analysis of the inpatient programmes in relation to provision of the inpatient service users' health care needs (George, 2011). In this regard, the theoretical framework

facilitated the important task of developing guiding principles for nursing care of inpatient substance abusers in the treatment centres.

1.6.1 Selected Theories

The study's inter-theory approach included: the general systems theory (GST), as well as the biological/ physiological, psychological, socio-cultural, and spiritual theories. Collectively, these theoretical paradigms encapsulate the two critical variables in this study (as entailed in the research topic), namely: the substance use/ addiction dimension and the nursing personnel factor (as a determinant of the quality of care provided to the substance use inpatients).

In this regard, the GST was opted for, since it integrates nursing/ quality of care and substance use as integral aspects or sub-systems in the national health care (superordinate) system (Makhubela-Nkondo, 2013). Furthermore, a human being is a system comprised of sub-systems. Relevant to this study, substance addiction could be the result or effects of imbalance within one of the sub-systems, which in turn, affects the whole. Therefore, any weakness in the sub-system renders the entire superordinate or super-structural system susceptible to failure (Cordon, 2013). Such weaknesses could be caused by poor health care services or general shortages in human, infrastructure, and/ or financial resources (Carelse, 2018). Meanwhile, the biological/ physiological, psychological, socio-cultural, and spiritual perspectives provide an eclectic approach to the phenomenon of substance abuse, including its causes, prevention, treatment and management from diverse philosophical perspectives and assumptions (Adams, Khan & Raeside, 2014).

The inter-theory approach and usage in the study is evident in both the literature review and empirical data collection and analysis approaches. For instance, both the nursing/ health care, biological/ physiological, psychological, socio-cultural, and spiritual aspects of substance use disorders are captured significantly in Chapter Two and Chapter Five. The latter chapter practically demonstrates the researcher's awareness of the multi-faceted nature of substance use, its disorders, and attendant health care requirements in terms of trained personnel, viable infrastructure, and effective recovery programmes (APA, 2020; Elias, 2016).

1.7 RESEARCH DESIGN AND METHODS

Research design is a strategy that is opted for in the organisation and management of the whole process of research, such that it is practicable and responds to the research questions and objectives based on credible research instruments (Cohen, Manion & Morrison, 2018). The study adopted a mixed-methods approach involving convergent design to collect, integrate and interpret data simultaneously prior to its categorisation as findings or results (evidence) of the study (Creswell & Creswell, 2018: 218). The researcher opted for exploratory and descriptive mixed methods research based on the assumption that multiple data sources and methods were more advantageous than a single-method (qualitative or quantitative) approach to a better and more comprehensive understanding of phenomena and their various manifestations (Gale, Heath, Cameron, Rashid & Redwood, 2013).

1.7.1 Merging of Quantitative and Qualitative Research

Quantitative findings are presented as quantities or in numbers which are usually presented through statistical analysis, and it is often planned deductively (Patten & Newhart, 2018: 23). The researcher employed quantitative research because it helped in working objectively with large samples of participants or units where measures such as anonymity were required in a short time. The quantitative strand was employed to explore and describe the characteristics of inpatient substance users as obtained from their admission records at the selected treatment centre. Whereas the quantitative aspect of the study yielded secondary numerical information and data, the qualitative strand was most useful for the acquisition of empirical data from its primary sources (informants) with emphasis on its exploration and description from the experiences of the participants without any manipulation of variables (DePoy & Gitlin, 2016). Convergent mixed method design was adopted by the researcher due to its advantage of facilitating the simultaneous analysis and interpretation of both qualitative and quantitative data and its results (Leedy & Ormrod, 2015: 331). Each (qualitative and quantitative) data set was analysed separately, and the findings were merged convergently at the thematically organised discussions level (Terrell, 2016: 211).

1.8 DATA COLLECTION AND ANALYSIS

Consonant with the mixed-methods approach employed in this study, the systematic collection and synthesis of relevant information was conducted, such that both the qualitative and quantitative orientations of the study were integrated/ merged (Cozby & Bates, 2015). The collection of data was conducted simultaneously. Qualitative data was collected by means of focus group interviews with a total of sixteen nurses at all the three selected research sites in Gauteng Province. Two of the focus group interview session consisted of 5 (five) nurses; while the other consisted of 6 (six) nurses providing care at the selected substance abuse treatment centres according to the sampling processes and procedures outlined in sub-section 4.4.4 and the criteria stated in sub-section 4.4.5 of this study. The main focus of the three group sessions was on obtaining the nurses' perspectives, knowledge, and experiences regarding the broader aspects of their work in treating inpatient substance users (Dack, Ross, Papadopoulos, Stewart & Bowers, 2013). Similar to the quantitative phase, the focus group interviews followed all due processes of ethical approval.

The quantitative data collection involved quantitatively obtained information from 244 admission records of the inpatients at one of the three substance use treatment centres. The researcher was assisted by a team of field workers whom she personally trained to ensure that data was collected reliably in the same manner by all field workers (Bolarinwa, 2015). During this stage, the admission records of both male and female, adult and youth inpatients admitted for substance addiction were used as data sources. The first 244 admission files were obtained with the assistance of the relevant authorities at the treatment centre (see Chapter 4). The major focus of this quantitative strand was to determine the characteristics of the inpatient's substance use and addiction profiles, after which a convergent analysis was conducted simultaneously with the results of the three focus group interviews conducted at all three research sites. The researcher obtained an admission register for the year preceding the study and found that there were 2 444 admissions in that year. From the 2 444, the researcher surveyed 10% of the admission documents.

Convergent data analysis was applied for the purposes of integrating both qualitative and quantitative findings as representing the overall outcome of a single study and its mixed-methods approaches, and not as two distinctively separate studies (Brink et al., 2018: 96; Creswell & Plano-Clark, 2018: 74). In this regard, the qualitative data from the focus group

interviews was analysed thematically, while document analysis applied for the quantitative data obtained from the inpatient admissions records.

1.9 THE SAMPLING CONTEXT

The sampling context is discussed in more detail in Section 4.4. of this study, which was conducted at three Gauteng Province inpatient substance use treatment centres following the granting of permission to the researcher by the relevant authorities to conduct both the qualitative and quantitative phases of the study on-site (Benoot, Hannes & Bilsen, 2016). Figure 1.1 below shows the geographic map of Johannesburg.

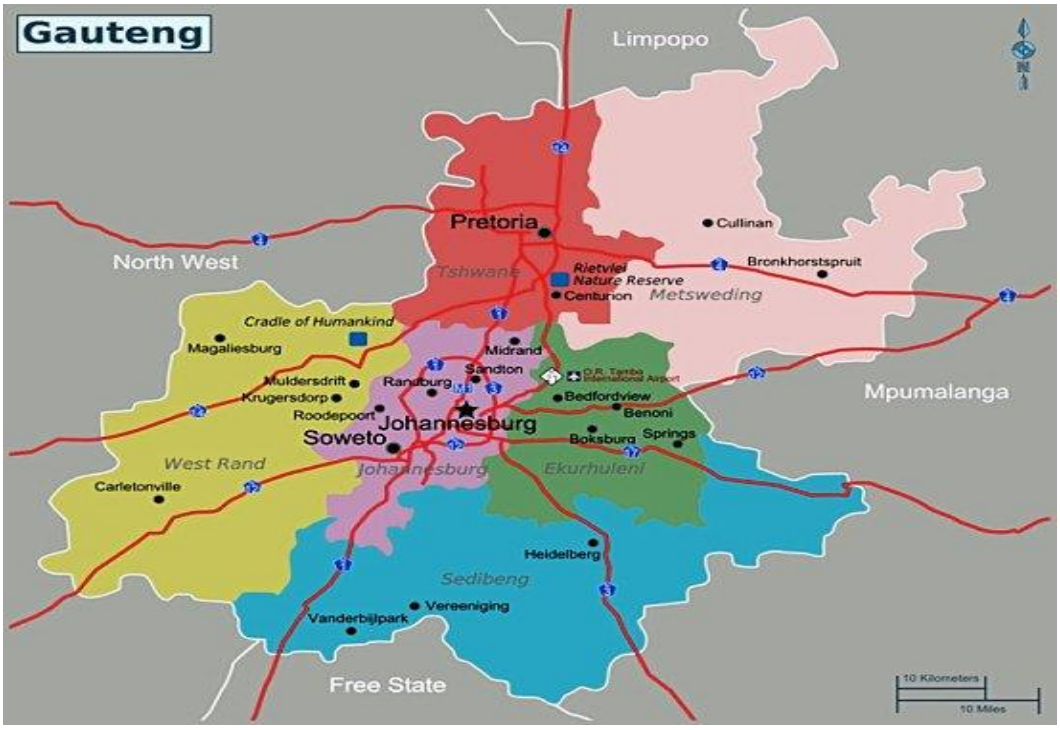

Figure 1.1: Map of Gauteng Province

The three inpatient treatment centres were selected for involvement in the study mainly on the basis that they were receiving funding from the Gauteng Department of Social Development (GDSD). In addition, the centre should strictly provide services for the treament or rehabilitation of substance use or addiction and have the capacity to admit both male and female, youth and adult inpatients. The centre should also provide detoxification services by professionally qualified personnel. In the context of this study the three inpatient substance use treatment centres were also chosen because of their willingness to grant permision to the researcher to conduct the study on-site (Brink et al., 2018:102).

The study population consisted mainly of substance use inpatients whose admission records represented 'their' substance use characteristics, as well as the nurses providing care to them. The researcher used non-probability convenient sampling to conveniently sample 10% of the inpatient admission records of the substance abusing inpatients admitted the year preceding the year of data collection for this study.

1.10 ETHICAL CONSIDERATIONS

Serious concerns with the abuse, mistreatment and violation of participants' basic human rights and social wellbeing necessitates that all researchers should understand and undertake a code of ethics in research ((Burns, Grove & Gray, 2013)). Ethics is the collective body of guidance regarding questions of doing what is morally correct, as well as taking action and making concomitant decisions accordingly. The ethical decision-making process involves identifying, evaluating, and choosing amongst the options regarding the issue at hand. Ignorance of ethical considerations by the researcher may have adverse consequences to participants, communities, institutions, researchers, and the scientific community (Gunawa, 2015). Equally so, the researcher's non-compliance with ethical regulations of research may increase the potential for physical, social or psychological harm to participants. Therefore, all persons involved in the research should comply with all the ethical rules and protocol.

1.10.1 Permissions and Approvals

Ethical clearance was obtained from the University of South Africa's Research Ethical Committee. Permission was also granted to conduct research by the Gauteng Department of Social Development, as well as Senior Management under whose jurisdiction and control the three treatment centres fell (see Annexure A and Annexure B) (Jason & Glenwick, 2016).

1.10.2 Voluntary Participation

The researcher conducted a risk-benefit analysis to protect research participants from harm and found that there was no anticipated risk involved during the focus group interviews (Kornegay & Segal, 2013). Participants were given sufficient time to decide whether to participate or not. Their participation was voluntarily and without any coercion,

and they were free to withdraw from the research without any penalty, at any time of the research process.

1.10.3 Informed Consent

For participation in the study to be truly voluntary, participants must understand and realistically evaluate what will happen to them during the research and the anticipated risks and benefits of participation (Kate & Whitley 2018:91). The researcher provided participants with comprehensive information regarding their participation. To ensure participants' informed consent, the researcher fully disclosed the following:

- The research project title;
- A statement explaining the purpose of the research;
- Any benefits to the participants;
- A statement describing the extent to which confidentiality of records identifying the participants;
- An explanation pertaining to who to consult if any answers are needed to pertinent questions about the research, including the case supervisor's contacts; and
- A written consent form to be signed by participants as an expression of their willingness to be part of the study. The form was signed by both researcher or field worker and the participants (Leung, 2015).

1.10.4 Privacy, Confidentiality and Anonymity

Confidentiality involves protecting the identity of participants and avoiding unauthorised disclosure (LoBiondo-Wood, Haber, Berry & Yost, 2014). Data becomes anonymous when they are not linked to any participant's identity. The researcher ensured privacy and confidentiality by keeping the documents anonymous. The researcher replaced the identifying information from the documents and assign numbers to the documents (Mabuza, Govender, Ogunbanjo & Mash, 2014). For the treatment programmes, the researcher allocated anonymity to the documents by making copies and removing all identifying information on the copies. The researcher restricted access to documents except to the *bona fide* assistant researchers.

All the research documents were kept in a safe place and in lockable cabinet, after which they will be destroyed as soon as they are no longer needed after at least five years. All

focus group participants signed participation confidentiality forms, indicating that there will be no discussion which will transpire voluntarily or involuntarily from the interview discussions (see Annexure B).

1.10.5 Autonomy

Respect for individuals involves convictions of autonomy, the right to decide and choose whether or not to participate in the study without fear of penalty or prejudice (Tappen, 2016). Furthermore, the informed consent, information sheet and full disclosure by the researcher provided sufficient background information against which the participants could make their autonomous decisions uncoerced.

1.10.6 Beneficence

The principle of beneficence means, doing no harm; therefore, the researcher has an obligation to monitor participants during the research for signs of unanticipated negative effects to secure their wellbeing (Taylor, Bogdan & De Vault, 2016: 124). The researcher was sufficiently competent to manage the core interview question ('grand tour') and subsequent probing questions without causing any undue distress to participants. However, an assurance was made to participants that the study did not entail any serious foreseeable risks or discomforts, except the risk of trauma which may cause psychological trauma to the nurses already providing care to inpatient substance abusers. The risk was mitigated by making a prior arrangement with the psychologist of the institution to assist in case of those participants who may be traumatised during the focus group interviews. However, during the research, there was no incident experienced where any of the participants required the services of an experienced psychologist due to any physical, emotional, or psychological problems.

1.11 SCOPE OF THE STUDY

The study was conducted only in the three selected inpatient treatment centres in Gauteng Province. The qualitative phase (strand/aspect) of the study was conducted at all the three treatment centres, while the quantitative (admission records) was conducted at only one of the three facilities; all of which were publicly funded, rather than privately owned. The scope of the ultimate findings focused strictly on the development of the nursing care guiding principles of inpatient substance users by the researcher.

Additionally, the combined data collection methods focused entirely on inpatients and their nurses, and not outpatients and other professionals and experts rendering care services at other treatment centres in the private sector, for instance.

Despite its focused scope, the study was not adversely affected due to the universality of the ultimate recommendations and guidelines (see Chapter Seven), both of which were not confined to only publicly funded Gauteng Province inpatient substance use treatment centres. Therefore, the trustworthiness and generalisability of the study could still be sustained (Tshuma & Mafa, 2013).

1.12 LAYOUT OF CHAPTERS

For the purpose of logical coherence and structure, the thesis is organised according to its 7 (seven) sequential and thematically linked chapters as indicated below.

Chapter One: Overview of the Study

The chapter provides both the introduction and background of the study, statement of the research problem, the rationale of the study, the research aim and attendant objectives, the research questions, the theoretical grounding of the study and its significance, the research design and methods, the definition of key concepts, as well as the layout of the chapters. It is worth mentioning that all these synoptically presented core variables are discussed in more detail in the ensuing chapters.

Chapter Two: Literature Review

This chapter discusses the literature review which examined the trends on substance addiction. It looked on the effects of substance use on individual, family, and society. It looked at both international and national literature about substance addiction and nursing care. Furthermore, it entails both the local and global perspectives on Inpatient substance abuser's care and treatment. In its section on the South African context of substance abuse and disorders, the chapter also presents an overview of the South African Nursing Council's perspective on the role of a nurse in the care of patients with mental health problems induced by substance use and its attendant disorders.

Chapter Three: Theoretical Framework

The chapter locates the centrality of the Systems Theory in the grounding of the study and its conceptual parameters. Accordingly, the main principles or philosophical aspects of this theory are referred to, for the purpose of locating their relevance or suitability to this study. A description is provided of the theoretical framework that underpinned the thesis, with reference to the general systems theory; as well as the physiological/ biological, psychological, sociocultural, and environmental, and the spiritual theories and models.

Chapter Four: Research Design and Methods,

This chapter mainly presents the convergent mixed-methods research design approaches adopted in the study. The study setting and its sampling domain is also presented and discussed, including the data collection procedures. This chapter concludes with the relevant ethical considerations applied for the purpose of this study.

Chapter Five: Data Presentation, Analysis and Discussion

The chapter presents and analytically discusses the collected qualitative and quantitative data from the sampled research participants. The most important focus of this chapter is on the analysis or interpretation of the collected data, in order to allocate a degree of intelligibility to the data in respect to the problem to be resolved. It is based on the analysed data that the study's findings were established with a degree of credibility and reliability.

Chapter Six: Proposed Nursing Care Guidelines of Inpatient Substance users

This chapter largely presents the researcher' proposed guiding principles for the provision of nursing care to inpatient substance users. These propositions are derived from the thematically converged findings of the qualitative and quantitative findings.

Chapter Seven: Summary of Key Findings, Main Conclusions, Recommendations and Study Limitations

This chapter entails the centrality and efficacy of the study objectives and findings as the most compelling factors or framework for establishing the main conclusions and

recommendations. The study's possible limitations were also identified and discussed briefly in this chapter.

1.13 CONCLUSION

This chapter presented an outline of the whole study and its logically inter-related sub-units, each of which is discussed in more details in the ensuing chapters of the study. The outlined sub-units included: the research problem; significance/ rationale of the study; research aim and objectives; definition of key concepts; theoretical perspectives; research design and methods; data collection; sampling; the ethical considerations; as well as the layout of the chapters of the entire study. Babbie (2010) mentions that such a sequential organisation and arrangement of the study's chapters presents the entire research process as a continuum between the research topic, the problem being researched - or phenomenon/ phenomena being studied, as well as the data collection and analysis processes. In other words, the continuum itself represents an attempt to narrow the space between theory and practice in terms of substance use and nursing care.

The following chapter presents the range of literature reviewed as background to understanding the most critical aspects of substance abuse and nursing care. It is against this background that the researcher sought to establish a regime of relevant nursing guidelines for application across substance use and addiction treatment centres.

CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION

The previous chapter presented an overview of the study. The current chapter presents literature review, against which all the important variables in chapter one serves as a background leading to the sequential arrangement and logical structure of understanding the research processes applied in the study. In this regard, Zuzelo (2012 cited in Grove, Burns & Gray, 2013) describes literature review as a written argument which promotes the position of the thesis and builds a logical argument from a variety of comprehensively accumulated credible sources. In the context of the study, the review of literature afforded the researcher the opportunity to understand trends and practices as well as dominant theoretical orientations regarding the critical phenomenon being studied, namely, nursing care in the context of inpatient substance use, addiction, and disorder.

The literature research strategy adopted in this study involved relevant international and local South African perspectives obtained from academic books, search engines and data bases, published and unpublished academic studies, peer-reviewed scientific journals, as well as proceedings of conferences at which the subject of substance use and addiction was the major focus (Yin, 2016). Additionally, the researcher consulted, reviewed and analysed official government policy documents on substance use and addiction as well as inpatient admission records at selected inpatient substance use treatment centres. For the purpose of this study, the systematic search and synthesis of the relevant sources of information were most helpful for comparing local and international practices from which lessons could be learnt for application in the South African context of substance use and addiction. Against this background, and from the point of view of the researcher, no major literature gaps were noted.

This chapter is structured into seven main topics/sub-topics: manifestation of substance use and addiction; substance related disorders (SRDs); global perspective of substance use; treatment of substance use disorder; inpatient substance use disorder treatment; substance use in the South African context; and nursing and substance addiction.

2.2 MANIFESTATION OF SUBSTANCE USE AND ADDICTION

According to George, Ernesta, and Kevin (2012: 1), the first recorded human experience in the use of psychotropic substances occurred in the African continent. According to the latter authors, humans have over the years used these substances for recreational, spiritual, and other reasons. In the late 1950s, substance addiction amongst the youth in particular was viewed as a depressant against sociological, psychological, and economic problems. In the seventies, the scourge of substance abuse was then noted as a medical problem (Blobaum, 2013). Whereas the 1960s experienced the abuse of alcohol and drugs as either a problem of choice, character weaknesses, or moral degeneration in society, the continuation of the problem after the 1960s has necessitated medical approaches to the treatment of substance use, addiction, and the attendant disorders.

The medical approaches were influenced by the view that substance addiction did not only affect the reward circuitry, but other aspects such as memory, motivation, and other neurological manifestations induced by psychoactive substances (Blobaum, 2013: 102). Psychoactive substances have the potential to alter the functioning of the brain and its physiology. As a result, the mood, perception, cognition, memory, or consciousness changes (Wilson, 2013). This has been the dominant thinking for ages.

However, one of the observed literature gaps relates to the possible exact period at which substance use and addiction became psychologically and physiologically destructive (Malliarakis & Lucey, 2007: 367). Addiction is a broad term embracing both chemical and behavioural problems. Also, addiction is characterised by tolerance, preoccupation with repetitive usage, despite bio-psychosocial consequences (Bartlett et al., 2013: 349). Substance use manifests with severe or moderate symptoms. Many factors contribute to the severity, and these range from co-occurring medical, psychological, and social problems. Similarly, West and Brown (2013: 2) emphasise that addiction occurs when an addicted person repeatedly uses drugs despite prior resolutions to discontinue. The latter two authors contend that substance addiction is not an imperative, but its self-perpetuating tendency requires help beyond the individual during the period of addiction.

2.2.1 The Extent/ Magnitude of Substance Addiction

According to Courtwright (2015: 196), the use of illicit substances predates the 1800s for instance, in 1889 it was already known that the dangers of toxic opiates and their benefits

were outweighed by their side effects which ranged from constipation to depression. The extant series of annual World Drug Reports is evidence of the increasing usage of illicit drugs and substances. In 2013, it was estimated that 246 million people between the ages of 15 and 64 years indulged in illicit drug and substance use (UNODC, 2015). This figure was 3 (three) million people higher compared to the previous year (2012). In 2014, the number increased to 250 million people, translated as 1 (one) in twenty adults between the ages of 15 and 64 years who used at least one drug or illicit substance in 2014. Of the 29 million people using drugs, an estimated 12% were suffering from Substance Use Disorder (SUD) (UNODC, 2016: 1).

Worldwide, non-medical use of prescription drugs, including over-the-counter substances, was becoming a serious public health concern (Van Der Westhuizen et al., 2011). In fact, according to the UNODC (2018), opioids were the cause of most substance abuse disorder problems and contributed to 76 % of deaths. Compared to other African countries, the world mental health survey of 2007 found that South Africa had the highest SUD prevalence (George et al., 2012: 1).

In South Africa alcohol use is the most prevalent scourge in the Eastern Cape and Kwa-Zulu Natal and is still foremost cause of both communicable and non-communicable disease. Next to alcohol abuse is cannabis, which is the most commonly used substance by 30% of the youth admitted in specialised treatment centres in the Western Cape, and by 55% in Gauteng Province (SACENDU, 2015). By comparison with other provinces, the use of cannabis in Gauteng Province increased by 4% annually, followed by heroin as the second most problematic substance used across all treatment centres in Gauteng Province. Heroin was normally smoked by its users, but self-injecting trends have overtaken the smoking habit. SACENDU (2015) reports that nyaope/whoonga (mixture of cannabis and heroin) was the primary substance of use observed at its treatment sites.

The Western Cape remains the province with the highest prevalence in the abuse of methamphetamine throughout the years. In September 2017, the use prevalence was 29%. Comparatively, the Western Cape those reported the highest primary usage of methamphetamine at 42% with the Eastern Cape at 22%. In 2018, the Western Cape took the lead again in the usage of methamphetamine, which stood at 30%, which was 1% higher than the previous year. Throughout all SACENDU sites in the Western Cape, methamphetamine was reported as the primary substance used at 44% and only 1% in Kwa-Zulu Natal SACENDU (2015).

2.2.2 Stages of Substance Addiction

According to the National Institute on Drug Abuse (NIDA), addiction refers to a chronic relapsing brain disease characterised by compulsive drug-seeking and use, despite the harmful consequences of such continued usage (NIDA,2014: 5). These harmful consequences manifest in addiction disorder, which progresses to various stages of severity over time (Rasmussen, 2000:6). In many cases, compulsive drug administration has had devastating social consequences (e.g. job loss and family disintegration). Experimenting with drugs is a noticeable cause of substance use disorders which occurs in different stages of substance and drug abuse. The persons' behaviour is a noticeable determinant of the substance user switching from one stage of severity to the next (Whitesock, Zhao, Goettsch, & Hanson, 2018). However, in this study, the researcher has not been able to precisely establish the point at which addiction occurs. According to Malliarakis and Lucey (2007), compulsive substance usage leads to stages of changes in personality mood, behaviour, and sensory changes and instability.

2.2.2.1 Experimentation

During this stage, the substance user has undergone stages of trying and testing various types of illicit substances and drugs, with detrimental effects to the body and the brain. As a result of peer pressure, young people (adolescents) are prone to trying and testing different types of drugs for the mere 'ecstatic' feeling (American Psychiatric Association/APA, 2013: 487). The elementary stages of substance use disorders begins with intoxication at a teen age (APA, 2013: 487). The seriousness of substance use and its onset is already demonstrated by the early age at which the problem manifests itself.

At their age, the brain of young people is in the process of its development towards maximum functionality (NIDA, 2014:9). Cannabis has been identified as the commonest drug signalling the rite of passage from adolescents to adulthood (Volkow et al., 2014:220). Drug experimentation provokes or triggers a superficial sense of self control and confidence. However, the assumed self-control induced by substances soon become addictive and demand regular use and its consequent hazards on the health of the user (Ward, Mertens, Flisher, Bresnick, Sterlings, Little & Weisner, 2008).

2.2.2.2 Recreational

Following the experimentation stages, the substance user begins to feel that he/she is in control of the habit, believing that it is only for occasional situations or moments for pleasure or relaxation (recreational). The recreational stage poses danger to the user. For instance, alcohol addiction is preceded by recreational habits, in which the belief was that drinking alcohol was for pleasure until it became out of control and regular episodes of denial (Tomagová, Barkov, Lepiešová & Čáp, 2016). The recreational use of illicit substances and drugs continues even beyond pleasurable activities and moments (NIDA, 2018: 6). At this stage of recreational substance use, the user is characterised as presenting with at least three of the eleven DSM-V criteria discussed in sub-section 2.2.2.3 below.

2.2.2.3 Harmful use

According to the International Classification of Disease (ICD-10), the criteria of harmful substance usage disorder relates to physical harm associated with impaired judgement, to substance use within a 12-month period. DSM-V indicates a stage at which an individual's substance use behaviour has progressed to at least four to five of the following diagnostic criteria:

- Clear evidence that the particular substance used, was responsible for physical or psychological harm, including impaired judgement or dysfunctional behaviour;
- Clear identification and specification of the nature of harm;
- Persistent pattern of use for at least 1 (one) month, or repeated occurrence within a 12-month period; and
- The identified disorder is not associated with any criteria of mental or behavioural disorder which is linked to the same drug of abuse within the same period (other than acute intoxication) (WHO, 2010).

2.3 SUBSTANCE RELATED DISORDER

According to the Diagnostic Statistical Manual (DSM-V), substance-related disorders are categorised in terms of two diagnostic characterisation, namely: Substance Use Disorder (SUD) and Substance Induced Disorder (SID). SID includes intoxication, withdrawals, and other substance or medication-induced mental disorders such as psychotic and bipolar disorders (APA, 2013: 481; Group, 2002).

2.3.1 Substance Use Disorder

SUD manifests in a cluster of cognitive, behavioural, and physiological symptoms, which indicates the individual's continuous substances usage despite significant substance-related problems. A vital SUD characteristic is the underlying change in brain circuits that could go on beyond detoxification interventions (Peltzer & Phaswana-Mafuya, 2018). In such cases, the continuous intake of the used substance may lead to tolerance and culminates with compulsive usage. SUD sufferers are also diagnosed as presenting with the eleven DSM-V criteria, the ICD-10, or both. Following are the eleven DSM-V criteria:

- Time spent on obtaining, using, or recovering from the effects of the substance;
- Over-indulgence in the substance for long period of time;
- In more severe SUD, virtually all individual's daily activities revolve around the substances;
- Wanting to cut down or stop using the substance but not managing to.
- Craving and urges to use the substances.
- Failure to fulfil major role obligations at work, school, or home.
- The individual may continue to use substances despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of substance use.
- The individual is unable to fulfil his/her goals of education, good job opportunities, occupational, and recreational activities may be given up or reduced because of substance use.
- The individual becomes withdrawn from family activities and hobbies in order to fulfil the craving of substance use.
- Continuing to use, even when one is aware of the dangers such as physical or psychological problem that might be caused or made worse by the substance.
- Needing more of the substance to get the effect you want (tolerance).
- Development of withdrawal symptoms, which can be relieved by taking more of the substance. (APA 2013: 483).

WHO (2007) stated that the SUD syndrome become evident when the patterns eleven DSM-V criteria cause damage to health, which may be physical or mental disorder. HUD syndrome is referred to as the use of substance or class of substance to a much higher

priority than other behaviour that was valued by the service user. Diagnostic guidelines include:

- A strong desire or sense of compulsion to take the substance;
- Difficulties in controlling substance-taking behaviour in terms of its onset, termination, or levels of use;
- Requiring a remarkably increased dose of the substance to achieve the desired effects;
- A physiological withdrawal state when substance use has ceased or been weaned off, as evidenced by the characteristic withdrawal syndrome for the substance; or the use of same substance with intention of relieving or avoiding withdrawal symptoms (Goswami & Goswammee, 2017).

In a study conducted by Marf, Khan and Jahan (2016: 329) looking at the patterns of substance addiction use in a de-addiction clinic, (n=105) 92.4% of participants were polysubstance users, 26% used three types of substance, 81% used nicotine and 79% used opioids.

2.3.1.1 Severity of substance use disorder

As discussed above, it is evident that SUD is diagnosed in a broader range of severity that is, from experimentation to severe. The severity is determined by the number of criteria a person meets during diagnosis. Severe SUD is when a person meets six or more diagnosing DSM-V criteria (American Psychiatric Association, 2013: 484). The route of administration plays an important role in the progression of SUD. The faster and efficient absorption of substance into the blood stream results in a more intense intoxication and has a high chance of increasing the pattern of use which may lead to withdrawals or immediate intoxication (APA, 2013:486).

ICD-10 indicates that for a person to be at dependency stage, three or more of the following criteria should manifest and should have occurred together for at least a month or, if persisting for periods of less than one month, should have occurred repeatedly within a 12-month period. Following are the signs and symptoms of dependency stage:

- A strong desire or sense of compulsion to take the substance;
- Difficulties in controlling substance-taking behaviour in terms of its onset, termination terms of its onset, termination or levels of use;

- A physiological withdrawal state when substance use is reduced or ceased, as evidenced by the characteristic withdrawal syndrome for the substance or by use of the same substance with the intention of relieving or avoiding withdrawal symptoms;
- Evidence of tolerance, whereby doses of the psychoactive substance are required in order to achieve effects originally produced by lower doses; and
- Progressive neglect of alternative pleasures or interests because of psychoactive substance use, increased amount of time necessary to obtain or take the substance or recover from its effects.

Persisting with substance use despite clear evidence of overtly harmful consequences, such as harm to the liver through excessive drinking, depressive mood states consequent to periods of heavy substances, or drug-related impairment of cognitive functioning; efforts should be made to determine that the impairment of cognitive functioning; efforts should be made to determine that the user was actually, or could be expected to be, aware of the nature and extent of the harm (WHO 2010: 5).

2.3.2 Substance Induced Disorder

The criteria for diagnosing different mental conditions as DIC has been included within the specific chapters under specific mental condition (Lutchman, 2015). The signs and symptoms and the problematic behaviour associated with intoxication are as a result of the physiological effects of the used substance on the Central Nervous System (CNS) and those effects could be evident during or soon after the use of the substance and during this time there is no other medical condition or mental disorder which could better explain the condition.

Diagnosing substance withdrawal is the same as diagnosing severe SUD as explicated in Section 2.3.2 above. DSM-V has classified them under specific conditions. Substance withdrawals happen as a result of specific problematic behavioural changes accompanied by physiological and cognitive concomitants for stopping the use of substance (Holyoke & Stephenson, 2017).

Amongst SID there is Substance Induced Mental Disorder (SIMD), which is often severe and can temporarily be persistent, CN syndrome as a result of Substance Abuse (SA). SIMD differ from SUD by the cluster of cognitive, behavioural, and physiological symptoms which are the reason for continued substance use despite the significant substance related problems. Furthermore, the similarities are that SIMD may be produced

by the same 10 classes of substances that produce SUD. Following are the diagnostic criteria of each SIMD explained in specific mental disorder (APA 2013: 487):

a) The disorder represents a clinically significant symptomatic presentation of a relevant mental disorder;
b) There is evidence from the history, physical examination, or laboratory findings of both the following:
    i) The disorder developed during or within 1 month of a substance intoxication, withdrawal or taking of medication; and
    ii) The involved substance/medication is harmful and can be the cause for the mental disorder.
c) The disorder is not better explained by an independent mental disorder (i.e., one that is not substance or medication-induced). Such evidence of an independent mental disorder could include the following:
    i) The disorder precedes the onset of severe intoxication or withdrawal or exposure to the medication; or
    ii) The full mental disorder persisted for a substantial period of time (e.g., at least I month) after the cessation of acute withdrawal or severe intoxication or taking the medication. This criterion does not apply to substance induced neurocognitive disorders of acute intoxication or withdrawal.
d) The disorder does not occur exclusively during delirium.
e) The disorder causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

2.4 A GLOBAL PERSPECTIVE OF SUBSTANCE ABUSE

An Australian study by Ford (2010: 47) about nurses' views on harm reduction measures and other treatments for substance users, found that nurses were supportive of abstinence based measures; that is, 82% for naloxone maintenance, 77% for rapid detoxification therapy and 76% for methadone maintenance programme.

The study also found that nurses from all speciality fields are involved with addiction treatment, but 35% lacked the necessary knowledge of substance addiction care. Furthermore, the study by Zamani, Ahmed, Hossain and Kamal (2014:38) conducted in Dhaka, Bangladesh found that the majority of substance users were suffering from psychological problems such as depression (92%), insomnia (91%), and reduced appetite

(69%). Another challenge for nursing of addiction is the formal role expectations which nurses do not have, and this includes guidelines and written policies which could give direction to nurses (Clancy, Oyeteso & Ghose, 2007: 163).

2.4.1 Effects of Substance Use Disorder

Substance use affects all areas of a person's life. It also affects the health of the individual's family (Carelse, 2018). SUD has serious public health issues globally. Individuals who abuse substances have complex or multiple needs resulting from two or more existing conditions, which include medical, psychological, social or legal needs or problems (Seggie, 2012). Furthermore, substance use has noticeable effects on society, which include loss of productivity, security issues, criminal activities, cost to the state due to health problems and family disorganisations, including the effects on Gross domestic products (WHO, 2007)The effects of substance can be linked with the wide variety of problems covered in the eleven diagnostic criteria of the DSM-V for SUD, mentioned.

2.4.1.1 Biological effects

Consequently, changes on the physiological structure of the brain resulted from the long-term imbalances in neurological systems which are due to repeated use of psychoactive substance are not easily reversed NIDA (Stevenson, Jack, O'Mara & LeGris, 2015). Substance users often have one or more health effects which may include lung disease, heart disease, strike, cancer and mental health conditions (NIDA n.d:19). People with SUD who suffer chronic diseases and those who are on chronic medication are more likely to be non-adherent (Groshkova et al., 2013).

Between 2000 and 2015, the substance use directly caused 60% of death (UNODC, 2018). In 2004, harmful use of alcohol was listed as the third leading risk factor for premature death and disabilities globally, with 2.5 million people estimated to have died of alcohol related causes, 320 000 of whom were young people between the ages of 15 and 29 years. Prolonged use of different substances has several effects on the health of the users (Gilchrist, Moskalewicz, Nutt, Love, German, Volkova & Bujalski, 2014). The common effects of drugs are usually related to the mode of administration such as snorting drugs, injecting, smoking, inhaling and engagement in risky behaviours. Others included unprotected sex, accidents, injuries and physical violence (NIDA, 2016: 2).

About 3 (three) million deaths worldwide resulting from the harmful use of alcohol were reported. Heavy use of alcohol is a contributor to most public health problems and most of alcohol-related modalities such as traffic accidents, furthermore long-term use of alcohol are associated with the development of liver cirrhosis (WHO, 2010). Cannabis is one of the substances with harmful long-term bodily effects (Nies & McEwen, 2011).

Substances such as cocaine are stimulants snorted by users in powder form, rubbed in the gums, dissolved in water, mixed with heroin, and injected into the bloodstream. The same substance can be heated, and users inhale its vapour. Consequently, long-term use of cocaine may result in several effects, including loss of appetite resulting in malnourishment, movement disorders, restlessness, epistasis and lung diseases. Also, cocaine affects the mental states of the user resulting in restlessness, auditory hallucinations, and loss of touch with reality and severe paranoia (Leppo & Perala, 2017).

Opioids are highly addictive. Drug such as heroin are snorted or smoked, whereas the black tar of the impure heroin is usually dissolved, diluted, and injected either in the vein, muscle or subcutaneously. Needle injecting puts users at risk of contracting blood borne diseases such as HIV and Hepatitis C (Dack et al., 2013). Users may contract HIV and hepatitis C because the use of drugs impairs judgment which can lead to engagement in risky behaviours such as unprotected sex (NIDA 2016:2). Volkow, Baler, Compton and Weisset (2014:220) indicated that motor coordination becomes disturbed resulting to poor driving skills and increasing the risk of injuries, all because of longterm use of cannabis.

2.4.1.2 Psychological effects

Substance addiction and mental health conditions often co-occur (Berring, Pedersen & Buus, 2016). Mental conditions such as anxiety, depression schizophrenia, may be visible before the user is diagnosed with SUD. The development of SUD maybe as a result of self-medication, or a mental condition arising from substance abuse. It has been reported that long-term use of substances such as cannabis has serious psychological effects (Volkow et al., 2014: 2220). Some of the psychological effects of cannabis are:

- Impaired short-term memory, making it difficult to learn and to retain information;
- Altered judgement, which may lead to sexual risky behaviour that facilitate sexual transmitted infections;
- In cases of high doses, people may develop paranoia and psychosis;

- Altered brain development;
- Poor educational outcomes, which increase the likelihood of dropping from school; and
- Cognitive impairment, with lower IQ among those who use cannabis more frequently as youngsters, for those predisposed psychosis and increased risk of chronic psychosis.

2.4.1.3 Social effects

Unemployment is one of the social challenges facing substance users (van den Heever, Poggenpoel & Myburgh, 2013). They either had not worked at all before or have lost their jobs as well as having little or no job skills at all. Furthermore, people who use substance may find it difficult to present themselves to potential employers without being under the influence of substance (Stevenson et al., 2015). Heavy use of cannabis is associated with lower income, poor or lower socioeconomic status, unemployment, criminal activities and less satisfaction with life (Volkow et al., 2014: 2221).

2.4.1.4 Effects on the individual

Harm Reduction Coaltion (HRC), an American national advocacy group for those suffering from substance addiction, has noted social inequalities that affect drug users in different ways, including their right to care. However, apart from the substance use effects on the individual, the constrain can be felt by other people as well (Barlett et al., 2013: 349). Cannabis is a risk factor for pulmonary carcinoma (Volkow et al., 2014: 2222).

2.4.1.5 Effects on the family

The family of individuals suffering from SUD is subjected to great suffering (Chaghari, Saffari, Ebadi & Ameryoun, 2017). Physical effects caused by substance use in one's body become a concern and may also affect the user's family psychologically. For instance, alcoholism and substance use are harmful to others in the family, with children deprived of financial support due to money spent excessively on drugs and alcohol. The financial inability of addicted breadwinners' further results in children devising other means to fend for themselves. Families may lose their movable and immovable property; the addict may further steal from family members. Cumulatively, an individual problem culminates in devastating consequences for the family as a whole (APA, 2013).

2.4.1.6 Effects on society

Substance addiction has multifarious disease which affects an individual as well as the society at large (Alford, 2014). The harm to society caused by substance use includes motor vehicle accidents, death caused by domestic and public violence; in some cases, gender-based violence. Volkow et al. (2014: 2221) indicate that the exposure to cannabis might also be the cause for fatal motor vehicle accidents due to impaired vision and fatigue. Alcohol-related problems have a major impact on the health care systems. Wilson (2013: 128) reports that every 3 in 10 people abusing substances gives the idea of the social and medical difficulties.

Passive smoking affects bypassers and about 230 chemicals from tobacco are known to be harmful, more especially to children. Futhermore, subatance addiction contribute to the spread of infectious disease. People who inject drugs (PWID) accounted for 1 in 10 cases of HIV -postive cases (NIDA, 2012: 21).

Social treatment for substance addiction includes social reintegration of drug users who are on treatment through collaboration of treatment centres and social services in the communities. In a survey on treatment facilities by therapy, 90% of facilities surveyed collaborated with social services, and all collaborated with hospital-based residential unit (European Monitoring Centre for Drugs and Addiction and United Nations Office on Drug and Crime, 2017: 13). Eight of the units collaborated with prisons' and probation services and some with unemployment services. CBI has been found to improve QOL in social function of substance users (Zhuang et al., 2013: 1244).

2.5 TREATMENT OF SUBSTANCE USE DISORDER

The increasing number of SUD is associated with the severity of range of negative consequences both globally and locally. The concern is exacerbated by the lack of access to the effective treatment for SUD in many parts of the globe, including South Africa (George et al., 2012: 1).

Most substance use culminates in behavioural and biological changes and other symptoms that constitute SUD, as stipulated on DSM-V diagnostic criteria. The goal of SUD treatment is to initiate voluntary avoidance of substance previously used by an individual (Myers et al., 2008). Treatment is conducted as a collaborative process

between clinicians and clients, a process where a client is assessed, diagnosed, and treatment is planned for intervention and evaluated. This is done taking into consideration that clients are diverse (Myers et al., 2008).

It is difficult for substance users to stop by themselves. Research has shown the effects that substance abuse has on the brain function, which remains long after the substance use problem has been treated (Marf et al., 2016). Essentially, substance use disorder is incurable, but can be treated and maintained (Malliarakis & Lucey, 2007). Although the use of evidence-based approaches is critical, access of substance addiction treatment remains a challenge globally. A treatment survey in Albania indicated that 75% of high-risk drug users were not able to receive treatment (European Monitoring Centre for Drugs and Addiction and United Nations Office on Drug and Crime, 2017: 14).

What complicates access of treatment is substance addiction in special groups and drug users who have special needs, such as women, the homeless and the elderly. Even access to counselling services does not include comprehensive treatment and testing of infectious diseases and therapy (European Monitoring Centre for Drugs and Addiction and United Nations Office on Drug and Crime, 2017: 14). In Finland, treatment for alcohol and addiction to other drugs is offered freely to the public by the municipalities (Leppo & Perala, 2017. 963).

SUD is a serious health problem to all South Africans. According to SACENDU (2015: 2), 14% of substance users presented with dual diagnosis on admission, 47% reported mental health problems, 18% had hypertension and 11% presented with respiratory problems. Nurses working in the inpatient treatment centres have identified that there seems to be clear lack of nursing care guiding principles, which impact negatively on the SUD treatment outcomes. Therefore, serious attention needs to be given to nursing care guiding principles for the treatment of inpatients with SUD, given that inpatient treatment centres provide specialised social, psychological and medical services to substance user and to those affected by the substance use, such as families, to address the social and health consequences (Marrelli, 2018).

Treatment of SUD focuses on wide variety of problems covered in DSM-V eleven criteria for SUD as indicated in sub-section 2.3.1 above. Depending on the number of symptoms that the individual present with, professionals can specify the severity of the disorder (Kuntz & Scholtes, 2013). Treatment of SUD requires multidisciplinary approaches, there

is no ‘one size fits all’ (NIDA, 2010). Treatment of substance addiction focuses on replacing negative attitudes with evidence-based interventions. This serve as a key to helping them achieve the highest level of health possible (Barlett et al., 2013: 350). Should the identified and recommended treatment fail, the professionals may opt for harm reduction by employing programmes or policies that focus on reducing the harm caused by substance use without necessarily affecting the underlying drug addiction (Gilchrist et al., 2014).

2.5.1 Treatment of Biological/ Biomedical Symptoms

SUD is considered as a brain disease which requires appropriate medical attention (Ramphele 2012). Acknowledging substance addiction and treating it with the use of evidenced based interventions is critical to proper care (Barlett et al., 2013: 350). Cognitive behaviour intervention (CBI) has been found to improve (QOL) by releaving symptoms and improving physilogical health (Zhuang et al., 2013: 1245). Due to the far-reacing biological impact of substance addiction on the individal, different types of medication and devjces are used to treat substance addiction. Amongst others, the different types of medication used to treat SUD aims to treat withdrawals, maintain abstinence and prevent relapse (NIDA, 2018: 24).

Treatment of withdrawals is considered when substance users first stop the use of substances, because they can experience different physical and psychological symptoms that include restlessness, sleeplessness. The use of medication or other devices, reduces the severity of those symptoms, making it easier to transit from using, to not using substance (NIDA 2018:24).

Furthermore, medication may help the brain of the user to adjust slowly to abstinence, while these medications are working on substance craving and calming the body. Accordingly, the individual will focus on the psychosocial counselling and therapies as part of addiction treatment. Furthermore, the use of medication will prevent relapse and the individual will focus on treatment that will assist in eliminating triggers (Ramlagan et al., 2010).

2.5.2 Treatment of Psychological Symptoms

In addition to pharmacotherapy, psychotherapy and counselling are other forms of substance addiction treatment which can be employed separately or as combination therapy (Scot, 2019). These can be provided as brief psychosocial interventions, individual, group or family therapy (European Monitoring Centre for Drugs and Addiction and United Nations Office on Drug and Crime, 2017: 12). In response to the growing trend of substance use, there are several behavioural therapies which professionals use in addiction treatment with the aim of changing the attitudes and behaviours associated with substance addiction so that substance abusers can handle situations differently (Siegel, 1983). Cognitive Behaviour Therapy (CBT) assist patients to recognize, avoid, and cope with circumstances that may lead them to use substances. Contingency Management (CM) uses positive reinforcement such as rewards in the event of one being substance free. Motivational Enhancement Therapy (MET) is employed to inculcate preparedness to abstain from substance abuse. Family Therapy (FT) focuses on helping the substance user and her/ his family members; and the 12-step facilitation (TSF) is self-help strategy aiming at helping those with alcohol addiction (NIDA, 2018: 25).

2.5.3 Treatment of Social Symptoms

Social treatment for substance addiction includes social reintegration of drug users who are on treatment through collaboration of treatment centres and social services in the communities (SAMHSA, 2006. The European Monitoring Centre for Drugs and Addiction and United Nations Office on Drug and Crime (2017:13) found that 90% of facilities surveyed collaborated with social services, and all these facilities collaborated with hospital-based residential units, while eight (8) of the units also collaborated with prisons and probation services, and some are collaborated with unemployment services as part of the treatment regime. CBI has also been found to improve QOL in social function of substance users (Zhuang et al., 2013:1244).

2.5.4 Treatment of Spiritual Symptoms

Evidence based treatment such as 12-steps has been an important component in addiction care. The treatment approach recognised the healing power of mind-body and body-soul connections with the involvement of pastors and religious organisations (Holyoke & Stephenson, 2017). Where religious programmes have been institutionalised

as part of the treatment and rehabilitation initiatives, inpatients have been noted to appreciate such services by pastors (Isidore, Ediomo-Ubong,, Okokon, Nsidibe, Enwongo, Emeh & James, 2014).

2.6 INPATIENT SUBSTANCE USE DISORDER TREATMENT

Inpatient SUD treatment manifests in different approaches. The factors and processes of inpatient SUD collectively determine the outcome of the treatment (Hoad & Leddy, 2006).

2.6.1 International Standards of Inpatient SUD Treatment

Drug dependency is a complex multifactorial biological and behavioural disorder. Based on medical research, there is a good understanding that the brain mechanism plays a central role in the development and persistence of signs and symptoms of SUD (Group, 2002). The UNODC (2016) has noted treatments that help normalise brain functioning of the affected individuals and support them in changing their behaviour. The developed treatments are based on scientific evidence showing that SUD can best be treated at the health facilities. However, in many countries, it is still difficult to include addiction treatment in the health care facilities due to a huge gap between science, policy and clinical practice (UNODC 2016:1).

To assist countries in the development of appropriate responses and evidenced based service for SUD, the UNODC and WHO created global programme for drug dependency treatment and care in 2009. The programme emphasised on seven principles. In the context of the systems theory, all the principles are relevant engaging systems that emphases the bio-psychosocial approach in the treatment of SUD:

- Treatment must be available, accessible, attractive, and appropriate;
- Ethical standards in the treatment services should be ensured;
- Promoting treatment of SUD by effective coordination between the criminal justice system, as well as health and social services;
- Treatment should be based on scientific evidence and respond to specific needs of individuals;
- Responding to the special subgroup and conditions;
- Ensuring good clinical governance of treatment services and programmes; and

- Integrated treatment policies, services, procedures, approaches and linkages should be constantly monitored and evaluated.

2.6.2 Treating Factors of Substance Use Disorder

SUD treatment aims to help addicted individuals to stop compulsive substance-seeking and use (Ward et al., 2008). SUD treatment happens in a variety of settings, intensity and duration. How treatment is provided, components of treatment, continuum of care and the use of evidenced based treatment approaches are some of the factors of SUD treatment (NIDA, 2012).

2.6.2.1 Treatment setting

SUD treatment of SUD could be offered in a variety of settings (Dossey et al., 2016). Individuals suffering from SUD may receive inpatient treatment at hospitals and specialised residential treatment centres. SUD inpatient treatment settings such as hospitals should have detoxification and stabilisation of patients during withdrawal (Edward, Ousey, Warelow & Lui, 2014). The setting should be able to assess and treat general medical and psychiatric conditions. Psychiatric hospitals are able to offer treatment for co-occurring mental disorders and they are secure (APA 2010:23). APA further indicates that inpatient hospital setting is more appropriate for individuals who overdosed, those with risk of complicated withdrawals, individuals with acute or chronic medical conditions and individuals with marked psychiatric conditions.

Residential specialised treatment is recommended for those individuals who do not meet clinical criteria for hospitalisation, but whose lives and social interactions have been excessively affected by substance use. Such residential treatment is also recommended for those individuals who needed substance-free environments for effective treatment (APA, 2010: 24).

2.6.2.2 Intensity and duration of treatment

Intensity and duration of treatment related to one another because intensity is related to the frequency of treatment provided, and duration refers to the length or period of time an individual has been receiving treatment (Felicilda, 2015).

2.6.2.3 Methods of treatment provision

Treatment in the inpatient facilities may be provided in several ways: one-on-one counselling, peer groups, or with family members (George et al., 2012). Group sessions are viewed as an integral and valuable part of the treatment and are time-saving. Most of inpatient centres use group sessions to administer treatment modalities such as CBT and MI. Family members' contribution to treatment include obtaining information about individual's current attitudes towards substance use, as well as encouraging family support for abstinence, and maintaining marital and family relationships (APA, 2010: 41).

2.6.2.4 Components of treatment

This refers to the elements or aspects of treatment such as assessment, counselling, education, and other activities which form part of the treatment (Gilchrist et al., 2014). Figure 2.1 below depicts the different components required for SUD treatment.

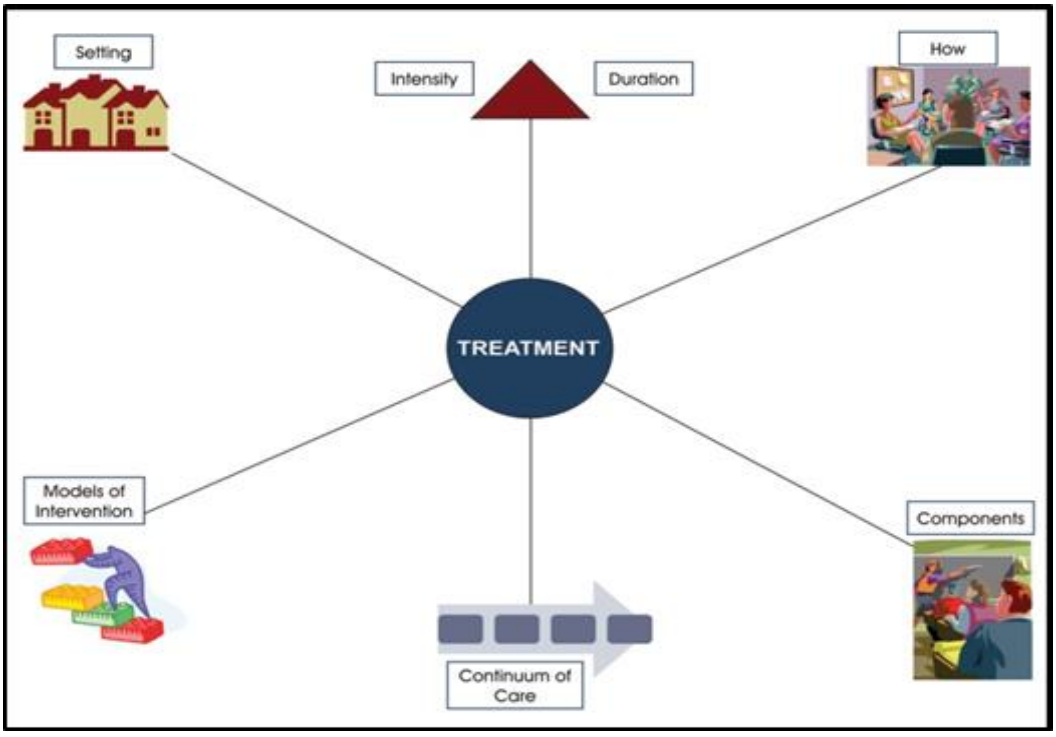

Figure 2.1: SUD treatment cycle
Source: Adapted from: Colombo Plan (2017)

2.6.3 The Inpatient Treatment Process

People suffering from SUD are either voluntary or involuntary admitted at the inpatient treatment centre (DSD, 2013: 32, 33). Furthermore, they have multiple problems ranging

from personal, social and economic reasons which cannot be resolved by considering the addictive symptoms only. However, it is important to diagnose and conduct comprehensive assessment for personalised and effective approach to treatment planning and treatment (Groshkova et al., 2013). The goals of both long-term and short-term treatment are to stabilise clients' physical and emotional state, while also removing patients from the toxic environment during the detoxification process (Goswami & Goswamee, 2017). Both short and long-term inpatient treatment settings provide 24 hours residential care. Inpatients are services are provided to reduce the risk of defaulting on treatment and returning to active drug use, which assists the patient in regaining improved personal health, family, work and social functioning (Isidore et al., 2014).

2.6.3.1 Intake and screening

In the context of inpatient treatment screening, it is important to determine the severity of the substance use problem. Screening through diagnostic tests helps to identify the specific drug of abuse (Isidore et al, 2014). Inpatients are confirmed by using screening tools and severe SUD is also diagnosed by using screening tools. Therefore, a therapeutic rapport is built, and the patient is assured of confidentiality and an informed consent is obtained (Jacobsen, 2017). Figure 2.2 below is a graphic presentation of the processes in the inpatient treatment, starting from intake and screening to assessment, treatment plan and treatment modalities.

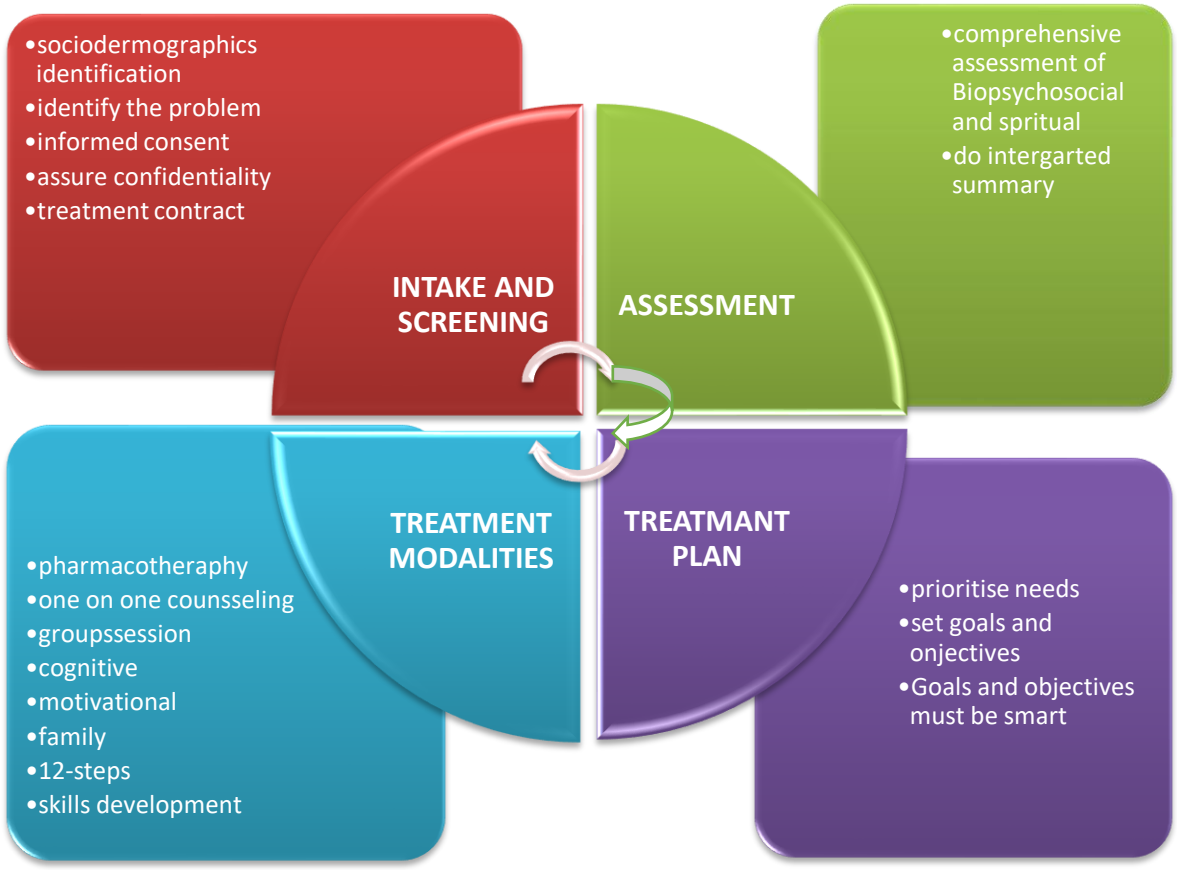

Figure 2.2: Inpatient treatment processes

2.6.3.2 Assessment

Post diagnostic assessment is important for the purpose of initiating treatment (NIDA, 2012. Co-occurring medical and psychiatric conditions need proper diagnosis for proper and effective treatment planning. The severity of SUD might cause deterioration of somatic and mental health status, personality traits, and affect vocational and employment status, family and social integration and the legal situation of an individual. Assessment further looks at the individual's environment, developmental factors, childhood and adolescent history, family history, relationships, social and cultural circumstances, spiritual and previous treatment history. An integrated assessment summary helps in the development of a convincing treatment plan (UNODC & WHO, 2008: 6).

2.6.3.3 Treatment plan

Treatment plans are developed in conjunction with the patient. This is where goals are established and practised, prioritise needs, set goals and objectives and intervention to meet those needs are identified (UNODS & WHO, 2008: 6).

2.6.3.4 Treatment modalities

Treatment modalities may include medication, behavioural therapies or a combination of both (NIDA 2012). Inpatient usually begin with medication-assisted treatment in the form of detoxification, a period which may take few days before other forms of therapy could commence (Nies & McEwen, 2011). Therapy consists of a mixture one-on-one counselling and group therapy. Besides detoxification, therapy modalities used in the inpatient SUD treatment include pharmacotherapy and psychosocial approaches such as behaviour therapy, Motivational Enhancement Therapies, family therapy, community approaches, and self-help (NIDA, 2012).

Pharmacotherapy includes detoxifications and maintenance treatment. The aim of detoxification is to enable patients to become drug free and prepare for treatment (Nies & McEwen, 2011). Agonist maintenance therapies aims at relieving unpleasant craving associated with abstinence. Antagonist therapies are used to block the physiological effects of used substances, and some medications are used to promote abstinence and prevent relapse (APA, 2010: 35).

Behavioural therapies help by engaging individuals in the treatment, through incentives for remaining abstinence, modifying the attitudes and behaviours related to drug use, and the increase of life skills to handle stressful situations and environmental cues that may trigger cravings or a relapse. The therapies include cognitive behavioural therapy (CBT), contingency management therapy and motivational interviewing (Rawson, Marinelli-Casey, Douglas, Dickow, Frazier & Gallagher, 2004).

The goals for behavioural therapies include abstinence, sustain recovery from substance use, and improvement in psychological indicators (SAMHSA, 2006). Community reinforcement approaches are based on the on the theory that environment reinforces the use of substances in the instances where individuals with SUD lack positive reinforcement from a sober community (APA, 2010: 41). The aim of community therapies is to provide SUD suffering individuals with natural reward through family and community involvement.

Community therapies work jointly with family therapies which aim to improve communication amongst family members (Sorsdahl, Stein, Weich, Fourie & Myers, 2012). Spiritual treatment modalities recognise that spirituality is the basic material part of man and attempt to address the reconnection with the individual SUD sufferer's higher power

(Scot, 2019). Treatment modalities addresses different spiritual aspects, such as: self-righteousness and intolerance, so that an individual can have an expansion of identity and realise that s/he is participating in a “Larger Life” than his/ her own, which can be described as God. Approaches such as Psych synthesis and 12 steps can assist the patient towards discovering his/ her higher consciousness (Scot, 201). Figure 2.3 below is a graphic presentation of treatment modalities used in inpatient treatment centres.

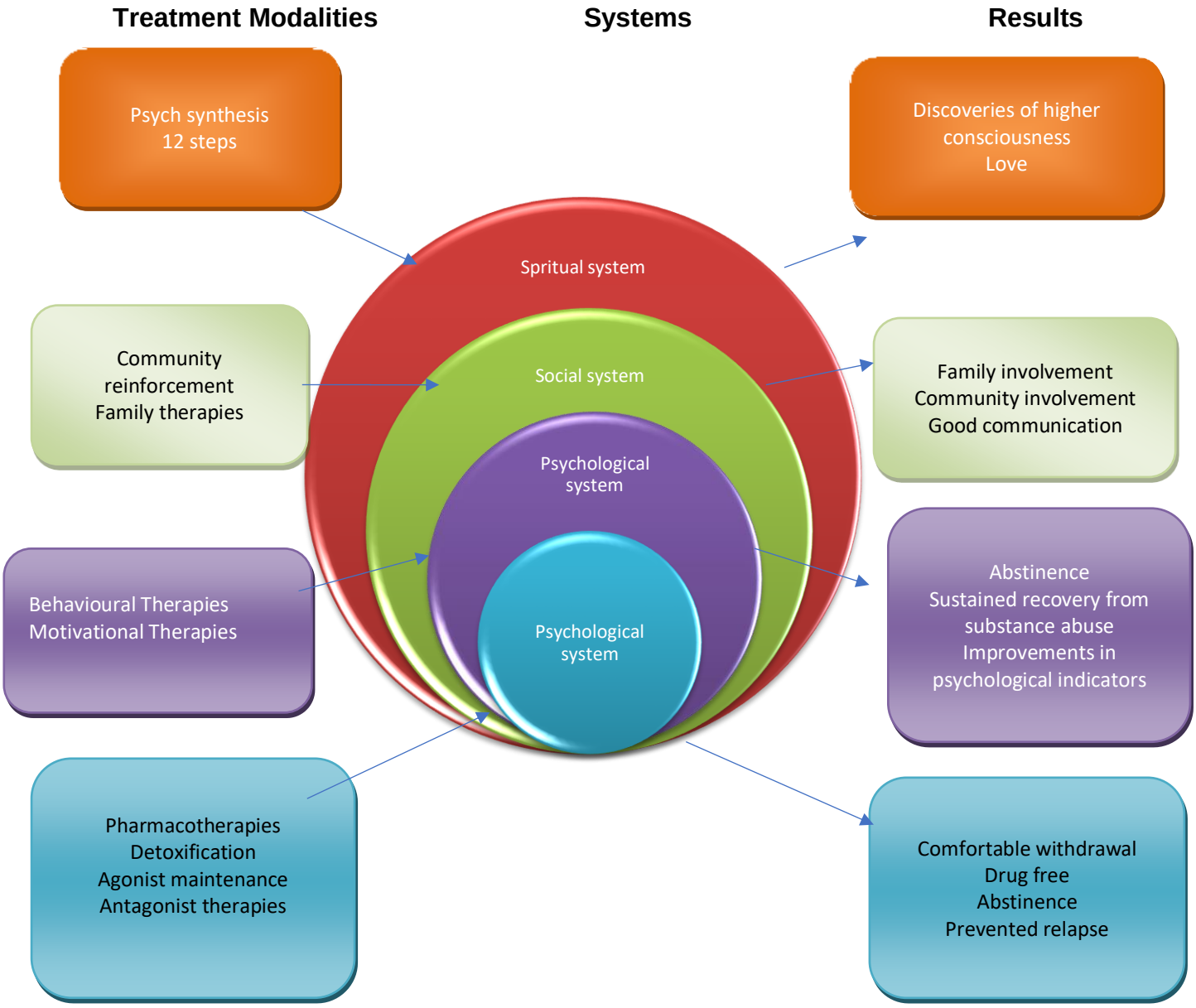

Figure 2.3 SUD: Inpatient treatment modalities

2.7 SUBSTANCE USE IN THE SOUTH AFRICAN CONTEXT

According to Seggie (2012), 10% of the South African population could be described as experiencing alcohol use and/or dependency disorder, and at least 13% have a lifetime

SUD. However, health care services have been criticised for not availing SUD treatment to everyone who needed rehabilitation. Meanwhile, the INBR (2015: 48), estimated that 1 (one) of every 18 people suffering from drug use disorders in Africa receive treatment each year. This implies that the larger population of drug users were not receiving treatment or may not be suffering from drug use disorder.

Alcohol is also one of the psychoactive substances which could produce dependency. The World Health Organisation report on Alcohol consumption (WHO, 2010) indicates that by 2010, alcohol consumption worldwide was at 6.2 litres of pure alcohol consumed per person aged 15 years and older, which translates to 13.5 grams of pure alcohol per day. A recent report by South SACENDU (2015: 1) has found that alcohol remained the dominant substance of use across all of the nine provinces in South Africa, with 18% in the Northern Region (Limpopo and Mpumalanga) and 39% for the Central Region (Free State, Northern Cape and North West).

SACENDU (2015: 1) reported further that by the end of 2009, the treatment admission for cocaine-related problems in South Africa showed an increase in numbers across the nine provinces. During the first half of 2015, the proportion of the first-time admission to treatment ranged between 68% in Western Cape and 98% in Northern Region (Limpopo and Mpumalanga) (SACENDU, 2015: 2), and this is indicative of the increasing demand for concomitant health care services by people who had never had access to the treatment before.

A relatively high proportion of South Africans abstain from alcohol, but 45% of males and 18% of females drank alcohol, whose rate of consumption was one of the highest in the world (Parry, 2005: 4). Additionally, the harmful use of alcohol ranks among the top five risk factors for disease, disability, and death throughout the world (WHO, 2010). The term “alcoholic” was used to describe the different types of addicted alcoholics: beta, gamma, delta and epsilon. The beta alcoholic is the problem drinker with deteriorating health status due to alcohol abuse (Magidson, Gouse, Burnhams, Wu, Myers, Joska & Carrico, 2017). This type of alcoholic may suffer from cirrhosis of the liver, hypertension, cardiac arrhythmias and tuberculosis (TB). Inpatient treatment centres in South Africa should provide treatment, rehabilitation and development skills (Mabuza et al., 2014). Social workers, medical practitioner, psychiatrist, psychologist and nurse are in the public centres, and should have necessary qualification at the addiction services centres and provide adequate treatment, rehabilitation and necessary skills development to the users.

Addiction treatment aims to reduce the bio-psych-social and economic impact of substance abuse and related illness among the South African population, and to develop and implement multi-disciplinary and multi-modal protocols and practices for the integrated diagnosis and treatment of substance dependency and co-occurring disorders (DSD, 2013). All clients admitted to inpatient treatment centres should receive comprehensive, accurate, timely assessment for their physical, psychiatric and psychological functioning and regular monitoring and evaluation of such functioning (DSD, 2013).

2.8 NURSING AND SUBSTANCE ADDICTION

In ancient nursing practice, nursing was practised by a body of male attendants noted for their propensity for purity and cleanliness, full of kindness, and cleverness and great skills in all kind of service (Hoad & Leddy, 2006:40). Along with good nutrition, ventilation, and a clean environment, the men read stories, sang hymns, played musical instruments, and communicated with the sick while attending to all their health needs and all these served as the origin of holistic nursing (Hoad & Leddy, 2006:40).

Dossey and Keegan (2016: 856) state that nursing is a person-centred profession characterised by two paradigms, traditional and holistic. As a traditional science, nursing involves a systems approach as its philosophical paradigm, while holistic nursing views health as a sense of well-being and a quality of life. Nursing focuses on protecting, promoting, and optimising health and wellbeing; assisting healing; preventing illness and injury; alleviating suffering; and supporting people to find peace, comfort, harmony, and balance. All these activities are meant to comfort and empower patients, helping them to find meaning and purpose in life experiences, foster growth and healing when needed, and transcend with grace and peace when the time arrives (Dossey & Keegan, 2016: 856).

Traditionally, nurses have cared for individuals, families and communities. The individual is viewed as a human system which lives in an open interact with other systems (Olson, Young & Schultz, 2017). The interacting systems are characterised by mutual change where change in the individual affect the change in family and at the same time is influenced by communities (Hoad & Leddy, 2006: 462).

Nurses have responsibility to recognise the signs and symptoms of drug use for early intervention (Polit & Beck, 2017). For nurses, managing patients with addiction can be challenging, due to overwork and the nature of the disease. According to Wilson (2015: 128), nurses in almost all specialities are invoved in the care of patients who abuse substances. Trained nurses have skills in health promotion and communication, including health education to patients. Therefore, nurses are in a good position to provide SBIRT, although specific training is reqiured to promote competence and comfort (Wilson, 2013: 128). During the patient stay at the hospital, nurses have a great opportunity to initiate SBIRT.

Furthermore, nurses play a key role by assessing, managing and care for individuals with SUD together with their families and the community (Clancy et al., 2007:162). Nurses also play an advocacy role by addressing concerns in drug use and misuse, which requires them to have knowledge of prescription drug use and misuse (Felicilda, 2015: 50). SUD has had an enormous impact on the health care system. As such, nurse should be trained on CBI to implement interactive education, corrective cognition, relieving of negative symptoms, forming of healthy lifestyle and improve QOL (Zhuang et al., 2013:1245).

Generally, nursing schools provide minimal exposure to important concepts of addiction (Hogarth, Beattie & Morphet, 2016). Nurses in the addiction care sector are expected to care for their patients, regardless of *how* or *where* the substance user started the use of substance (Bartlett et al., 2013:352). In order to be effective, nurses should be fully conversant with addiction treatment because they are in a better position to positively affect the health and wellbeing of persons with SUD problems (Hanrahan, 2012).

2.8.1 Nursing Care

The use and abuse of illicit drugs and substances has widespread effects, and the importance of users to seek specialised treatment is of vital importance. When nursing the addicted, the focus of care is more on responding to patients' needs (West & Brown, 2013). Resulting from the misuse of substances, patients may present with psychological, medical and surgical health needs simultaneously. Therefore, the treatment of service users may include subsequent social, psychological, physiological, spiritual and medical services (Lutchhan, 2015:74). Nursing individuals suffering from addiction disorder presents challenges that are different from those of other areas of nursing practice (Wilson, 2013). Due to the nature and behaviour of drug use patients, there is a perception

that only the robust kind of nurses are suitable for this particular job. Some of the functions of nurses at treatment centres involve observing, recording, and reporting information about the patients, including any changes in their status, the function also includes analysing and integration of data, as well as making decision with, and for patients through interactions and transactions (Amoore, 2016:33).

Caring for substance use service users (addicts) is a demanding task for nurses. Lack of knowledge by nurses concerning addiction may lead to some negative attitudes towards substance abuse service users and engender poor quality of nursing care (Barlett, Brown, Shattel, Wright & Lewallen, 2013:351). For instance, a study by Ford (2011:246) found that nurses' experienced mild to severe stress as a direct result of caring for substance abuse patients. They would then engage in unsafe practice by treating patients without full knowledge of their condition, and not taking care of their safety and security needs; thus, exposing both themselves and the patients to danger. Contrarily, the study by Thorkildsen, Eriksson and Raholm (2015:355) reported that nurses' unconditional love for their work was the main propellant of their willingness to care for their substance addiction patients (Lemke & Schaefer, 2012:95).

Within the medical and health care services, nursing care fulfils a pivotal role as nurses are the first 'point of contact' with the service users, monitoring their health status and providing comprehensive nursing care throughout the day. As such, their responsibilities demand competence, skills and knowledge for holistic care from clearly stated guidelines. It is more tenable and less strenuous for nurses to perform their everyday duties when guided by clear and easy-to-follow substance use treatment routines (NIDA, 2012). Therefore, it is an absolute imperative that inpatient treatment centres should provide proper and quality medical services, thereby assisting substance abusers and addicts to recover with no fear of recidivism (Poudel & Gautam, 2017). In doing so, nurses should be intensively trained and guided by the rules and regulations pertaining to the principles of care and treatment of substance abusers.

Nurses constitute an indispensable part of the inter-professional approach towards the provision of the necessary care to SUD sufferers (Wilson, 2013). The pivotal role of nurses is enhanced by the level of their training in physiological, mental, psychological, social and environmental aspects of health care provision (Bunyan, Crowley, Smedley, Mutti & Cashen, 2017:227). In the context of this study, the role and services provided by nurses in the treatment of inpatient service users is considered as essential, and not

peripheral to the requirements of specialised training, knowledge and experience in substance addiction (Were, 2014).

Generally, nurses provide direct and indirect motivation and guidance during their day-to-day interactions with patients (Bunyan et al., 2017:227). However, a study by Nilsen and Burleson (2013:171) found that nurses trained in mental health care were more positively engaging with substance abuse patients than general nurses. The professional training and background of health care and treatment options is absolutely relevant, considering the multifaceted nature of both substance and drug use, as well as the range of disorders resulting from such levels of use (Wilson, 2013:171).

Knowledge about addiction and measures of treating substance addiction by nurses has been found to be essential in the way nurses approach addiction nursing (Dack et al., 2013). However, some nurses do lack the necessary knowledge of substance treatment (Björkdahl, Hansebo & Palmstierna, 2013). A case study of codeine addiction by Ammit (2016)provided some inpatient guiding interventions for SUD treatment as follows:

- *Physical treatment and withdrawal treatment:* Guided by Clinical Opioids Withdrawal scale, nurses provide symptomatic treatment;
- *Brief intervention*: The patient is educated on regarding the misuse of substances;
- *Drug and alcohol treatment plan:* Opioids Substitute Therapy (OST), long term acting opioids are administered as chronic treatment. Treatment plan includes discharge plans for psychosocial interventions; and
- *Therapeutic relationship*: This is the relationship which comprises of different components such as the bond nurses form with patients.

Clancy et al. (2006: 165) indicate that for nurses to work with substance abusing persons effectively, they need personal qualities such as robustness and resoluteness, while shyness and naivetes are considered disadvantageous. Thorkildsen & Eriksson (2015) explored the core of love when caring for patients suffering from addiction and found that nurses have inner driving force that enable them to work with addicted individuals. This is explained as unconditional and neighbourly love. The love for their work is the force driving nurses to give assistance to patients who need care, even though it is known that addiction is often an emotional and uncomfortable topic for health care professionals (Bartlett et. al., 2013: 350). A study by Ware (2014: 31) with advanced nurses, found that

an addiction sub-specialty was needed in addition to the basic substance addiction knowledge of nurses.

Meanwhile, Clancy et. al. (2006:167) found that a majority of nurses believed that becoming an addiction nurse was a progression of five stages: encounter, engagement, stabilisation, competency and mastery. In this regard, Malliarakis and Lucey (2007: 367) recommended the following interventions to improve addiction nursing:

- SUD and its treatment should form an essential component of nursing education, as part of their professional development;
- SUD to form part of nursing practice policy in order that all patients are assessed during nursing assessment;
- As soon as SUD diagnosis has been conducted, nurses should embark on early intervention and halt the disease progression; and
- Development of community-based programmes for the prevention of substance addiction for the vulnerable.

2.8.2 Holistic Nursing in Substance use

Holistic nursing is described as all nursing practice that has healing as its goal, and honours the interconnectedness of self, others, nature and spirituality by focusing on protecting, promoting and optimising health and wellness of those who are sick (Dossey & Keegan, 2016: 4).

Nurses conduct holistic assessment by collecting comprehensive data related to the health of individuals. The assessment includes physiological and behavioural data, internal processes, family and cultural processes, and all system factors that may either enhance or impede on patients' health. Furthermore, nurses should develop a nursing care plan that addresses assessment areas (Alford, 2014).

In each step of treatment, professionals (including nurses who treat addiction within, among and upon variety of systems) are enmeshed in settings in which treatment is provided in a structured manner (Armstrong & Rispel, 2015). The discipline or departments to which the professionals belong, is a functional system. Accordingly, the principles and process directing the professional care is an information and service system. Supporting procedures and protocols are referred to as the mental systems. All

these systems are directed towards a goal and have inputs, throughput and output followed by outcomes (Cordon, 2013). These systems may malfunction at any particular point in time. As a result, the malfunctioning may affect the attainment of overall goals. Therefore, professionals should work with the intention of minimising the negative effects and increase the positive effects of the service towards the goal of quality care (Gillies 1982). In the context of substance addiction, the goal would be that of fighting off recidivism towards total abstinence from the substance of addiction and use.

The use of systems theory in the treatment of SUD allows nurses to implement holistic patient care; for example, physical assessment by measuring body temperature. The psychological aspect of nursing care includes subjective assessment of the mental state and results thereof would direct the care plan which may include referral to a psychologist. Establishing the individual's social and employment status, as well as, next of kin, would assist nurses in garnering support from the family, or referral to the social worker where and when a need arises.

2.8.2.1 The systems context of nursing

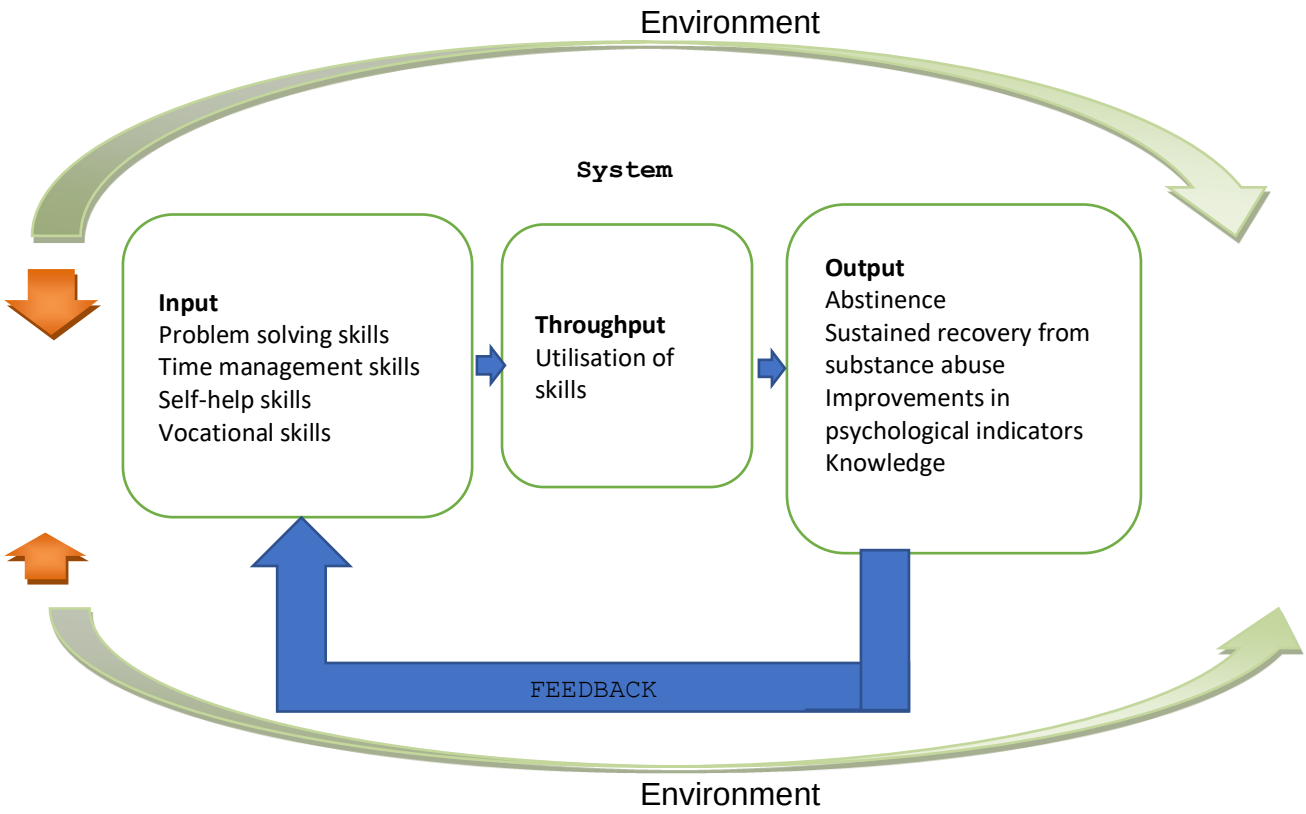

Figure 2.4: Inputs-Process-Output feedback systems
Source: Amin (2018: 36)

Figure 2.4 above shows that the systems operate by processing energy that crosses through permeable boundaries of open systems. The output and throughout process have positive energy that is fed into the system across the boundaries (Amin, 2018:36). In the context of substance addiction, inputs are the contents of treatment modalities that are meant to treat SUD.

Throughputs are the way the energy is used within the system, which is the implementation of the content of the modalities by the addicted individual, that aims at changing what is going on in the system, as well as the effects that are observed on the outside of a person or how the individual's behaviour has changed, what the person is doing as a result of the processed energy (output). The processes would be abstinence, sustained recovery from substance use and improvements in psychological indicators. When all these processes are completed, the same results affect the environment and lead to further inputs into the system, and the cycle continues (Amin, 2018).

2.8.3 The South African Nursing Council Perspective on Caring for Substance use Inpatients

This section of the chapter focuses specifically on the SANC perspectives and prescripts regarding the health care rendered to mental health inpatients whose condition or problems have been caused or induced by the abuse of drugs and other substances. As indicated earlier, the substances of use were identified mostly as (but not limited to) alcohol, cannabis, heroin and cocaine (SACENDU, 2018). Accordingly, the *place* of treatment is indiscriminate (whether psychiatric or rehabilitation centre) since the emphasis is on the personnel treating the inpatients in respect of the nursing categories.

The core purpose and function of the SANC is "to establish, improve and control conditions, standards and quality of nursing education and training" (SANC, 2015). The SANC also determines personnel (categories of nurses) registered and accredited to work in psychiatric institutions. Notwithstanding the specific focus allocated to the SANC in this section, reference is also made to other relevant factors; especially in consideration of the fact that the SANC itself is also a creation of law under the Department of Health Department in terms of the Nursing Act (No. 33 of 2005 as amended). While it prescribes practice-related duties in terms of the nursing curriculum, the SANC is also legally bound by the laws governing the healthcare sector in general. In this case, the Mental Health Care Act (No. 17 of 2002) and the Nursing Act (No. 33 of 2005) are the foremost reference

points in terms of the place and personnel responsible for mental health and substance use treatment.

According to South African Nursing Council guidelines, the role of the nurse in prevention and care of patients with mental health problems is to address the mental health care needs of the patient as an individual, his/her family as an inpatient or outpatient. Furthermore, the mental health care nurse addresses the mental health care needs of groups and populations throughout the lifespan, inclusive of emerging vulnerable population groups. There are specialist functions in different levels, performed by mental health nurses namely primary, secondary, and tertiary levels. In these levels, the mental health nurse is enabled to work professionally and competently.

In psychiatric institutions, only psychiatric nurses are the allowed mental health practitioners to render prescribed mental health care, treatment, and rehabilitation services in terms of the Mental Health Act (No. 17 of 2002). Accordingly, psychiatric nurses should have successfully completed their clinical nursing qualifications in Psychiatric Nursing Science (PNS) and registered to practice as such in accordance with Section 31 of “the Mental Health Act”. Following below is an overview of the work of an enrolled nurse and nursing assistant as examples of healthcare practitioners providing relevant services to inpatients with mental health problems induced by their use of drugs and other related illicit substances.

According to SANC prescripts (2015), enrolled nurses (ENs) carry out nursing care to fulfil the health needs of a drug user. Enrolled nurses have successfully completed and received clinical nursing qualification and registered to practice as such in terms of Section 31 of “the Mental Health Act”. During admission of a drug user, they assist with admission, compile the drug user’s assessment interview and document his/her preadmission behaviour (violent, agitated, anger, and so on). Furthermore, enrolled nurses assist with random drug tests initiated and authorised by a therapist based on the need such as suspicion of illicit drug taking within the centre. Additional assistance is provided with medical programme which is also called ‘My Health is my responsibility’, which includes personal and environmental hygiene, health education on oral hygiene. It is also important for the enrolled nurse to observe signs and symptoms of stress, the impact it has on the body and medical and drug information sessions to substance abusers. The enrolled nurse also monitors drug users’ responses to treatment, such as side-effects and withdrawal symptoms, lack of motivation, non-adherence and mixing of

prescribed treatment with illicit drugs.

On the other hand, the scope of practice of an enrolled nursing assistant entails that, on the day of admission, she/he assists inpatients to feel at ease and desist from stressful conduct. The ENA also facilitates, promotes and maintains treatment and physical training programmes for inpatients. She/he explains the benefits of exercise, sleep and nutrition, and maintenance of adherence to treatment and rules of the treatment centre.

2.9 CONCLUSION

The chapter presented a systematic review of multiple views and perspectives on literature regarding substance use and its disorders. The main areas of focus addressed SUD manifestation, its treatment, as well as the sphere of nursing and substance use. These critical aspects were presented from both the local South African and international contexts. The literature review was helpful to the study insofar as providing background information and knowledge on dominant SUD trends and practices, as well as current theoretical developments in the self-same sphere of substance abuse. Such background was of further use in providing frameworks against which the capacity and efficacy of local SUD treatment centres. The subsequent chapter then focuses on the theoretical framework and conceptual grounded-ness of the study in general, and the research topic in particular.

CHAPTER THREE: THEORETICAL FRAMEWORK

3.1 INTRODUCTION

The previous chapter provided a literature perspective from which both the theoretical and practical domain of the study were derived (Burrel, 2017). The present chapter addresses the theoretical and conceptual frameworks on whose basis the philosophical premises of substance use and nursing care were derived and established in this study. As a field of study, substance use and addiction are connected to theories that capture important elements of their prevalence and implications to individuals, families and society (Buchman, Skinner & Illes, 2010). There are biological, psychological, sociological and other inter-related theories that stem from the idea or set of ideas that account for part of the (addiction) problem, but do not account for other features that were previously addressed by other theories. In this regard, each theory projects addiction in a particular perspective and on what is immediately visible from the particular theory's own point of view (West & Brown, 2013:1). In this study, five major theories and two models were recognised and identified as relevant. These are: the general systems, the physiological, the psychological, the socio-cultural and environmental, as well as the spiritual theories and sub-categories; all of which are cognate from the aetiological models and theories of addiction.

3.2 AETIOLOGICAL MODELS AND THEORIES OF ADDICTION

Many people use drugs for different reasons, but the vulnerability of becoming addicted depends on many factors. People who take drugs usually lack knowledge on the multiple effects of drugs, which vary from person to person, (Blobaum, 2013). Individuals may use the same drug but experience different effects due to their different body mass index (BMI) and their health status during the time of drug abuse. In conjunction with their personal and social adjustment, people also react differently in relation to their physiological, psychological changes and social environments (George et al., 2012). However, it is argued by some researchers that SUD affects everyone regardless of their race, creed, social class, age or gender (Clancy et al., 2007). There are several consistent predictors of drug use and abuse, which include the genetic/ biological, the psychological, and social environment or culture. Collectively, these predictors all contribute to the extent to which the individual will develop substance or drug addiction disorders (Malliarakis & Lucey, 2007).

3.2.1 General Systems Theory

The general systems theory (GST) was developed in the 1930s by biologist Ludwig von Bertalanffy, after he saw a need for a single, systematic, theoretical framework to account for striking parallels he had observed (Von Bretalanffy, 1975). The theory was developed to assist research in various disciplines to advance understanding, analysing and thinking about organisations (Gillies, 1982:57). The theory is clearly contextual, because it aims at the holistic general theory in which many subsystems interact, and their organisation produces strong interactions (Von Bertalanffy, 1975:122). A system is defined as complex elements in an environment interacting with each other in an ordered manner rather than randomly (Von Bertalanffy 1975:159). In a system, the focus is on the whole rather than parts of the whole, and the overall being greater than its parts. Cordon (2013) describes a system as a way of organising reality of the whole in terms of subsystems, elements, parts and variables which are interdependent and integrated.

Another concept of systems theory is the super systems referring to the hierarchy in one aspect of the super system for a lower order system. A social system is part of the super-system of families and individuals, olso there are physiological and psychological systems as the super system of the biological. The system in which the therapist is interested in at a point in time is called focal system and other systems within the super system are called interacting systems (Cordon, 2013). Because of interrelationships between subsystems, the overarching principle is that whenever one subsystem is affected, it also affects the other subsystems. In the treatment of Substance Use Disorder professionals break down that portion of system in a more manageable separate part (Cozby & Bates, 2015).

The interrelationships between subsystems within the whole and between the subsystems and super systems, and between super systems, are critical in determining the health status of patients (Nies & McEwen, 2007). Human beings are like open systems that are in constant interaction with their environment, ensuring that the goal of nursing is on helping individuals interact with their environment in the restoration process to good health (George, 2002: 243). In the context of the systems theory, the whole is the service user, and the systems are biological, psychological, social/environmental and spiritual.

The context of SUD treatment, system consists of sub-elements such as the setting where treatment is being offered, the services being offered by professionals (e.g. nurses, social workers, occupational therapists, medical practitioners), and other team members, including the support structure (George, 2002: 243).

3.2.2 Physiological/ Biological Theories

Researchers have identified the role of genetics in the development of SUD. Liu and colleagues (2006 cited in Malliarakis & Lucey, 2007) reported 89 genes that were most likely responsible for the development of addiction among individuals. Genetics theory investigates the role of heredity in the development of SUD. Researchers investigated the genetic factors that contribute to addiction and found that among ethnic groups, genetic factors increase the individuals' vulnerability to addiction; whereas other ethnic groups appeared to have protective genetic factors that lessen the possibilities of substance abuse (Malliarakis & Lucey, 2007). It is estimated that the genetic factors of an individual account for 40-60% of a person's vulnerability to becoming addicted (NIDA, 2014: 8). It is further postulated that the method of administration of drugs increases the risk of an individual' addiction.

The conventional disease model views addiction as a disease, in which case "disease" means lack of ease, a pathological condition of the body that has a group of signs and symptoms and findings from investigations relevant to it (Hennessy, 2017). The pathological change occurring in the brain results in overpowering urges. Chronic addiction diseases vary, depending on their progression as determined by the degree of incapacitation and the speed and timing of such incapacitation (White et al, 2003: 10). In this regard, the individual keeps on relapsing and continues with substance abuse, despite the addicted individual making serious efforts to discontinue the substance (West & Brown, 2013: 96). Addiction develops because of the narcotic or pharmacological properties and effects of the abused substance. In in this regard, addiction is attributed more to the chemical composition of the used drug than the individual or the environment (Peltzer & Phaswana-Mafuya, 2018).

3.2.2.1 Biological perspectives

This relates to the formidable heredity components in the causes of SUD, and the physical problems that may arise due to the use of substances (NIDA, 2012). The biological perspective posits substance addiction as a disease that requires medical interventions. That is, addiction is viewed as a chronic relapsing illness, requiring continued inpatient care in the treatment facilities. According to this perspective, the treatment requires medical professionals, including nurses, doctors, psychiatrists, psychologists, occupational therapists and social workers.

Furthermore, substance use can have a significant health consequence, affecting the biological subsystems. For instance, tobacco smoking may cause heart and lung disease, and alcohol abuse may cause liver cirrhosis. According to this perspective, addiction could be managed by the same method used for diseases and can be managed by employing behavioural, medical and social means.

Substance abuse affects and alters various biological subsystems and causes structural changes in genetics, drug response, health and disease, disability, reward circuit deficit, neurotransmitter complications, and neuroadaptation (Olson et al., 2017). After every medical intervention following the disturbance in a system, the individual is restored to the normal state, meaning that the body re-establishes its equational steady state (Von Bertalanffy, 1975: 45).

3.2.3 Psychological Theories

Over the years, it has been discovered that one of the reasons for young people using substances was a way of escaping the intense feeling of loneliness, boredom as well as the sense of belonging among peers (Schmitz & Mickelson. 1972:358). In addition, Rasmussen (2000:9) explains the psychodynamic theory in the context of addiction developing when an individual uses substance to escape pain.

Secondly, addiction develops as a result of conflict amongst the id, ego and superego in an effort to relieve anxiety, the self-care, and self-preservation. Therefore, self-care

disturbances and self-destruction characterise addiction and signal an impaired ego. Furthermore, impulse, self-centredness, self-destructiveness, irresponsibility, poor judgement, regression, irritability and labile mood, all contribute to the development of addiction.

Many people using substances have been found to have a history of anti-social behaviour and a high level of depression and/ or low self-esteem (Scot, 2019). The latter author concludes that individuals at risk of developing addiction exhibit excessive behaviours reflecting their lack of appropriate self-control and coping skills.

3.2.3.1 Psychological perspectives

As individuals try to reduce tensions and gratification of their biological needs, mental disorders or neuroses occur (Poudel & Gautam: 2017). This is evidenced by forms of behavioural change. Psychological phenomena are part of an individual, and consist of a subsystem called personalities, which are composed of molecular units, reflexes, sensations, a brain centre for thoughts, feeling, behaviour and perceptions (Von Bertalanffy, 1981:112). In such a context, behaviour is then viewed as a stimulus-response scheme in which an individual function by responding to external stimuli. This is evident in the Pavlovian conditioning situation where a set of operations in which a contingency is arranged between two stimuli reliably predicts the other (Siegel, 1983: 208). That is a sum of reactions tending to re-establish at minimum cost an equilibrium which has been disturbed by outside stimuli.

Therefore, a psychological mental dysfunction is viewed as a result of a system disturbance rather than the loss of a single functioning (Von Bertalanffy, 1981:112). Individuals do not only react to outside stimuli, a system also reacts to its intrinsic activity (Von Bertalanffy, 1981:35). Psychologically, human behaviour tends to release and build tensions. (Von Bertalanffy, 1968:191). Psychological perspectives of substance addiction do not only refer to behavioural processes, but also cognitive and emotional processes that lead to compulsive use.

3.2.4 Socio-Cultural and Environmental Theories

Sociocultural and environmental theories posit that the family, culture, environment and other socioeconomic factors contribute in the development of addiction. The enabling

behaviour, family rituals, and the development of rules determine the behaviours and define the roles for a family member and the development of addiction (Ramlagan et al., 2010).

A study by Poudel and Gautam (2017:6) confirmed that substance use was significantly associated with psychosocial problems. For example, the home or social environment of a child in which parents abuse substances, increases the risk of substance use by the child emulating the parents. Other environmental factors contributing to an individuals' development of addiction include family dynamics, peer influences, everyday stress, and cultural values (Thorkildsen & Eriksson, 2015). According to NIDA (2018:2), an individual's environment is inclusive of influences from family, friends, economic status and general quality of life. Environmental or social theory also includes factors such as peer pressure, physical and sexual abuse, early exposure to substances, stress, and the type of parental guidance. All these factors increase the likelihood of an individual to use or become addicted to substance.

3.2.4.1 Social perspectives

Environmentalism emphasises that behaviour and personality are shaped by outside influences (Whitesock et al., 2018). The same applies to substance and classical conditioning, according to which substance use environments and paraphernalia can induce severe craving (Whitesock et al., 2018). While systems interact with each other, each has its own function, and all the systems also react to the environment or external forces that lie outside the body (Cordon, 2013:14). Adding to the above, drugs are also used to promote social interaction, as customs and rules in certain societies to promote group solidarity. However, SUD may develop as a product of multiple factors, which may include the family, peer pressure, ethnic group, advertising, economics and availability of drugs (Wilson, 2013).

3.2.5 The Spiritual Theories

All human beings have a deep desire for God, a longing for wholeness, completion, or fulfilment (Holyoke & Stephenson, 2017). Human beings get hungry for love, to be loved, and to move closer to the source of love, which will give them meaning to life. Addiction is viewed as offering temporary relief of the longing for love, supposedly transporting the abusers out of their illusory loneliness and pain into a fantasy world. The spiritual

development of individuals is an innate evolutionary capacity, a process of learning about love, caring, empathy and meaning in life (Dossey & Keegan, 2016:4). This connects to her/ his psyche, soul, inner peace and inner wisdom that evokes longing for a deeper purpose and feeling of loneliness. People suffering from SUD believe that they have lost connection with their own higher powers. Due to addiction, individuals may become self-righteous and intolerant and attempt to control other people's inner life, which is the anti-thesis of spirituality (Holyoke & Stephenson).

3.2.5.1 Spiritual perspective

People suffering from SUD believe they have lost connection with their own higher powers. Due to addiction, individuals may become self-righteous, intolerant and attempt to control other people's inner life, which is the anti-thesis of spirituality (Holyoke & Stephenson).

3.2.6 Bio-Psychosocial Spiritual Model

The bio-psycho-social model was first articulated by George Engel in 1977 as a reaction to reductionist and un-scientific perspectives, recognising how suffering and illness are affected by the interplay of biological, psychological, and social factors. (Jason & Glenwick, 2016). The main component of the biopsychosocial-spiritual model in addiction is the instructiveness derived from the basic principle of interactionism, which asserts the inter-connectedness of cause and effect (Greaves, Poole & Boyle 2015). In Figure 3.1 below, the biopsychosocial-spiritual systems are shown in the circles. The rectangles on the left shows the subsystems, and 'boxes' on the right shows the substance abuse disorders risk factors per systems.

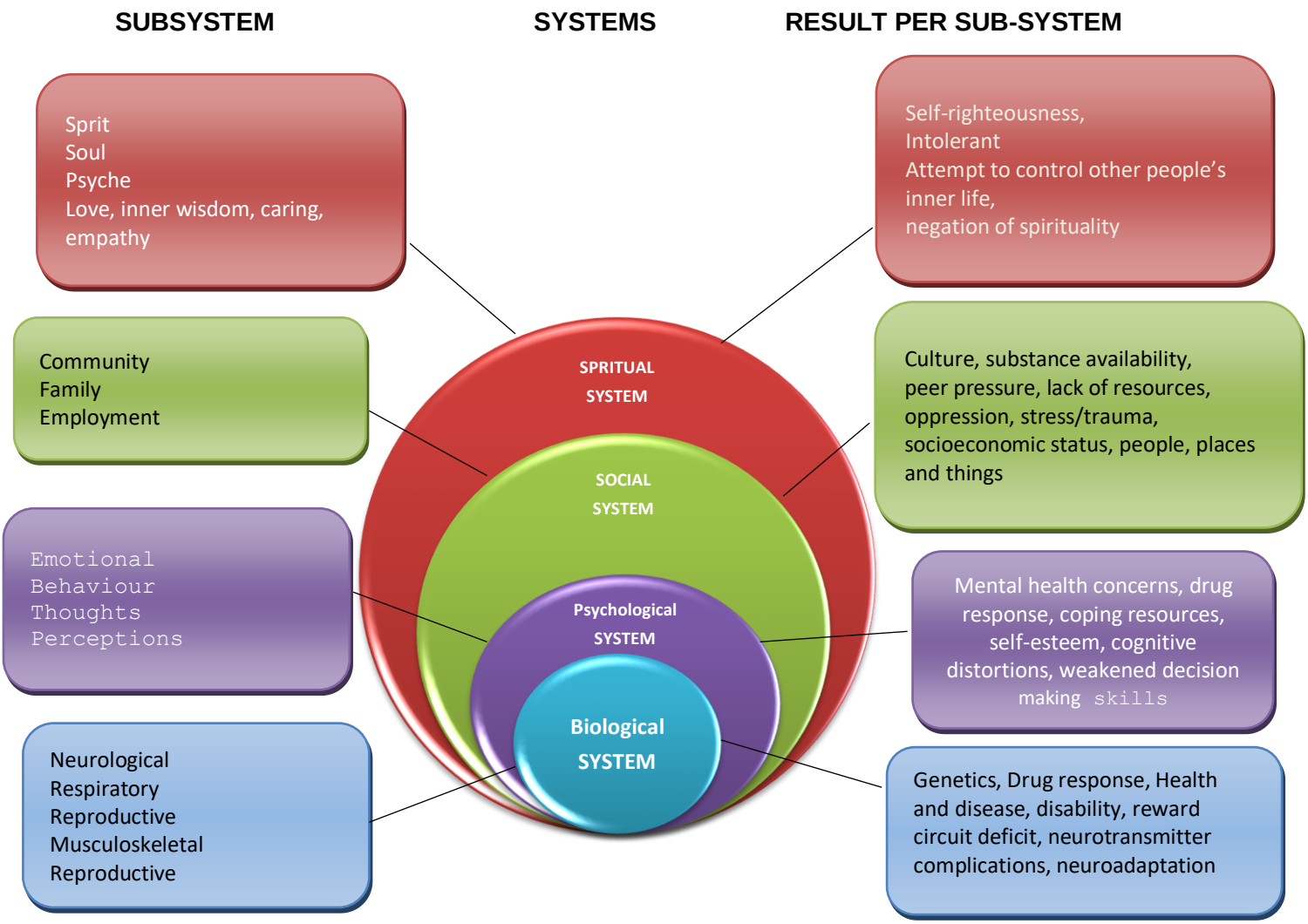

Figure 3.1: Biopsychosocial-spiritual approach applied on systems theories

Figure 3.1 above is based on the systems perspective according to which the body, mind and environmental interaction cause diseases. The biopsychosocial-spiritual model is can be used in conjunction with any philosophical approach (Jason & Glenwick, 2016). When applied to substance addiction, the biopsychosocial approach attempts to combine biological, psychological, social processes, and their interactions to addiction in all its complexity.

Biopsychosocial approaches highlight the interactions and mutually reinforcing forces and elements in creating addiction treatment. It draws on biology, sociology and psychology, recognizes cultural factors and additional systems perspective in addiction treatment. In many self-care treatments the system incorporates spirituality (Greaves, Poole & Boyle, 2015). When applying systems theory in the treatment of SUD, it is necessary to treat not only parts and processes in isolation, but to treat the problems found in the addicted person and consolidate them, which will result in the dynamic interaction of subsystems.

Eventually, the behaviour of the subsystem makes it different from treating them in isolation or within the whole (Bertalanffy 1968:31).

3.2.7 Reflective Choice Model

Reflective choice is defined as self-conscious analysis of options and decision-making by an individual to choose that particular option (West & Brown, 2013:41). The choice involved may be rational or irrational. This model posits that there is no abnormality in the mental functioning of the addict, and there is no disorder. Accordingly, the addicted individual is viewed as being able to make a choice whether to stop abuse of substance or not. Therefore, non-addicts feel it is better to live a life without addiction than suffer the consequences of substance abuse. However, the model emphasises that the onlookers forget that the alternative life imagined for the addict is not the alternative life the addict imagines for himself or for herself.

3.3 CONCLUSION

This chapter discussed the theoretical perspectives guiding the study. These perspectives are not an end in themselves, but only the means by which the study associates and connects theory and practice as a system of connected perspectives, rather than isolated or peripheral variables in the entire research process (Ling & Ling, 2017). Theories and models further help professionals, practitioners and in the addiction field to describe, explain, predict, control and guide the diagnosis and treatment of addiction (Myers et al., 2010).

The following chapter presents the research design and methods adopted in the study, in terms of which the data collection framework of the study is firmly situated.

CHAPTER FOUR: RESEARCH DESIGN AND METHODS

4.1 INTRODUCTION

The previous chapter mainly presented the theoretical framework of the study and illustrated the interconnectedness of different elements and aspects of the seminal aetiological theories and other associated theories, with SUD forming a pivotal focal point of the theoretical framework. The present chapter, on the other hand, focuses most fundamentally on the research design and methods adopted by the researcher. In this regard, the chapter focuses specifically on the main processes of research associated with the data collection and the instruments used to collect the relevant data (Pautasso, 2013). Based on the core units of analysis articulated in Chapter One, and supported by the consulted literature and the study's theoretical framework, the current chapter outlines the research design and methods; the data collection, management, and analysis processes; the sampling context; as well as the validity and reliability of the study and its related findings. The findings themselves are the core subject of Chapter Five.

4.2 RESEARCH DESIGN

Research design premises on the processes and strategies adopted in the study's data collection stages in order to achieve the objectives of the study, resolve the research questions, as well as the research problem (Babbie, 2010). In this study, a convergent mixed-methods research design was adopted, which involved quantitative, qualitative approaches. The rationale for utilising this triangulated approach was to ensure that both the processes of research and the specific instruments used to collect data, yielded the most optimal and cogent findings (Brink et al., 2018: 106)

4.2.1 Quantitative strand

Quantitative research mainly focusses on statistically inclined analysis and planned deductively, with the consulted literature serving as the main point of reference for planning and executing research (Botma et al., 2010). The researcher used the quantitative research due to the large samples of inpatient substance users' official admission records at the selected three treatment centres (Braun & Clarke, 2014). This quantitative segment also investigated the efficacy or otherwise of 5 (five) substance use

treatment programmes as the fundamental framework against which the study's innovated health care guidelines and principles were to be developed.

Creswell and Creswell (2018:217) assert that quantitative research studies are advantageous for large samples and their objective interpretation of data. Moreover, such studies make it possible for generalisations of the findings to be made for other research settings that show similar conditions, characteristics or contexts as those of the original sites of research. As such, many variables and cases can be generated for vast numbers of information and data (Burns et al., 2013). In this study, the quantitative aspect was employed with the use of vast quantities of documents (admission records) containing SUD-related information of the service users at the study's three selected research sites.

4.2.2 Qualitative strand

The qualitative research approach emphasises on human behaviour and experiences of the research subjects in their natural or ecological settings familiar to them (Benoot et al., 2016). In such cases, the objective is to obtain the knowledge, perceptions and understanding, as well as the experiences of the very people who are directly affected by the phenomenon that the researcher is investigating (in this case, substance abuse disorder). There is also the arguement in some research scholars that qualitative research may be subjective since it is the views of the very participants that are dominant (Cozby & Bates, 2015). Unlike the quantitative research (and their objective, statistically-oriented interpretation), qualitative research rely on the research participants' non-numeric knowledge, experiences, and assumptions to recreate their own realities (Kate & Whitley, 2018:5).

The explorative, descriptive, narrative, and analytic aspects of the qualitative mode of research complement each other, which mitigates to a certain extent against bias and prejudicies from both the researcher and the research participants (Dunn, 2013). Moreover, qualitative research methods are recognisable by their independence from the sample (Terrell, 2016:211). Hence, a case could be made on the basis of a sample size that is not as large as in a quantitative research context

4.2.3 Mixed-methods Research Approach

According to Terrell (2016: 211), and Creswell and Creswell (2018:249), mixed methods approach are based on the combination of both qualitative and quantitative research methods to achieve the maximum level and amount of information, knowledge, and data pertinent to the specific intentions of the study. It is on account of this optimisation and complementarity of methods that the current study on substance use disorder opted for the mixed methods approach to address different questions and issues relating to substance use disorder (Leedy & Ormrod 2019:262).

Mixed methods designs are credited with enhancing the limitation of both qualitative and quantitative designs when used separately or individually (Polit & Beck, 2017). Mason (2018:40) emphasises that mix methods/triangulation are also advantageous in that more than one data source can be used, especially in studies where social phenomena are measured from two or more different situations in order to improve or validate the correctness of the findings. In this study, the researcher realised the need for insightful understanding of experiences of nurses who provide care to inpatient substance abusers.

Notwithstanding its strengths, mixed methods may be time consuming and costly in some instances (Creswell & Creswell, 2018). There is also the possibility that the quantitative and qualitative results could reflect some inconsistency. Given the nature of this study, the researcher used the qualitative and quantitative results to conduct and to produce convergent findings. The convergence of these two approaches was useful in comparing and contrasting the accumulated processes and findings in order to develop new and relevant insights concerning inpatient care and treatment needs (Arnetz, Hamblin, Essenmacher, Upfal, Ager & Luborsky, 2015).

The researcher used simultaneous bi-directional approach in the merging of data, in the merging of data, characterised by back-and-forth, interactive engagement processing of both quantitative and qualitative findings (Miles et al., 2014). The researcher identified content areas represented in both data sets and compared, contrasted and synthesised the results at discussion or meta-inferences. In addition, differences and similarities were identified within one set of results, based on dimensions within other sets. Gunawa (2015) allude that statistical information and its subcategories is comparable for generation of theme. In this study on substance use disorder the convergence of both qualitative and quantitative results provided a framework for inferences inorder to compare and to

contrast the reltionship of the variables emerging from both the admission records of the SUD inpatients supported by the narrative statements of the nurses who were involved in the empirical collection of data at the three research sites (treatment centres). Hilal and Alabri (2013) corroborate that inferences, especially in the case of mixed methods are helpful for comparing sets of data obtained through different sources.

4.2.3.1 Convergent research design

Dossey and Keegan inform that convergent research designs are the traditional triangulation methods that integrate or converge different data in order to construct specific themes during the analytic phase of research. Polit and Beck (2017:724) allude that convergent reserch designs are concurrent and equally prioritise and complement qualitative and quantitative data

In this study the convergent research design was of particular use in the merging, comparing and contrasting of multiple data sets obtained both qualitatively and quantitatively. A major assumption of the convergent design is that both open-ended and closed-ended data provides different types of information (Doyle, 2009). In this study the researcher used the convergent design concurrently undertake qualitative and quantitative processes of the study. However, the research problem and research objectives were still the same. There was no separate research problem and research objectives for the quantitative and qualitative aspects of the study (Terrell, 2016:211).

The researcher used convergent parallel mixed method to understand the care and treatment of inpatient substance users which helped the researcher to suggest the nursing care guiding principles. The researcher concurrently and separately designed the quantitative and quantitative strand; in which respective research questions and approaches were determined (Leedy & Ormrod, 2015:331). Figure 4.1 is a diagramatic representation of the convergent mixed method as adapted from Cresswell and Plano-Clark.

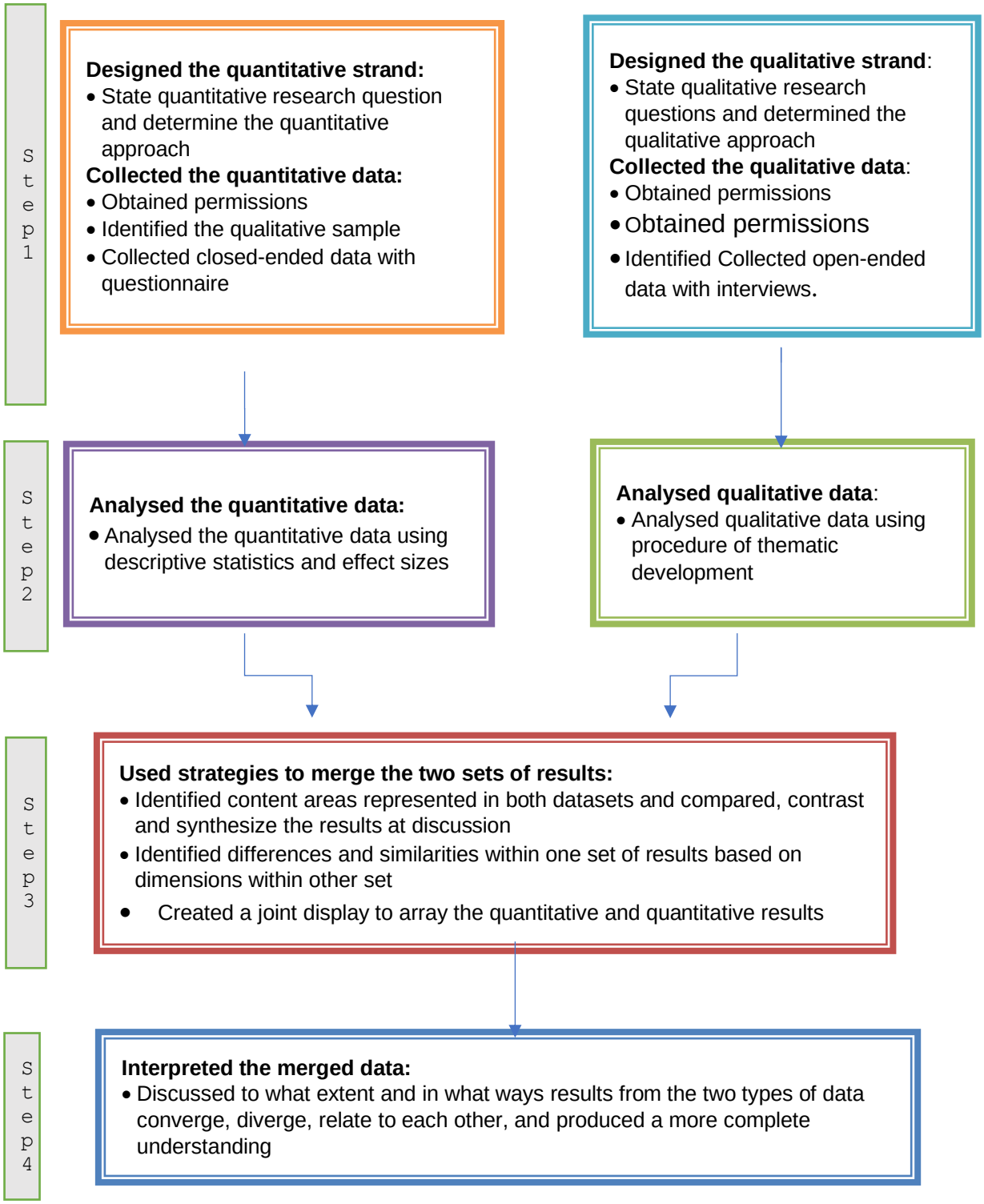

Figure 4.1: Flowchart of basic procedure in implementing a convergent mixed method design

Source: Adapted from Cresswell & Plano-Clark ,2018:70

As indicated in the figure above, the researcher used four main steps of convergent design. The researcher merged qualitative and quantitative results by directly comparing the two results in the discussion. Furthermore, the researcher interpreted the extent at which the two sets of results converged or diverged (Dunn, 2013).

4.2.4 Merging and Interpretation of Data

The study was undertaken in two clearly distinguishable segments as shown in sub-sections 4.3.1. and 4.3.2, both of which were consistent with the aptly articulated steps by Creswell and Plano-Clark (2018:70) in Figure 4.1 above. The practicality of these steps has been demonstrated in Chapter Five.

The convergence of data analysis enabled an approach according to which the findings yielded a holistic and thematically integrated/merged meaning of different variables around which the core phenomenon of substance abuse disorders and its treatment was presented and discussed (Leedy & Ormrod, 2015:331; Terrell, 2016:211). As propounded by Dunn (2013) and others. In this regard, steps 3 and 4 highlighted in Figure 4.1 were exemplified with the focused responses directed at in-patients' attributes and attitudes; nurses as care providers; as well as the treatment programmes themselves. It is in this particular regard that ***the capacity of treatment centres*** was contextualised and referred to in the statement of the research problem (Section 1.2, p. 4) in this study. Therefore, both the socio-demographic factors and subsequently generated themes should be viewed more in the methods-based context rather than the participant-based context. From the perspective of the study, the latter context elevates and particularises the data source; whereas the methods-based contextualisation necessarily centralizes and elevates the eclectically integrated data itself than its source (Goran, 2011; Vaismoradi, Turunen & Bondas, 2013). The methods-participant approaches are emphasised here, since they constitute the very point of convergence/merging of the data analysis process.

Accordingly, for step 3 and step 4 of Figure 4.1 (which are essentially segment 1 and segment 2 of the study as stated in sub-section 4.3.1 and sub-section 4.3.2 below), the quantitative data focused on both the demographic characteristics and SUD-related aspects of in-patients - the evidence of which was obtained from their (244) admission records. Meanwhile, the qualitative data yielded 6 (six) global themes and multiple associated sub-categories.

4.3 DATA COLLECTION AND PROCEDURES

Data collection refers to the systematic process of selecting and gathering data, based on the study design and measurement methods (Polit & Beck, 2017:725). Meanwhile,

Gray et al. (2017:493) mention that data collection is the fundamental basis of generating the findings and evidence of the study in its totallity. Congruent with its mixed methods convergent research designs, the systematic collection of data in this study entailed both qulitative and quantitative aspects which were enhanced by exploratory and descriptive elements.

4.3.1 Qualitative Data Collection

The qualitative data collection aspect of the study was facilitated through three focus group discussions consisting of a total of sixteen health care nurses from the three substance abuse treatment centres. Focus group interviews is a naturalistic interview that uses a small group of participants interviewed together, prompting a discussion (Dossey & Keegan, 2016). In a focus group discussion, the researcher asks the selected group of participants questions which were not predetermined (Grant & Osanloo, 2014:12). Unstructured focus group discussions were relevant because the researcher could not predetermine the proceedings with the nurses and their outcomes (Polit & Beck, 2017: 509).

4.3.1.1 Focus group interviews

Focus group discussions constituted the primary mode of qualitative data collection in this study, and justifies the convergence of themes generated from each focus group with the admission records and treatment programme to which the selected nurses were responding (Creswell & Plano-Clark, 2018:74). The researcher conducted 3 (three) focus group discussions consisting of five (5) nurses in each group. The focus group discussions allowed participants to share their thoughts with one another, generate ideas and considered a range of views in relation to the researcher's core and probing questions until the point of data saturation (Brink et al., 2018:144).

The researcher purposively selected sample of nurses with the following assumptions: that their experiences in substance abuse are of great assistance to substance users to cope with their psychological, social, environmental, emotional and cultural aspects (Gouse et al., 2016). The latter was assumed to be in their nursing training programmes. These aspects were also asked during the focus group interviews. During this unstructured focus group discussions, the researcher allowed the participants to express their own perspectives using their own frames of reference, ideas, and meanings that

were familiar to them. This particular aspect is important, as it conforms to the participant-centredness of qualitative research designs advocated by many researchers.

Prior to the commencement of the focus group discussions, the researcher made the necessary logistical arrangements and was granted permission by the institutions to conduct the empirical phase of the study on their premises (treatment centres) at convenient times for both the researcher and the participants. All the focus group interviews took place at the participants' workplace in a private office offered by the management specifically for the purpose of interviews with five nurses per session, varying from sixty to ninety minutes, depending on the amount of data which each group was able to provide.

As indicated in sub-section 4.4.3, non-probability purposive sampling was utilised to sample the eventual 16 nurses. Additionally, the criteria for their selection is clarified in sub-section 4.4.5 following formal requests to the facility managers at the three Gauteng substance abuse treatment centres. The actual recruitment and identification of the most suitable participants was actuated by the facility managers in consultation with their human resource managers based on the criteria established by the researcher (and not the centres themselves). Largely due to the choice of the purposive/ judgement sampling strategy (based on the researcher's adequate knowledge of these three treatment centres), the researcher consciously and intentionally desisted from active involvement in the names of the final 15 participants; which was in itself, a measure of adherence to both ethical protocols (see Section 1.10) and measures to ensure trustworthiness in the quality of the collected and analysed data (see Section 4.6) (Adams & Callahan, 2014; Tshuma & Mafa, 2013).

Apart from introducing the study and its objectives prior to the commencement of the three focus group sessions and only explaining or answering questions posed to her by the participants, the researcher maintained her objectivity throughout these sessions by not imposing her views on the responses of the participants (Morse & Field, 2013). Because the researcher is in the same professional environment as the research participants, objectivity was further exercised by not providing leading questions to the focus group participants (Babbie, 2010)In this qualitative strand of the investigation, the researcher used unstructured focus group interviews to gather in-depth information regarding nurses' experiences in providing nursing care to substance abusing inpatients. The researcher was the main instrument conducting interviews. Following early

introductions of each participant and the researcher's observance of all protocol (entailed in the participants' information sheet and informed consent form) (Wiles, 2013).

A 'grand tour' question for all the focus group interviews was asked. The question was a broad open-ended question, intended to gain an overview of the experiences of nurses in providing nursing care to inpatient substance abusers. Subsequently, more focused/ probing questions were asked until saturation point (Faulkner & Faulkner, 2019). The following ground rules were agreed to, at the beginning of the focus group sessions:

(1) participants could speak openly and freely;
(2) there were no right or wrong answers;
(3) to respect each other;
(4) one person to speak at a time; and
(5) maintaining confidentiality (see Annexure E) (Polit & Beck 2017:511).

The grand tour question for this qualitative aspect of the study was: ***What are your experiences of rendering inpatient nursing care to people who are using/addicted to substances?***

This question was asked to initiate separate dialogues with the three groups of nurses, and mainly focused on their different experiences in the provision of care to the substance use inpatients admitted at their treatment centres. The grand tour question was complemented by probing questions until the researcher was satisfied that data saturation has been reached. Data saturation is described as the point during the focus group interviews at which new data could not be obtained (Green, 2013) The researcher stopped collecting data at the point of saturation.

4.3.1.1.1 Communication techniques applied during the focus groups

Probing*:* Gray et al. (2017:261) describe probing as the use of non-threatening, but thought-provoking form of interview**.** Probing during interviews is the method used by the researcher to obtain detailed and reflective information from participants. Although the tone of qualitative interviewing is conversational, probing is what distinguishes qualitative interviews from interviewing that occurs in everyday conversations (Taylor et al., 2016:123). In this qualitative aspect of the study probing was applied in the form of specific and focused open-ended questions based on the participants' responses in relation to the research objectives.

Cross-checking: During the focus-group interview, the researcher imposed cross-cheeks on participants' conversations to examine them for accuracy between different factual accounts of the same events or experiences (Taylor et al., 2016:127).

Clarifying*:* Clarifying is defined as making something less confusing and easier to understand by providing detailed information (Grant & Osanloo, 2014:14). During the focus-groups, the researcher ensured that participants clearly understood questions by clarifying and answering their questions.

Short verbal responses*:* The researcher also used short responses such as, "Uhm ..." to encourage the participants to continue with their responses, or "ee" to show agreement. These were often used either to elicit further elaborations or as interjections in between a participant's continuous narration. All interviews were recorded using a voice recorder after verbal consent was obtained from them.

4.3.2 Quantitative Data Collection

The quantitative data collection of this convergent study focused on the statistical/numerical gathering of information to test the relationship amongst variables (Van Wyk, 2010) Quantitative research studies are based on deductive logic and are more structured to allow for generalisations. (Babbie, 2010) In addition, quantitative data collection processes provide an audit trail of the study with clear explanations of the techniques or strategies employed in generating the results, including the rationale for the selected method (Babbie, 2010).

In this study, the quantitative aspect of the study was facilitated by means of a systematic consulting, review and analysis of official inpatient substance use service users at one of the three selected substance use treatment centres. The rationale for this approach was based on the fact that, the qualitative data collection was already obtained from the nurses at two of the three research sites by means of focus group interviews. Therefore, the admission records of 244 inpatients at the one treatment centre yielded quantifiable data and information in respect of the following eight categories of substance abuse inpatients at the treatment centre (Alford, 2014:153):

- Socio-demographic data: identifying the individual in terms of age; gender; marital status; number of children; race; educational and employment status; and religion.
- Personal history: about the period of substance and whether he/she had ever tried to seek help for substance addiction before admission at the facility for treatment.

- The service user's history: type of substance being used, the period it has been abused, the number of substances and family involvement in the substance addiction, considering both physical and psychological addiction. Also, two (02) questions soliciting the presence of family support.
- Medical history: to check the presence of medical conditions before and during the admission period.
- Detoxification: whether it was done, and for how long?
- Medical, psychiatric and psychological conditions and the reasons of their presence.

Before the commencement of the study, the researcher obtained permission to gain access to the research setting from the Department of Social Development in Gauteng Province. The researcher further requested permission to gain access to the admission files from the selected treatment centre. The Operational Nursing Manager's office was provided for use during the review of inpatients' admission files, which was obtained from the centre's admission office. The records were kept in the Operational Nursing Manager's office for the three days during which they were reviewed and analysed by the researcher. Following the review of the admission files/ records of the 244 substance abuse inpatients, the researcher then prepared for their thematic analysis concurrent with the thematically analysed information of the focus group interviews with the nurses at the other two treatment centres.

4.4 THE SAMPLING CONTEXT

Sampling refers to the selection of representative groups, units, or cases on account of the similarity of characteristics or traits in relation to larger group from which it (sample) was selected (Babbie, 2010). The sampling context then refers to a structured framework guiding the processes by which the selected participants were selected. For the qualitative data collection, the participants were selected according to the researchers predetermined criteria. For the quantitative aspect, the selection of records was guided by the record of cases as recorded in the files of the Operational Manager in the selected SUD treatment centre. Taking both the qualitative and quantitative impetus of the study's multiple forms and sources of data, the sampling context is then structured such that the following critical variables: study setting; study population and sample size; sampling strategy or technique; as well as the selection criteria.

4.4.1 Study Setting

The study setting refers to the physical geographical place at which the study was conducted (Walliman, 2015). The setting also refers to the timing of the study as well as the political, historical, cultural, social, economic and other important developments taking place at the time of undertaking the study. The present study was conducted at three SUD treatment centres in Gauteng Province. The review and analysis of the 2 444 inpatient admission records was conducted at one of these three treatment centres, while the focus group sessions were held with nurses rendering care services at all three centres.

The study was conducted at a time when drug use was rampant in many urban and rural townships, particularly among the socio-economically marginalised groups in society (Wagner, Kawulich & Garner, 2012). Drugs such as nyaope have caused widespread concerns in many places throughout South Africa due to the destructive behaviour of the users, who are usually youngsters from the ages of twelve (Morse & Field, 2013). it is against this background that the study was conducted. Hence, the researcher's belief that the value and significance of the study is based on its contribution to the development of guidelines and principles to improve the performance of substance use treatment centres.

4.4.2 Study Population and Sample Size

The study population refers to all members of the super ordinate group that bears resemblance to all or most of the selection standards or criteria determined by the researcher in advance of the empirical phase of data collection. It is from the study population that the characteristics qualities or traits of representativity are determined. In this study, the study population consisted of nurses from different categories who are professionally trained and qualified or work at substance use treatment centres. Secondly, the study or targeted population consisted of substance use inpatients at treatment centres in Gauteng Province.

The sample size refers to the actual number of individuals, cases, or units taking part in the study due to their representative attributes (Tshuma & Mafa, 2013). In this study the sample size consisted of 15 nurses who took part in separate focus group interviews. The

second sample set consists of 244 cases of substance use inpatients. These cases were obtained from the admission files of the SUD inpatients rather than the inpatients themselves.

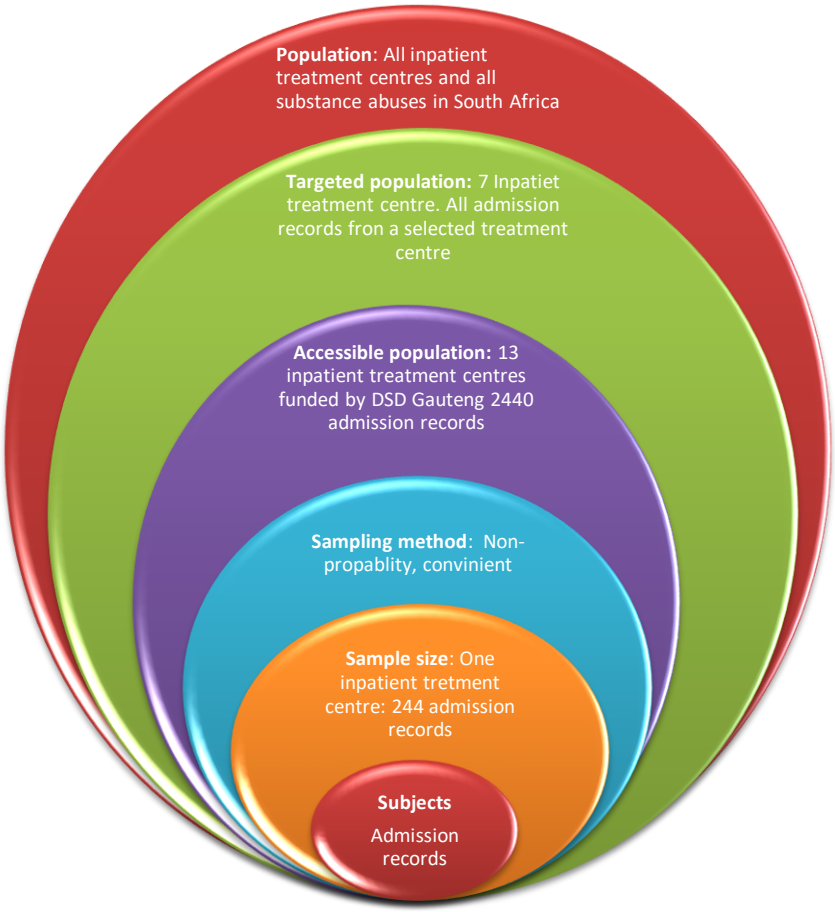

Figure: 4.2: Linking population, target population, accessible population sampling method, sample and subjects of the study

Adapted from: Gray et al. (2017: 330)

It is evident that the sampling framework demonstrates the inter-connectedness of the various sampling unit of analysis. In this regard Figure 4.2 below represents the nexus between, and among these variables, especially, insofar as the aspect of "representativity" is concerned (Tshuma & Mafa, 2013). Some schools of thought in research posit that "representativity" is necessitated by the researcher's quest to access those members, cases or units that inherently display some significant degree of "belongingness" to the group being studied in terms of similarity. As such, a continuum or linkage could be established between the aspects of representativity, accessibility, and similarity.

4.4.3 Sampling Procedures and Strategies/ Methods

Non-probability purposive sampling was used to assess and select nurses who were knowledgeable and could articulate their experiences in the provision of care to substance using service users at the treatment centres selected in this study. Purposive sampling is the selection of participants according to the researcher's own discretion as determined by the extent to which the researcher is familiar with the environment and realities of the participants Gray et al., (2017:689) explain that purposive sampling is a type of non-probalbility sampling method which involves conscious selection of participants by the researcher for inclusion in the study.

Purposive sampling is commonly used in qualitative research, based on the researcher's judgement regarding the participants' representative' qualities, or have specialised knowledge of the phenomenon being studied (Taylor et al., 2016). A qualitative researcher does not articulate an exact population to whom the results are intended to be generalised, but establishes the eligibility of participants in the research, with the prime criteria being whether the participant has experienced the phenomenon under investigation or not.

4.4.4 Sampling of Sites

In this qualitative strand of the study, purposive sampling was used, and many more participants would have increased the complexity of data analysis processes. The researcher conducted three (3) focus group, with five (5) nurses in each group (15) from three (3) selected inpatient treatment centres in Gauteng province. These research sites (treatment centres) were selected amongst others, based on their track records and expertise in the treatment of substance use, also including that:

- They were public health care facilities (one public and two non-governmental organisations) receiving government funding from the Gauteng Department of Social Development;
- Accommodated inpatients for treatment of substance use/ addiction;
- Inpatient treatment centre admitting both males and females, youth and adults;
- Provided inpatient detoxification services to adequately trained and qualified multi-professional teams; and
- Granted permission for the study to be conducted on their premises.

4.4.5 Sampling of Participants

The eligibility of the 15 nurses subscribes to the following criteria:

- All categories of nurses from 3 (three) inpatient treatment centres providing nursing care to people abusing substances.
- Nurses who were employed and provided care to service users at inpatient treatment centre for a year and above at the time of data collection
- Participants who are legible and qualified to work and provide professional service to substance abusers, as well as provision of detoxification to inpatient service users.

Any participant who did not comply with all of the above criteria was not chosen for participation in this study

4.5 DATA MANAGEMENT AND ANALYSIS

In quantitative research, data analysis is the reduction, organisation, and statistical testing of information obtained during data collection and analysis was first conducted on pre-existing sociodemographic, then other statistical tests (Tapen, 2016).

Descriptive statistics are used to explain and summarise data, and again it does indicate what data set look like. This is achieved by converting and condensing collected data into and organised visual representation in different ways, so that meaning can be attached to data (Brink et. al., 2018:166). The researcher carefully verified data, checked and eliminated errors before capturing the data (Gray et al., 2017:508). The researcher created data codebook, captured the answers after coding and entered data into Excel to create data sheet.

Data was protected by making sure no identifying information appeared on the data collection forms. Only the subject's identification number appeared (Gray et al., 2017:509). The researcher kept the forms in folders in a lockable cupboard. With the help of a statistician, the researcher captured all completed questionnaires into Excel spreadsheet. The researcher analysed the closed-ended questions using IBM Statistical Package for Social Science (SPSS) version 25. Frequency tables, bar charts and pie charts were used to present data in percentages and numbers, the researcher received assistance from a statistician to analyse and interpret data using frequencies and graphs.

The researcher used SPSS to describe the characteristics of samples by creating frequency distribution of the variables being studied, using tables, pie and bar charts. The open-ended data was analysed manually using the thematic framework analysis method (Stuckey, 2013). Each transcript was read twice or more to identify themes. Response codes were constructed based on themes that emerged and the saturation of information determined termination of the analysis. Following is Figure 4.4 showing the schematic presentation of data.

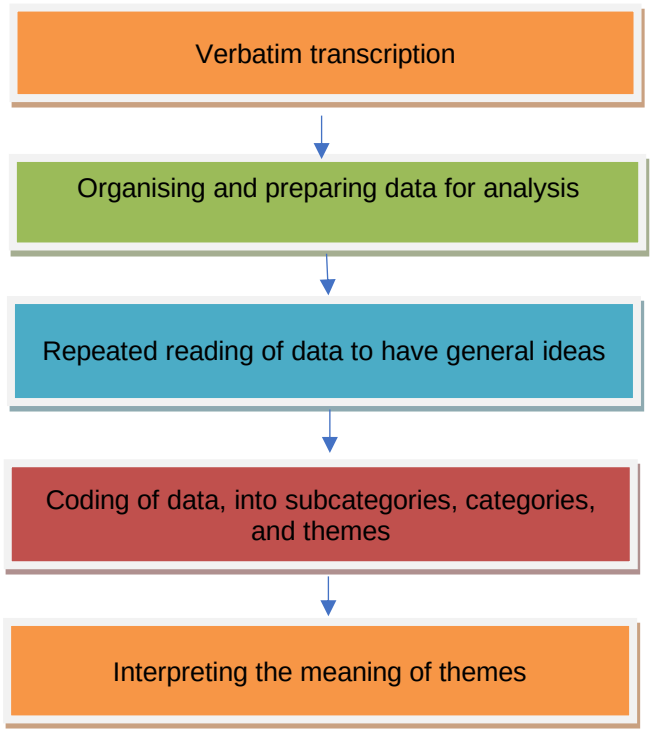

Figure 4.3: Schematic presentation of data

The above figure shows detailed steps that were followed by the researcher during qualitative strand analysis:

- The researcher organised and prepared data for analysis by conducting verbatim transcription of the audio recorded interviews and optically scan the treatment documents (Creswell & Creswell, 2018:192; Polit & Beck, 2017:531).
- Then the researcher repeatedly read and looked at all data to obtain a general sense of the information and reflecting on its overall meaning. This step helped the researcher to have general ideas of what participants were saying. To get the tone and the depth of idea (Creswell & Creswell 2018:192)
- Data was coded into segments and different codes were used to categorise data, the proses of coding started during data collection and resulted into data reduction (Creswell & Creswell, 2018).

- The researcher reduced data into smaller, more manageable units in order to identify and underline concepts, and then allocate codes. Labelled codes that correspond to categories, formed the basis for categories of all the data, (Creswell & Creswell, 2018:192)
- All the corresponding categories were grouped and developed into a theme, bringing meaning and identity to the experiences of nurses when providing care to inpatient substance abusers (Polit & Beck, 2017:535)
- Generated themes were the major findings of the qualitative strand of the study and were used as headings in the findings section. Themes were analysed and narrated to convey the findings of the analysis (Creswell & Creswell 2018:195), so that readers can understand the meaning thereof (Gray et al., 2017:269).

4.5.1 Data Analysis

The researcher analysed qualitative and quantitative data separately and independently using their relevant analytic procedures. Quantitative strands were analysed using descriptive statistics and qualitative strands were analysed using thematic analysis. Data analysis from the nurse's focus group interview started during the data collection. The researcher transcribed the recorded data, reviewed the transcripts summarising the content and paraphrasing the material in order to discard the less relevant information.

The researcher continued to review the transcripts for common themes, linking those themes and phrases together for the presentation of findings (Terrel, 2016:167). The researcher further coded, categorised and sub-categorised data by taking similar statements from their context and grouping them (Flick, 2014:45).

4.5.2 Document Analysis

Records are an important source of data. On the other hand, records may contain bias, facts may be distorted or omitted, data collection may be halted due to other reasons, confidential reasons (Brink et al., 2018:147).

Based on approval from the inpatient treatment facilities whose permission was sought, the researcher collected and analysed 5 (five) treatment programmes from inpatient treatment centres, scrutinising how different treatment programmes address the health

needs of inpatient substance abusers. Most of the treatment programmes were emailed to the researcher.

4.6 VALIDITY AND RELIABILITY OF THE RESEARCH INSTRUMENT

Scientific research is a rigorous process, requiring careful monitoring and evaluation, as well as quality assurance mechanisms (Babbie, 2010). These aspects of scientific research ensure trustworthiness of the study in terms of the validity and reliability of the research instruments. Any unmitigated flaws in the research instrument are likely to render the findings and the instrument used to obtain such findings, unreliable. Therefore, validity and reliability are two of the foremost considerations in determining the trustworthiness of the research processes and their final outcomes.

4.6.1 Validity

Validity refers to the extent to which the study's conclusions effectively and accurately reflect the reality of the participants as the primary providers of the study's information (Morse & Field, 2013). As such, validity means that the researcher had observed, identified or measured what was originally intended to be measured, such that there is a generalisability of the results to other settings (Mason, 2018:35). In addition, validity of the study is often associated with the operationalisation of variables, meaning that variables can be identified, observed, and measured. The study used descriptive design, and the findings could not be subjected to a generalisability test because of its unknown population parameters. Therefore, the external validity could not be met (Bolarinwa, 2015). The researcher ensured validity of the research instrumentation as indicated below:

- The sample was chosen in accordance with predetermined inclusion criteria;
- The site of research was chosen by considering possible ways and means to eliminate intrusions;
- Data was recorded and preserved in its original format to prevent its alteration (Gray et al., 2017:43); and
- Enforcement of objectivity by means of prolonged engagement with the participants for the corroboration of their views and perspectives.

4.6.2 Reliability

Reliability refers to the consistency or stability of measure of behaviour (Cozby & Bates, 2015:100). In this study, reliability was ensured with the centralisation of the 'grand tour' question to all nurse participants in the three focus group interviews. This ensured that there was consistency and non-deviation from the originally stated objectives of the study. In addition, the researcher ensured that she presented the preliminary findings and conclusions of the study to the focus group participants to ensure that they could either agree or disagree with the researcher's findings.

4.7 CONCLUSION

This chapter described and clarified the study's adopted research design approach and methods, both of which are distinguishable by the extent to which the qualitative and quantitative research were blended to provide a convergent mixed-methods framework. It is worth mentioning that while the qualitative and quantitative research generated various categories of information and data, it is the convergent design that enabled both data sets from the in-patients' admission records and focus group discussions with the nurses that a holistic category of themes was generated (Terrell, 2016; Vaismoradi et al., 2013). In this regard, the source of the data (participants) and the methods of collecting the particular data were not regarded as separate processes, but seamless and complementary in their merging of inpatients' characteristics, the experiences of the health care practitioners providing care at the three selected treatment centres, as well as the nature and (in)efficacy of the treatment programmes themselves (Goran, 2011).

It is specifically for the latter reason that the following chapter explores, describes and analyses in a practical and realistic manner, the extent to which the merged characteristics of SUD inpatients, nurses' experiences, and nature of the treatment programmes portray the study as a unified or wholesome unit; rather than a mere aggregation of incoherent methodological applications (Babbie, 2010; Goran, 2011).

CHAPTER FIVE: DATA PRESENTATION, ANALYSIS AND DISCUSSION

5.1 INTRODUCTION

The previous chapter focused on the research design and methodology followed in both quantitative and qualitative strands of the study. The current chapter, on the other hand, focuses on the presentation and interpretation of the findings derived from both the quantitative and qualitative data. The chapter concludes with a section focusing on a convergent analysis and comparison of both data sets in respect of the main themes that emerged. It is worth mentioning that the number of themes and their attendant categories and/or sub-categories that emerged are inter-related and complementarily hinge on the three critical factors entailed in the research topic: in-patients' substance use-related characteristics; nurses' experiences; as well as the nature of the substance use treatment programmes.

Qualitative data was collected through the researcher's focus group interviews with the sixteen nurses and triangulated by analysing, among others, how different inpatient treatment programmes address the health and medical needs of inpatient substance abusers at the three treatment centres; as well as nurse's attitudes and experiences concerning the provision of care to inpatient substance users.

Meanwhile, quantitative data was triangulated by conducting a document analysis encompassing a variety of pertinent factors, such as the demographic characteristics of the 244 inpatients; their substance abuse journey (in terms of experiences and attitude); as well as the levels of internal and external support they received. It is also worth mentioning that the variables reflected in the quantitative findings address two important issues: the sociodemographic characteristics of the substance use inpatients, as well as the help seeking, substance use history, family support, medical and psychological characteristics of these substance use inpatients.

The quantitative findings are presented in thematic categories, while the qualitative findings are presented in the form of thematically categorised narrative statements of the participants in italics to support the particular theme of the findings under discussion. Quantitative data is presented first, with tables and graphs describing the statistical information of inpatient substance users, which is analysed and interpreted below each graph and table.

5.2 INPATIENTS' SOCIO-DEMOGRAPHIC CHARACTERISTICS

Table 5.1 below reflects the overall socio-demographic profiles of the inpatients whose admission records were utilised as the main source of data in this section. Each socio-demographic variable is then presented and discussed following the overall summary depicted in Table 5.1. Due to its salience in the determination of substance use, the age variable has been categorised and discussed separately from Table 5.1.

Table 5.1: Sociodemographic characteristics of respondents (n=244)

Variable	Frequency	Percentage (%)
Gender		
Male	196	80
Female	48	20
Marital Status		
Married	16	7
Single	223	90
Divorced	1	0.4
Co-habiting	4	1.6
Number of Children		
Yes	12	4.9
No	12	4.9
Not known	220	90.2
Race		
Black	224	91.8
Coloured	14	5.7
White	6	2.5
Educational Level		
No formal education	4	1.6
Primary education	26	10.7
Secondary education	207	84.8
Post-secondary education	4	1.6
Not known	3	1.2
Employment History		
Unemployed	232	95.1
Self-employed	5	2.0
Employed by private company	5	2.0
Volunteering	1	0.4
Not known	1	0.4
Occupation		
None	233	95.5
Professional	5	2.0
Non-professional	6	2.5
Religion		
Christianity	136	55.7
None-Christianity	17	7.0
No religion	91	37.3

5.2.1 Age Distribution

Different age groups experience SUD differently (Ammit, 2016). Figure 5.1 below is an illustration of the inpatients' age distribution from all the 244 admission records surveyed by the researcher. The figure shows the age distribution of respondents ranging from the age of 10 years to above 41 years of age.

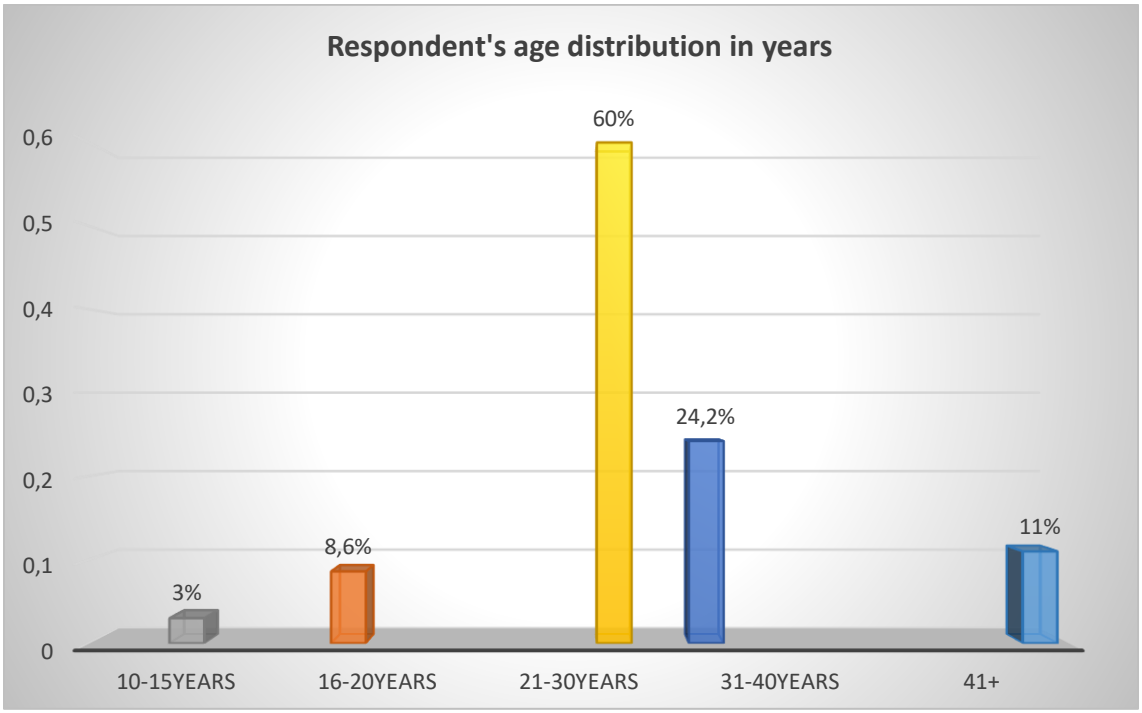

Figure 5.1 Age distribution of respondents (n=244)

Furthermore, that the majority are of age 21-30 years (60%, n=146), suggests that this age group might also have developed SUD and surpasses the next highest age group between 31-40 years (24.2%, n=59) by almost 50%. The disturbing factor is that the children aged between 10-15 years are also affected at 3% (n=7). The age group 16-20 years are at 8.6% (n=21), which implies that this age group of adolescents are also beginners experimenting with substance use and have not yet developed SUD. The 60% majority in Figure 5.1 coheres with most studies that the majority of substance users were to be found in the self-same age group of 21-30 years of age (Ammit, 2016).

5.2.2 Gender Distribution

The gender distribution of the surveyed admission records indicates a majority of males (80%, n=196), and a female minority (20%, n=48). This is a clear indication that substance addiction affects males more than it affects females. Researchers such as (Clancy et al.,

2007) contend that SUD affects everyone, regardless of their race, creed, social class, age or gender. Therefore, it would be categorically doubtful to declare that males were the most substance users on account of the gender distribution in these records.

5.2.3 Marital Status

From the surveyed records, 91.4% (n=223) were single, 6.6% (n=16) were married, followed by 1.6% (n=4) who were co-habiting and 0.4% (n=1) divorced. This finding correlates with the finding in Figure 5.1 above showing the highest number of inpatients being those aged 21-30 at 60% (n=146). Generally, people in this age group were still single and considering marriage or getting married, but because of substance abuse which dominate their lives, they either ignore their social lives or they do not care anymore. The fact that only a minority of inpatients (6.6%, n=16) were married, suggests that a correlation between marriage and SUD could not be unequivocally established. Inversely, this could also suggest that marital responsibilities were definitely a negative SUD risk factor.

5.2.4 Number of Children

About 90.2% (n=220) of the surveyed records did not indicate as to whether or not inpatients had children, 4.9% (n=12) had children, and 5.9% (n=12) did not have children. The non-indication of whether or not an inpatient has children is attributable to a number of possibilities; including the fact that the particular inpatient preferred to leave the family out of his/her SUD situation. A determination of the inpatient's children is important both for diagnostic and prognostic purposes (Amoore, 2016).

5.2.5 Racial Group

Information about race is vital in determination of genetic exposure of certain conditions including SUD (George et al., 2012). From the analysed admission records, the majority racial group was black African (91,8%, n=224), followed by Coloureds (5.7%, n=14), and Whites (2.5%, n=6). It should be noted that the data reflected in Table 5.1 does not show an accurate racial distribution picture because other substance users prefer privately owned treatment centres that were not accessed by the researcher.

5.2.6 Educational Level

From the survey, 85% (n=207) inmates had secondary education, 1.6% (n=4) had no formal education, 11% (n=26) had primary education; while 1.6% (n=4) were those with post-secondary education, and 1.2% (n=3) were those about whom nothing is known concerning their level of educational attainment. That the majority of (85%) were in secondary education (similar to age), suggests a strong correlation between adolescence and substance use susceptibility of this group. The susceptibility of this group is noted with concern and is an area that will require specific focus in terms of SUD programmatic guidelines.

5.2.7 Employment Status

Like other important socio-demographic variables noted in Table 5.1, employment status constitutes a valuable determinant for the diagnosis and prognosis for inpatients, especially those of working age (Social Work, 2015). Furthermore, van den Heever, Poggenpoel and Myburgh (2013) argue that a degree of correlation exists between SUD and (un)employment status. In Table 5.1, the majority of inpatients (95%, n=232) were unemployed, 2% (n=5) self-employed, 2% (n=5) employed by private companies, 0.4% (n=1) doing volunteering work, and the status of 0.4% (n=1) was unknown. That 95% (n=232) of the inmates were unemployed, implies that some degree of correlation may be drawn between the ages of people using substances and their unemployment status.

5.2.8 Religious Affiliation

Generally, by virtue of its emphasis on good living and ethical conduct, religion prohibits the use of illicit substances (Kendler, Gardner & Prescott, 1997). In the context of this study, religious affiliation provides an indication on the aetiology and effects of SUD. It also assists in the treatment planning and identification of strength of the individual admitted inpatient. The admission records showed that the majority of inpatients (55.7%, n=136) were Christian, 7% (n=17) belonged to non-Christian affiliations, and 37.3% (n=91) had no religious affiliation. Since spirituality is an individual matter, the religious distribution herein does not in any way reflect a collective indictment on any single religious denomination. However, for this study, such a state of affairs is an area that would require specific focus in terms of guidelines because this is an indication that this group has lost touch with their higher power and spirituality.

5.3 INPATIENTS' SUBSTANCE ABUSE JOURNEY

Following the socio-demographic information of the inpatients from their admission records, is their substance abuse help-seeking journey encompassing details such as their periods or history of substance use and previous admissions; family support; as well as medical and psychological characteristics of these substance use inpatients.

5.3.1 Period of Substance use

The information accrued in Figure 5.2 below shows that the majority of inpatients (30.5%, n=74) were involved in substance use for a period of 7-10 years, followed by 28% (n=69) who used substances for 4-6 years, 21% (n=52) for 11 years and above; while 14% (n=33) for 1-3 years, 6% (n=14) for less than a year, and 0.4% (n=1) were not sure of the period, which is the reason why it was not stated. This statistical information strongly correlates with the ages of people being admitted at the centre. The information in Figure 5.2 above also confirms that the majority of substance use cases developed from the adolescent stage of life, progressing to SUD with the continuous indulgence in this destructive habit.

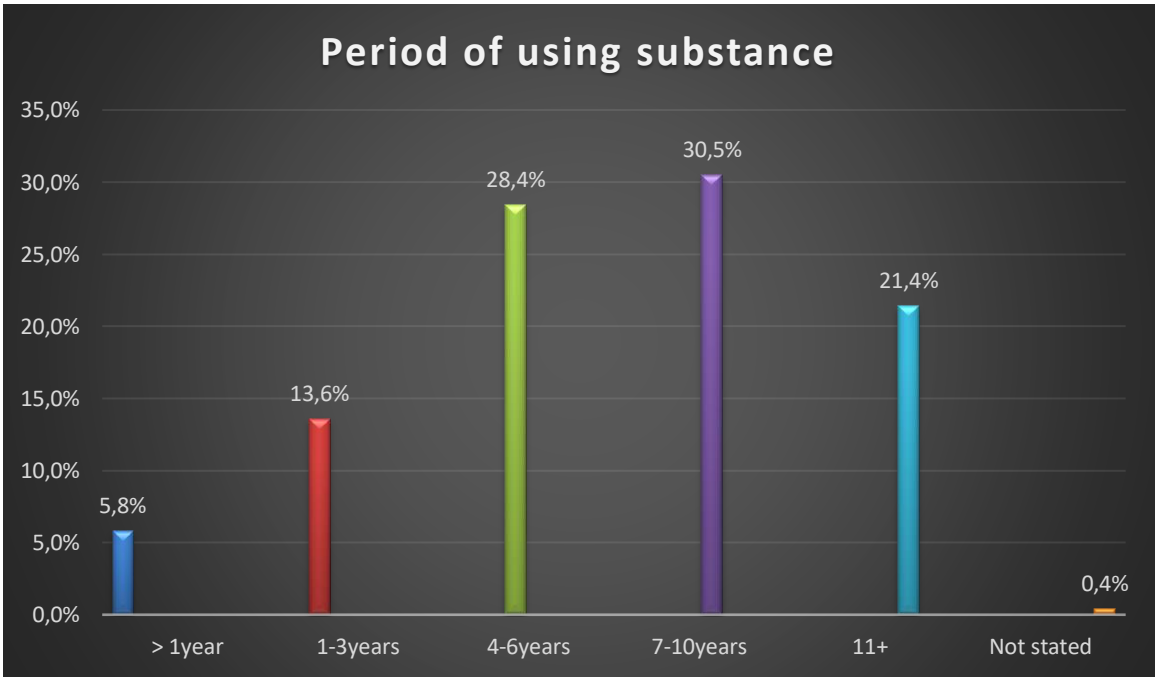

Figure 5.2: Period of substance use (n=244)

The fact that substance use could manifest a prolonged presence, suggests that prolonged and multi-faceted (inter-professional) interventions should be applied correspondingly. Such prolonged and protracted approaches are indispensable

considering the types (and affordability) of substances being continuously used. The current study established that heroin (88.9%), cannabis (83.6%), tobacco (7.4%), nyaope (5.3%), and rock cocaine (5.3%) were the most frequently used substances. The situation is further compounded by the study's discovery that on a daily average, inpatient substance users had a history of having used between 1 (one) and 15 'bags' (packages) of the used substance, depending on its availability and affordability (Social Work, 2015; Wilson, 2013).

5.3.2 Previous Admission

The inpatient's previous admission record is important for, *inter alia,* establishing how the substance use condition was treated previously, and how available treatment options could be applied. The statistical details in Figure 5.3 below shows that 80% (n=195) of service users were not admitted in the centre before, meaning that the admission was for the first time. About 16% (n=40) were admitted before and received addiction treatment. Only 4% (n=9) of the service users did not have information about previous admission. The fact that there is an 80% prevalence rate of first-time admissions and 16% prevalence rate of 'returning' or recidivism cases, is in fact a compelling motivation for the revamping of substance abuse treatment programmes. Irrespective of their minimal rate of 16% compared to the 80% of 'first-timers', the mere fact of cases of a relapse after receiving treatment could also be viewed as an indictment on the quality and nature of the very treatment itself.

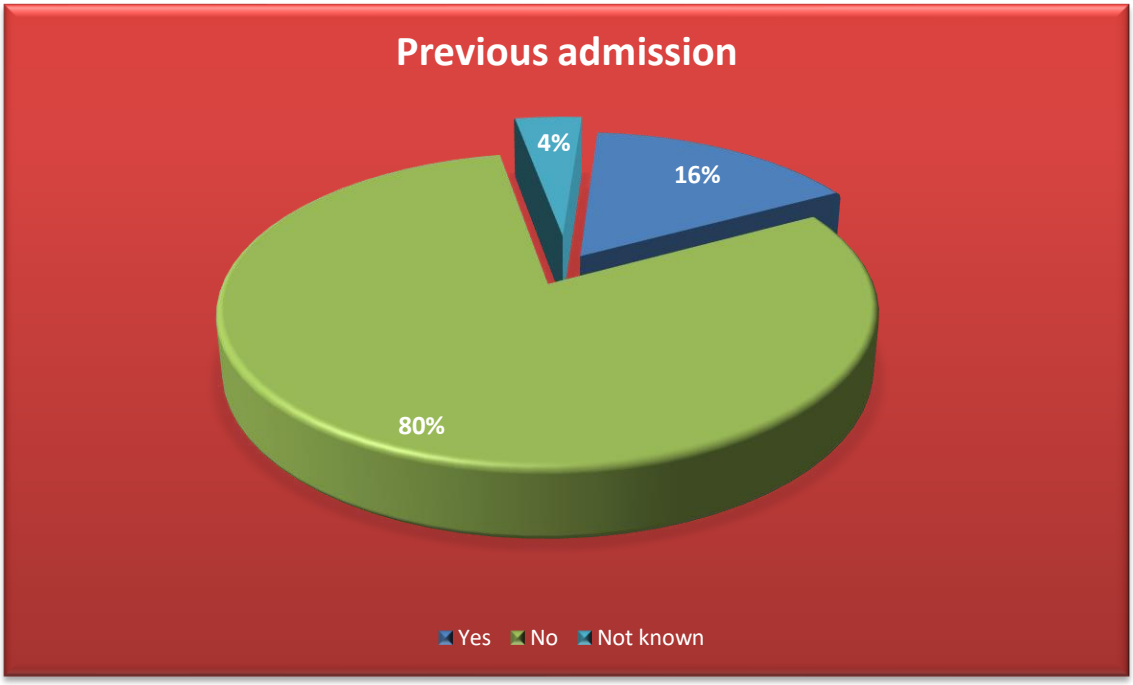

Figure 5.3: Previous admission (n=244)

In its further focus on the inpatients' past (pre-admission) behaviour and medical history or journey, this study established that some degree of correlation existed between an inpatient's previous admission record and the type of treatment facility at which s/he was admitted for substance use treatment. Information on the type of treatment facility is important because it serves, amongst others, to illuminate on the nature and quality of treatment services that were provided at admission as a point of reference for future or prognostic treatment options (Felicilda, 2015).

In addition to the information in Figure 5.3 above, this study found further that 14% (n=33) of the inpatients were previously admitted at a government (public) substance abuse treatment facility, and for 1% (n=4), it was not known whether they were previously admitted at a public or private health care facility. Meanwhile another 1% (n=3) was previously admitted at a private facility. For purposes of this study, the attitudes of inpatients concerning their situation were an important consideration. It is on account of (a positive or negative) attitude that a substance using patient (inpatient or outpatient) could be helped (Wood & Ross-Kerr, 2011). Therefore, the current type of admission is a reflection of the attitudes of the inpatients towards their condition of substance use and its disorders.

The study further established that the majority of inpatients (97%, n=236) were admitted on their own volition, which shows a generally constructive and helpful attitude towards

the eradication of substance use and the range of disorders it causes. Such a finding further explains that people who are addicted to the use of illicit substances to want to stop at some point during their journey of substance use. However, their desire to do so may be overwhelmed by the cravings or effects of the withdrawal rendering these people unable to stop on their own. Hence, they voluntarily seek inpatient admission for professional forms of interventions (Peltzer & Phaswana-Mafuya, 2018). Only 0.4% (n=1) of the inpatients constituted a statutory admission. Statutory admissions relate to those treatment admissions that have been imposed on the inpatient and enforceable as a legal requirement in terms of such legislations as the Criminal Procedure Act (No. 51 of 1977 as amended) and the Mental Health Act (No. 17 of 2002). Examples could include a fitness to stand trial for an individual whose serial offences have been proved to be related to substance use.

5.3.3 Reasons for Substance Use

Many reasons and factors account for substance use, due to the multiple range of personal, social and economic circumstances of each individual affected (APA 2013; Groshkova et al., 2013). Accordingly, it was imperative for the study to investigate the reasons in order to assess the extent of personalised and effective approach to treatment planning and treatment (Blobaum, 2013).

Figure 5.4 below depicts the reasons for inpatients' indulgence in substance abuse. Extrapolated from this figure is that the reasons for the majority of 47% (n=115) were not known (i.e. not documented in the admission records), followed by 20% (n=49) who cited peer pressure as the reason for indulging in substance use. This correlates with the fundamental tenets of psychological theories of substance use, which emphasise peer pressure and assumed escape from painful experiences as the most common reasons associated with adolescents' indulgence in the use of substances (Rasmussen, 2000:9; Schmitz & Mickelson, 1972:358).

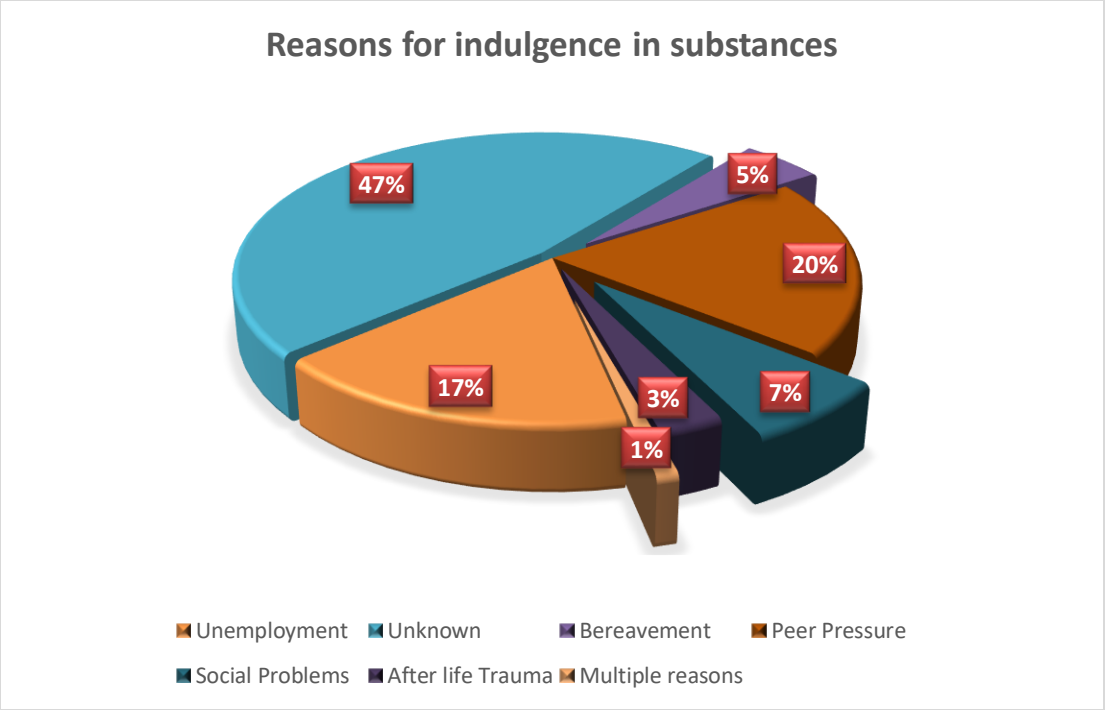

Figure: 5.4: Reasons for substance use (n=244)

From the above figure, 7% (n=17) indulged in the use of substances due to social reasons, 5% (n=12) as a result of bereavement, 3% (n=7) was due to trauma in their lives, and 1% (n=2) had multiple reasons. Unemployment was the third highest reason for substance use, as cited by 17%, n=42) of the inpatients. Therefore, peer pressure, unemployment and social problems were respectively the most commonly identified reasons for indulging in substance abuse.

5.3.4 Method of Substance use Administration

The methods of substance use administration are an important factor for determining the extent of the used substance's affordability and availability (NIDA, 2018:2). As indicated in sub-section 5.3.1, the most commonly used substances were heroin, cannabis (marijuana), tobacco, nyaope, and rock cocaine (5.3%).

In terms of the statistical information accruing from Figure 5.5 below, the majority of the inpatients (66%, n=161), smoked the used substance as a route of administering it into their blood system, 24% (n=58) injected the substance, and 10% (n=24) used more than one route of administering (for instance, injecting, smoking, sniffing and snorting). Determining the methods of substance use administration was also useful for establishing

or predicting the methods of treatment based on the harmful physical, mental, emotional and social effects of each substance use method (Alford, 2014).

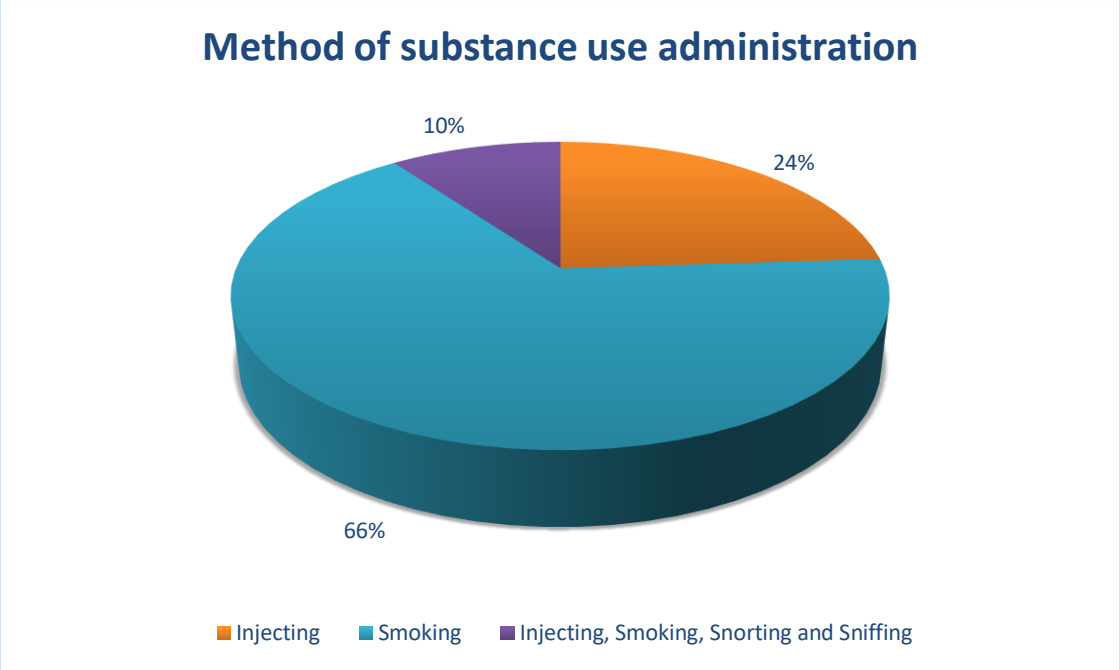

Figure: 5.5: Method of substance administration (n=244)

Having established and identified the route or method of substance use administration and reasons for substance use indulgence, it was also deemed necessary to find out the last day of using substance before admission for treatment as an inpatient. In this regard, the study found that 62% (n=152) of the inpatients only 'quit' their substance use habit on the very day of admission, 29% (n=70) the day before admission, 5% (n=11) used more than one substance about a week before the day of admission; while 3% (n=9) used within the same week of admission, and 1% (n=2) of the admitted inpatients did not give an indication of their last encounters with the use of substances prior to their ultimate admission at the treatment centre.

The fact that a majority of inpatients were still using illicit substances on the very day of their admission, raises further questions on their attitude and extent of cooperation regarding substance abuse treatment. Moreover, the capacity of treatment centres is also brought into sharp focus, given that admissions appear to be the busiest part of the daily itinerary/schedule as induced by the high number of inpatients who were still 'high' on substance abuse on admission day.

5.3.5 Home Background/ Dwelling Context and Role of Family, Relatives and Friends

Investigating the home background or dwelling context of substance use inpatients is of critical value. For instance, NIDA (2018), Poudel and Gautam (2017), and Thorkildsen and Eriksson (2015) are in agreement that substance use was significantly associated with the home or social environment of a child in which parents use substances. As such, the risk of substance use by the child emulating the substance using parents increases both socio-cultural and genetic influences (Ramlagan et al., 2010).

Figure 5.6 below indicates that the majority of the inpatients (70%, n=172) were found to be living with their parents, and 11% (n=28) whose residential background could not be accounted for (i.e. unknown), followed by 7% (n=18) who were staying with relatives; and only 5% (n=12) had their own houses. Meanwhile, 4% (n=10) were living on rental premises, and three categories of 1% (n=2) each were respectively street dwellers, lived with a partner, or with friends.

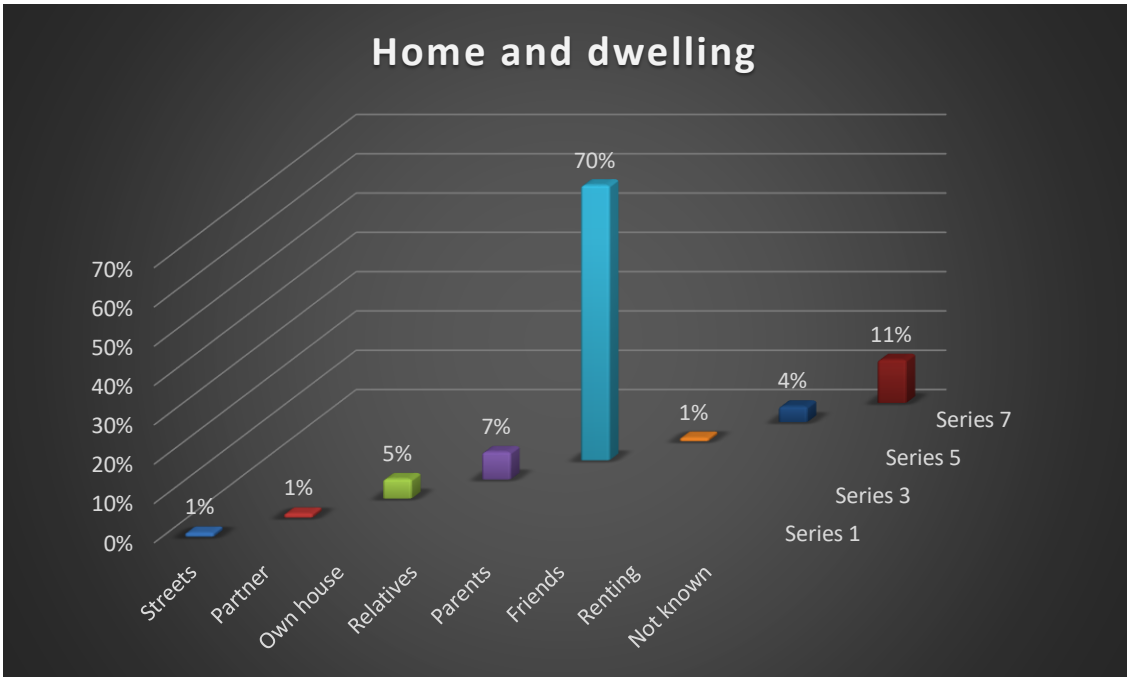

Figure: 5.6: Home/ Dwelling context (n=244)

The statistical inference from the above figure is illuminating. Among other factors, it shows that most substance users were still living with their parents, which correlates with the adolescent age factor of the majority of the admitted substance using inpatients. That only a minority were from unstable backgrounds (e.g. street dwellers) and not from stable backgrounds such as the home, implies that the behaviour and attitudes of parents in the

presence of their children plays a seminal role in the future behaviour and habits of their children. The latter is attested to by authors such as NIDA (2018), Poudel and Gautam (2017), and Thorkildsen and Eriksson (2015) referred to earlier. It is worth noting that only a minority lived with friends, which presents the home as more of the 'epicentre' of substance use than the role of peer influence.

Interestingly, the study further found that 82% (n=201) of the inpatients did not have any substance using family member, 17% (n=41) attested to at least a family member who was using substances, and 1% (n=3) did not known whether they had any family member using substances or not. Compared to the data accrued in Figure 5.8, it is further interesting that the majority of inpatients (70%, n=172) were found to be living with their parents (i.e. at home); yet, an additional number (n=200, 82%) mentioned that there were no substance using family members in their homes. The irony or contradiction could suggest these inpatients were either economical with the truth and protecting the image of their homes, or correlation between family background and substance abuse was statistically insignificant (Austin & Sutton, 2015; Gentles et al., 2015).

In terms of relatives, the study also found that 82% (n=201) referred to a substance using uncle, 9% (n=23) had substance abusing siblings, followed by only 4% (n=9) of whom one or both parents were substance using. Furthermore, 3% (n=7) had or knew of a cousin using substances, while 1% (n=4) knew or had a substance using partner. For both relatives and families, there was a stark contradiction or incongruent correlation with substance use on the one hand, and the home background or dwelling context of the inpatients on the other. Whereas the majority of the inpatients (70%, n=172) indicated in Figure 5.8 were still living with their parents (suggesting their youthful age), for a majority of the self-same youthful age living with their parents (82%, n=201) they did not link or associate their substance use habit with their parents. At the same time, only 9% (n=23) and 4% (n=9) respectively linked a sibling or parent to substance use. From the study's view, such statistical and logical inconsistencies could further suggest some administrative weaknesses in the capturing of inpatients' details and information on their day of admission at the substance use treatment centres. The latter state of affairs is possible, given that the home background or residence of 11% (n=28) of the inpatients could not be established from their admission records. In addition, 1% (n=3) did not known whether they had any family member using substances or not.

5.3.6 Detoxification and Treatment Completion

An investigation of detoxification and treatment completion was necessitated by the very essence of the study to also determine the design, quality and efficacy of existing substance use programmes at public treatment centres in particular (Clancy et al., 2007; Zhu & Whu, 2018). Additionally, the extent of the inpatients' completion of the treatment centre's detoxification programme and services is also a determinant of the extent of available human resources, knowledge and skills provided by professionally qualified personnel (Edward et al., 2014; Goswami & Goswamee, 2017).

In determining the treatment efficacy of substance use – as with other health and related medical conditions – it was necessary to compare the inpatients' condition on admission and on exiting the substance use treatment centre. Table 5.2 below depicts the data obtained from the admission records of the inpatients.

Table 5.2: Medical history n= (244)

Medical and Mental History	Frequency	Percentage
Any medical history		
Yes	65	27
No	179	73
Type of condition		
Physiological	59	24
Mental	6	3
Not applicable	179	73
Receiving medical treatment		
Yes	25	10.2
No	34	13.8
Not applicable	185	76
Receiving mental health treatment		
Yes	6	3
No	0	0
Not applicable	238	97
Dental problems		
Yes	54	22
No	190	78
Suicidal ideation		
Yes	42	17
No	202	83
Blood pressure on admission at detox		
Normal	172	71
Abnormal	7	3
Not recorded	65	26
Blood pressure of discharged from detox	1	0.4
Normal	1	0.4
Abnormal	242	99.2

Not recorded		
Blood glucose of admission detox		
Normal	1	0.4
Not normal	1	0.4
Not recorded	239	98

From Table 5.2 above, it is evident that 73% (n=179) of the inpatients did not have any known or previous medical history related to substance use, while 27% (n=65) had medical history, 24.2% (n=59) had physiological medical conditions; whereas 3% (n=6) suffered from mental conditions. Furthermore, 10.2% (n=25) was receiving treatment for their medical condition, 3% (n=6) were receiving mental health treatment, 17% (n=42) were found to have had suicidal ideas, and 22% (n=54) had dental problems. On admission, blood pressure was taken and 71% (n=172) their blood pressure was normal and that of 7% (n=3) was abnormal. Blobaum (2013:102) urges that medical approaches were influenced by the view that substance addiction did not only affect the reward circuitry, but other aspects such as memory, motivation, and other neurological manifestations induced by psychoactive substances.

5.3.6.1 Number of consultations with a psychiatrist or psychologist during admission period

Figure 5.7 below depicts the number of times consultations had taken place between a psychiatrist or psychologist and the individual inpatients. Number of consultations is a critical treatment factor, as it emphasis substance addiction as a problem requiring a multi-professional treatment regime (Malliarakis & Lucey, 2007).

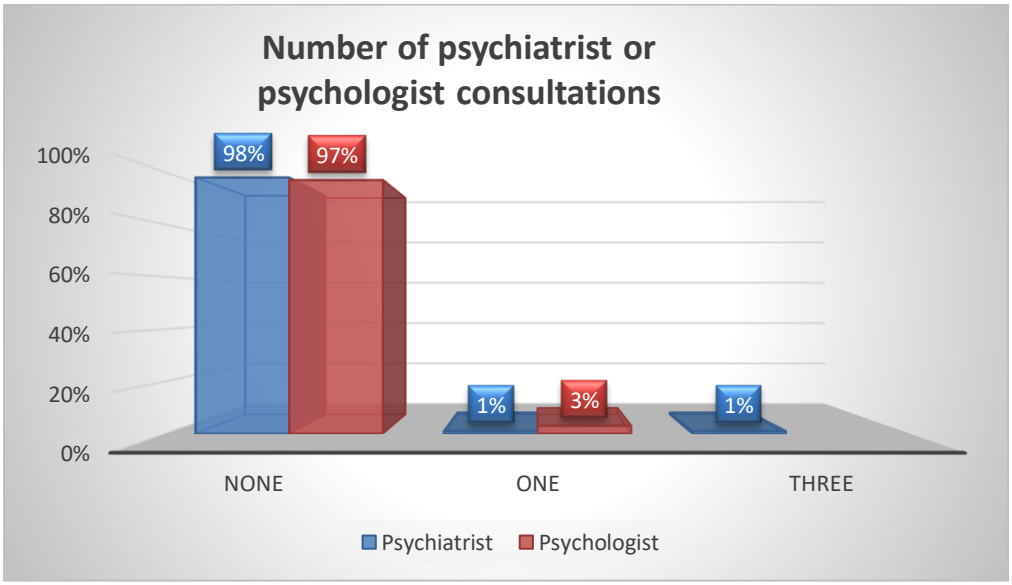

Figure: 5.7: Consultation with psychiatrist and psychologist (n=244)

The researcher noted that 1% (n=2) did consult with the psychiatrist once, another 1% (n=2) had consultation with the psychiatrist three times, and the majority of substance user 98% (n=240) did not consult with the psychiatrist during admission period of six weeks.

Regarding the number of times substance users consulted with the psychologist, the results showed that 3% (n=6) had a consultation with the psychologist only once during admission, and the majority of 97% (n=236) did not consult with the psychologist. These results do correlate with the findings in table 5.3 above, where in all 2.5% (n=6) substance user who had mental health history were taking their medication. The results indicated that there are SA's who were adhering to their medication.

5.3.6.2 Completion of detoxification programme

Detoxification constitutes part of the substance use treatment modalities (Nies & McEwen, 2011). Accordingly, detoxification interventions are also a reflection of the quality of and efficacy of the treatment interventions or programmes themselves. Extrapolated from Figure 5.8 below, shows that 92% (n=226) of the substance use inpatients underwent detoxification on admission, and 8% (n=18) did not undergo detoxification on admission. Notwithstanding (undergoing or not undergoing) detoxification admission status, 58% (n=144) of the entire inmate population completed the detoxification programme while 34% (n=82) did not complete it, and 7% (n=18) was "not applicable" as they completely did not undergo detoxification.

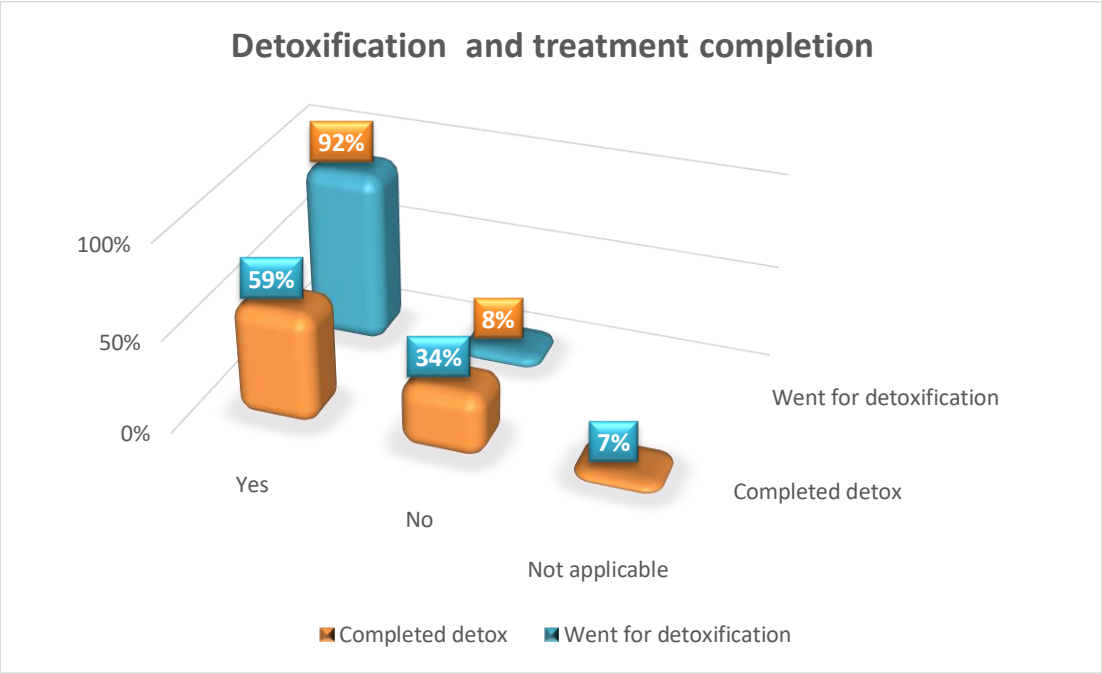

Figure 5.8: Detoxification and treatment completion (n=244)

The fact that a majority of 92% (n=226) underwent and completed the substance use treatment centre's detoxification programme, augurs well for the quality of such a programme. There is statistical correlation of the number of those who received detoxification with the years of using substances. High number of those undergone detoxification is indicative of the severity of SUD.

5.4 ANALYSIS AND DESCRIPTION OF QUALITATIVE FINDINGS

This section essentially discusses the experiences of the 16 nurses obtained during the focus group discussions. The nurses' data was also triangulated with in conjunction with the status of 5 (five) treatment programmes from inpatient treatment centres. The findings are presented in the form of the nurses' verbatim responses, from which five key themes emerged.

5.4.1 Sample Description

Table 5.3 below shows the socio-demographic characteristics of the nurse participants (n=16) in the three separate focus group discussions.

Table 5.3: Sociodemographic characteristics of participants (n=16)

Variable	Frequency	Percent (%)
Gender		
Male	02	12.5
Female	14	87.5
Total	**16**	**100**
Age		
25-30	04	25
31-40	04	25
41-50	04	25
51-60	02	12.5
61-70	02	12.5
Total	**16**	**100**
Nursing Category		
Professional nurse	06	37.5
Enrolled nurse	03	18.8
Enrolled nursing assistant (ENA)	07	43.7
Total	**16**	**100**
Number of Years as a Nurse		
02-05	06	37.5
06-10	02	12.5
11-20	02	12.5
21-30	03	18.8
31-40	03	18.8
Total	**16**	**100**
Number of Years at Inpatient Substance use Treatment Centre		
02-04	06	37.5
05-06	04	25.0
07-08	02	12.5
08-10	02	12.5
11-12	02	12.5
Total	**16**	**100**

As shown in Table 5.3, the majority (87.5%, n=14) of participants were females, and the minority (12.5%, n=2) were males. This could be an affirmation that nursing was predominantly a female profession. With regard to their collective age distribution, 75% of the nurses (n=12) were aged 25-50 years. However, individually, 3 (three) age categories (25-30; 31-40; and 41-50) were evenly distributed (25%, n=4). The fact that only 25% (n=4) were above 50 years of age (i.e. 51-70) augurs well for the future of the inpatient substance use treatment centres with a young-to-middle aged population of professional health care staff.

The professional training and background of health care and treatment options is absolutely relevant, considering the multifaceted nature of both substance and drug use, as well as the range of disorders resulting from such levels of abuse (Wilson, 2013:171). It is in this particular context that the education and training credentials of the 16 nurses

were an important socio-demographic factor for this study. Accordingly, the majority of participants 47.7% (n=7) were enrolled nursing auxiliaries (ENAs), professional nurses (37.5%, n=06), and enrolled nurses were 18.8% (n=03).

Regarding the number of years in the nursing profession in general, the majority (37.5%, n=06) have been working as nurses for 2-5 years, and a total of 4 (four, 25%) have worked as nurses for 6-10 years; while another total of 6 (six, 37.6%) have worked as nurses for a period ranging 21-40 years. Tanner (2012) asserts that a correlation exists between the education and training background and the number of practice years in the health care service provision sector. Accordingly, the combined effect of the majority of nurses (37.5%, n=6) being in the professional category, and 37.6% (18.8% + 18.8%), n=6 (3 + 3) respectively with a combined experience ranging from 21-40 years), potentially augurs well for the sustenance of the inpatient substance treatment programmes at these three centres under the provision of a qualified, experienced and knowledgeable personnel (Dack et al., 2013).

With regard to the number of years working at the inpatient substance abuse treatment centre, the same number of those with a nursing record of 02-05 years (37.5%, n=06), were still the same (37.5%, n=06) of those who worked for 02-04 years, followed by 04 (four, 25%) who had been working at the same treatment centre for 02-04 years; compared to three categories of 12.5% (n=02) who respectively worked at the treatment centre for 07-08 years, 08-10 years, and years and 11-12 years. In comparing the number of years in the nursing profession against the number of years working at the treatment centres, it could be assumed that those with 02-05 years' nursing experience worked at the treatment centres as their first places of employment. Inversely, those with 02-05 years of working experience at the selected inpatient substance abuse treatment centres, have not been in the nursing profession for longer than 5 (five) years.

5.4.2 Main Themes, Categories and Sub-categories

Five main themes emerged from the qualitative data analysis process emanating from the focus group discussions with a total of sixteen nurses at the selected three inpatient substance use treatment centres. These themes were:

- Psychological and emotional behaviour hampering inpatient substance users' care and treatment;

- Attitude and support of the family and relatives regarding the provision of inpatient substance users' treatment;
- Emotional, coping, support and challenges experienced by nurses in the provision of care and treatment to the inpatient substance users;
- Unclear procedures and approaches, resource shortages in the provision of inpatient care and treatment; and
- Suggested inpatient care and treatment programmes.

Table 5.4 below is an illustrated summary of the main themes, categories and attendant sub-categories derived from the findings that emerged from the analysed qualitative data of the focus group interviews whose socio-demographic characteristics were presented and discussed in sub-section 5.4.1 (pp. 93-94).

Table 5.4: Summary of main themes, categories and sub-categories (n=16)

Theme	Category	Sub-Category
5.4.3 Theme 1: Psychological and emotional behaviour hampering inpatient substance users' care and treatment	5.4.3.1 Emotional status and behaviour of inpatient	*5.4.3.1.1 Anger;* *5.4.3.1.2 Lying;* *5.4.3.1.3 Violent behaviour and theft; and* *5.4.3.1.4 Disrespectfulness.*
	5.4.3.2 Unpreparedness of the inpatient	*5.4.3.2.1 Suspicious drug taking*
	5.4.3.3 Predisposing factors for drug use	*5.4.3.3.1 Low socio-economic status;* *5.4.3.3.2 Homelessness;* *5.4.3.3.3 Loss of family members; and* *5.4.3.3.4 Peer pressure and concomitant exposure to substances*
	5.4.3.4 Response to treatment	*5.4.3.4.1 Side effects and withdrawal symptoms;* *5.4.3.4.2 Lack of motivation;* *5.4.3.4.3 Non-adherence; and* *5.4.3.4.4 Mixing prescribed treatment with other drugs*
5.4.4 Theme 2: Attitude and support of inpatients' family and relatives	5.4.4.1 Rejection by relatives 5.4.4.2 Parental involvement	
5.4.5 Emotional, coping and support experienced by nurses in the provision of care and treatment to the inpatient substance user	5.4.5.1 Nurses' emotional experiences	*5.4.5.1.1 Depression and anger;* *5.4.5.1.2 Fear;* *5.4.5.1.3 Love;* *5.4.5.1.4 Non-judgementalism/ Acceptance;* *5.4.5.1.5 Self-fulfilment; and* *5.4.5.1.6 Empathy to inpatients*
	5.4.5.2 Nurses' coping mechanisms	*5.4.5.2.1 Stress relief medication, prayer; and engaging with patients*
	5.4.5.3 Challenges experienced by nurses	*5.4.5.3.1 Work pressure;* *5.4.5.3.2 Lack of relevant training; and* *5.4.5.3.3 Limited support and working without guidance*

Theme	Category	Sub-Category
	5.4.5.4 Support needed during care and treatment provision	*5.4.5.4.1 HIV/AIDS related training;* *5.4.5.4.2 Information on different types of drugs and treatment;* *5.4.5.4.3 Follow-up care after discharge; and* *5.4.5.4.4 Inpatient material support*
5.4.6 Theme 4: Unclear procedures and approaches, resource shortages in the provision of inpatient care and treatment	5.4.6.1 Lack of inter-professional and inter-disciplinary approaches	*5.4.6.1.1 Unscreened patients* *5.4.6.1.2 Treatment referral for other conditions*
	5.4.6.2 Suggested in-patient treatment approaches	*5.4.6.2.1 Multi-disciplinary approach;* *5.4.6.2.2 Skill development approach;* *5.4.6.2.3 Psycho education;* *5.4.6.2.4 Medical treatment/ Detoxification;* *5.4.6.2.5 Management of chronic conditions*
	5.4.6.3 Resource shortages	*5.4.6.3.1 Inadequate infrastructure*
5.4.7 Theme 5: Suggested inpatient care and treatment programmes	5.4.7.1 Existing treatment programmes	*5.4.7.1.1 Orientation, pre-admission and ground rules;* *5.4.7.1.2 Admissions policy/ procedures* *5.4.7.1.3 Recreational and physical wellness programme;* *5.4.7.1.4 Psychologist group sessions;* *5.4.7.1.5 Personal hygiene and medical programme;* *5.4.7.1.6 Spiritual programme;* *5.4.7.1.7 Individual and family relations programmes; and* *5.4.7.1.8 Coping and life skills development*
	5.4.7.2 Programme evaluation	*5.4.7.2.1 Assessment interview; and* *5.4.7.2.2 Patient control point system*

5.4.3 Theme 1: Psychological and Emotional Behaviour Hampering Inpatient Substance user's Care and Treatment

This theme relates to participants' experiences with regard to the characteristics of inpatient substance users at a treatment facility. The discussions with nurse participants in the focus groups revealed four predominant themes concerning their inpatients' characteristics in respect of their psychological and emotional state; the unpreparedness of the inpatients; predisposing factors for their drug use; as well as their response to treatment. Each of these themes has its own categories and sub-categories, as shown in Table 5.5 below.

Table 5.5: Theme 1: Psychological and emotional unpreparedness hampering inpatient substance user's care and treatment

Main Theme	Main Category	Sub-category
Psychological and emotional behaviours hampering inpatient substance user's care and treatment	Emotional status and behaviour of inpatient	Anger; Lying ; and Violent behaviour and theft.
	Unpreparedness of the inpatient	Disrespectfulness; and Suspicious drug taking.
	Predisposing factors for drug use	Low socio-economic status; Homelessness; Loss of family members; and Peer pressure and concomitant exposure to substances
	Response to treatment	Side effects and withdrawal symptoms; Lack of motivation; Non-adherence; and Mixing prescribed treatment with other drugs

5.4.3.1 Category: Emotional status and behaviour of inpatients

It is almost a truism that the use of substances poses great risks to both the psychological and emotional being of the users (American Psychiatric Association, 2010; Felicilda, 2015). Accordingly, the nurse participants corroborated these claims from their experiences with their inpatients, citing anger, lying, violent behaviour and theft as some of the emotional and psychological instability factors of these inpatients. Additionally, disrespectfulness was also cited as characterising the inpatients' emotional and psychological status. In the context of the concerned inpatients' behaviour, their form of

disrespectfulness could also be construed as a scant regard - or even complete disregard - of the rules and behavioural protocols of the healthcare facility.

5.4.3.1.1 Sub-category: Anger

The following statements are some of those that indicated the anger issues of the inpatients. Such behaviour was mostly directed at all nurses and to all staff members. The anger became more evident during mealtimes, when some of the substance users would throw food at the kitchen staff.

Participant 11: *… they have anger, there is too much of anger on them … the same behaviour is towards nurses, the kitchen staff, the cleaners, everybody.*

Participant 9: *Yahh even towards staff, there is one whom we have been discharging this morning. He is so angered, he just does not want to see this little girl from the kitchen, you know even if they are giving him food …. At times they were giving him food he threw it back to them, he just wanted to fight any of this little girl...*

The afore-cited excerpts reveal that anger management should constitute an integral aspect of the treatment centres' programmes in assisting the inpatients' recovery.

5.4.3.1.2 Sub-category: Lying

Lying was reported by nurses as one of the characteristic behaviours that the inpatient substance users display. According to the nurses, inpatient substance users even went to the extent of bribing their parents or family members by lying in order to acquire what they wanted; for instance, money. Participants 1 and 2, shared the experience where those substance users using nyaope, would go into a shower, pretend to be showering and yet they are using nyaope in the shower.

Participant 2*: …actually, you know their behaviour, they behave like they are in jail, they steal and they can lie … At times they even bribe their parents to give them money and tell them for in case they go out ... because people at the treatment centre don't want them to go out. They tell their parents whatever and you find that they have money…*

Participant 1*: It is difficult for those who are using nyaope, as we say nyaope is different, there are different types of nyaope, and you know what they do? I want to tell you how tricky they are. They open a shower and if you are not there, they stand like that at the corner. I just stand as if I am not looking and then they will open the shower and then they will stand at the corner of the*

shower, and stand there for few minutes and when he comes out he is wet and he will say I have finished…

In addition to their anger, the established spate of lying by inpatients suggests a distorted sense of values instilled over time during drug use. As such, their sense of values and ethics ought to reorient to acceptable societal norms (Thorkildsen & Eriksson, 2015).

5.4.3.1.3 Sub-category: Violent behaviour and theft

Notwithstanding the mode of substance or drug intake/administration by the users, violent behaviour and stealing are also symptomatic of the emotional and psychological state of the substance abuser, irrespective of his/her socio-economic status (Arnetz et al., NIDA, 2016). The following statements depict the inpatients' various aspects or levels of violent behaviour and stealing.

Participant 4*: … even if they fight, and you find yourself in this fight … it becomes hectic*

Participant 3: *We do not allow then to take their belongings and put them together in one locker because they got the tendencies … you find that, the very people sharing locker end up stealing from each other, then they start accusing each other 'so and or so and so stole my things', only to find that they are putting their things together, so we discourage that.*

Participant 7: *And even if you give HIV medication to the right person, should you leave and then you take time to return and check, it will disappear … when it is time for medication you only call that person and you give it. It will disappear you won't know what happened. With HIV people they are always eagerly waiting for them.*

Participant 8: *Drug people, what we know, most of them they are criminals, they are liars they cheat, they do all this crazy stuff outside, 90% of them have stolen from their parents all the time, they steal outside home and most of them have been to jail…*

Prominent among the above-mentioned acts of misdemeanour is the fact that some of the undesirable behaviours did not originate in the treatment centres. Some of the inmates are admitted as habitual liars, thieves and/or violence mongers. Berring et al. (2016) attest that nurses and other healthcare professionals working in substance use and mental health treatment centres were mostly at risk due to the actual and potential acts of violent posed by their inpatients.

5.4.3.1.4 Sub-category: Disrespectfulness

Particularly at healthcare facilities such as inpatient substance abuse treatment centres, disrespectfulness constitutes one of the inpatients' undesirable forms of conduct (Nies & McEwen, 2011). As such, it is of utmost importance that the behaviour of inpatients is monitored and understood. Such understanding is helpful for the construction of behavioural traits and patterns by the professionals at the treatment centre (Bartlett et al., 2013). The following participant statements are indicative of the extent of disrespectfulness and scant regard (or even complete disregard) of the rules among inpatients, which does not necessarily suggest such negative behaviour is exhibited by all of the inpatients.

Participant 5: *The challenges of working with them, at first is they do not have any respect and they just talk anyhow.*

Participant 6: *I cannot say the negatives, the challenges of working with them, at first is they do not have any respect and they just talk any how because that is what has been registered in their mind, and then you try and call him to order in a nice way, and say if you're here just respect the elders. Respect everybody who is here, you must love yourself, respect others, respect officials, security, nurses everybody, who is around you. We do not do vulgar, we do not talk about numbers like in jail, if we find you mentioning some names, we allocate points for you. If you are swearing at others we allocate points for you, and by doing that it helps us a lot, but on average when they finished the programme and he has got points. Those points are not written on the confirmation letter when they go out, it is just an internal way of disciplining them, and after we have allocated some points, they start changing. They will behave the way that a human being must, but there are those who can do something that will be irritating to others, just to provoke a fight, we immediately call them and allocated points, he stops immediately. It does work for us, a lot.*

From the statement above, it is insightful that the treatment centres' ground rules involve behaviour modification, which is consistent with the inculcation of socially acceptable values and norms (Nies & McEwen, 2011; Whitesock et al., 2018).

5.4.3.2 Category: Unpreparedness of the patient

The inpatient's state of preparedness or readiness/willingness determines the degree to which the duration of treatment being administered will have the desired outcome and impact on the particular inpatient (NIDA, 2018; Nies & McEwen, 2011). Contrarily, the

inpatients' unpreparedness is the most likely indicator of the inpatient's background factors, current condition and personal predispositions that have the potential to render treatment options less effective than they should be. From the nurses' perspective, suspicious drug taking during the period of admission was the most prominent indicator of inpatient unpreparedness, as demonstrated by the following statements.

5.4.3.2.1 Sub-category: Suspicious drug taking

The nurse participants mentioned suspicious drug taking by those inpatients involved as an example of their unpreparedness. Beside sneaking drugs into the treatment centre, substance abusing inpatients were able eat aloes to mask the drug taken, believing that drug masking will make the drug invisible or undetected during drug testing. The following statements attest to the problem.

Participant 10: *When they know that we are going to test them, so they do not take it* [illicit substance of abuse]*. But at night the other nurse observed that these people are walking, and their mood and everything has changed at the same time they became too happy, and she reported to the professional nurse that she does not understand, and the security guard followed them. After the whole thing other inpatients came and report that others brought dugs inside the centre…*

Participant 9: *The other one was having a hand glove full of drugs.*

Participant 3: *He came in with a food container with 'pap' and meat, but inside the food was drugs … Aloe has a way of interfering with drug urine tests and give false results. There is aloe somewhere in the yard I do know, and they also know. If they use substance and see that you are going to test, they eat the aloe, you will find them all negative*.

Participant 2: *Some they put in the seams of clothing, you have to check the seams even the hair, if the hair is big, they put it inside it you will not see it.*

From the statements above, it is evident that some inpatients display behaviour that is reminiscent of prison inmates, where random checks are conducted for contraband and other illicit substances. In the case of this study, random testing of drugs is conducted by the nurses as part of the treatment programme, especially when drug taking by inpatients

Random drug testing is initiated and authorised by a therapist based on the need. Authorisation is granted according to the therapeutic progress of the service user (inpatient) in the event that there is suspicion of drug taking within the centre. The results of such tests are incorporated to the individual inpatient's development plans.

5.4.3.3 Category: Predisposing factors for drug use

Predisposing factors in the case of this study refer to the conditions or circumstances that were the most likely contributing factors to the state of drug and substance use leading to their admission for the duration of the treatment (Clancy et al., 2007; Edward et al., 2014). The participants mentioned that such factors included: low socio-economic status, homelessness, loss of family members and peer pressure and its resultant pull and exposure to substance use.

5.4.3.3.1 Sub-category: Low socio-economic status

According to authors such as Stevenson et al. (2015) and Volkow et al. (2014), low socio-economic status and its attendant poverty was one of the most likely contributors of substance and drug addiction. The participants confirmed that poverty was one of the substance use predisposing factors, as shown in the following statement by one of the participants.

Participant 6*: I realised … that most of them, it is through poverty that they abuse substances, and the fact that they were raised by a single parent … no food, there is nothing at home, the problem is due to the abuse of substances they end up taking the very small dish you put there they sell it and take it.*

In the light of the statement above, it is then essential for the treatment centre to develop innovative mechanisms to guide them in anti-recidivism measures to thwart the scourge of poverty. In this regard, skills development programmes could be an indispensable intervention to empower the inpatients during the period of admission (Rawson et al., 2004). Such interventions are not only helpful for employment purposes in general, but also help in the improvement of behaviour and its modification; thus, preparing the inpatients for active citizenship and meaningful social participation (Mabuza et al., 2014).

5.4.3.3.2 Sub-category: Homelessness

On the day of admission, pertinent aspects of the incumbent inpatient's medical and drug use history are documented. Homelessness was cited by participants as another predisposing factor contributing to the use and use of substances, as indicate below.

Participant 2*: Others they are from street, because of them coming from streets when they come here … social workers try and trace for the family.*

The home background is vital in this respect, because the home is the source of children's sense of behaviour, attitudes, and values from a very early age in their lives (Wilson, 2013:169). Therefore, a stable home background was most likely to have a positive effect on individuals, whereas the opposite (e.g. homelessness) holds true as well. The study also considers that homelessness could also be the direct result of poverty rather than unstable family backgrounds. There are many cases in the public domain, of homeless substance abusers whose parents are affluent and even members of parliament.

5.4.3.3.3 Sub-category: Loss of family members

Individuals react differently to tragic events such as death or loss of a family member, divorce or poor academic performance. Others react by committing suicide, while others resort to drug and substance use. The participants mentioned that loss of a family member (either or both parents, sister, brother, or relative) or close friend, constituted another predisposing factor for inpatient substance use. The following statement attests:

Participant 1*: They come for admission for different reasons, others they will tell you, is because I lost my father, others they will say because of poverty, others will say friends*

The very realisation and observation of loss of family member/relative/friend as a substance abuse predisposing factor, implies that failure to detect and include such predisposition may lead to misdiagnosis (*ergo,* mis-prognosis) and effective treatment options of the inpatient (Nies & McEwen, 2011; Whitesock et al., 2018). Therefore, it was important for the study to consider the role of homelessness in the recovery process of inpatients, some of whom may resort to the earlier state of homelessness after discharge. That would mean the treatment regime did not fully prepare the particular inpatient for reintegration into society (Greaves et al, 2015; Nemutandani et al., 2018).

5.4.3.3.4 Sub-category: Bad role modelling

In addition to the previously cited predisposing factors, exposure to the use of drugs may originate from the bad role modelling by parents or peers. The home or social environment of a child in which parents use substances, increases the risk of substance use by the child emulating the parents (Thorkildsen & Eriksson, 2015). Exposure to the use of substance is also the cause of the use and the use of drugs. Many studies posit that peer pressure is arguably the most potent drug use factor. For instance, the American Psychiatric Association (2013), (George et al. (2012), Schmitz and Mickelson (1972), and

Social Work (2015), among others, contend that peer groups and the concomitant pressure they exert on their members often lead to experimentation with drugs. The following statement by various nurse participants attest to the combined effects or consequences of peer pressure and poor parenting behaviour on children as they grow up.

Participant 5*: Others they will tell you that their family members, like a father, he is using the substance.*

Participant 10*: … especially those who are young, because we do admit those who were born in 1998, teenagers or still teenagers. Peer pressure is the problem and some will be like I did it because I saw someone doing it my friends were using substances and then I said to myself, let me try, that let me try lead him to become addicted.*

Participant 6*: So, when it comes to nyaope, what I have noticed is that most of the people they get addicted in one way, they will say I started by smoking dagga. It all started from dagga, and from there you will find a friend who will bring you dagga, but instead is not dagga and it is nyaope. And they will smoke it and the friend will believe this is dagga, whereas the person doesn't know there is nyaope inside. After smoking together the one introduced will then after few hours start to say what you gave me is nice … different from the dagga I used to smoke … then the friend will tell him … got it from this place and this and that... You find out in the morning that the one who has been introduced will wake up and go to that person straight and say' hei bra (hallo my friend), I am not coping I am sick I have stomach cramps, I am vomiting and the friend will say no man you have to smoke that thing again is nice', and then they go and smoke again, who buys is the same person who has been introduced and from there he is now addicted to the substance….*

The above excerpts suggest that whether the influence originated from within the family or friends, experimentation is usually the 'point of departure' for the torturous journey of substance use that initially seems to be ecstatic during the hallucination or delusional stages (American Psychiatric Association, 2013: 487).

5.4.3.4 Category: Response to treatment

The success of substance use treatment options is inextricable to the inpatients' positive responses to the treatment regime being administered (Zamani et al., 2014). Similar to non-substance abuse patients in other healthcare settings, substance users respond to treatment in different ways. In this study participants averred that during the provision of nursing care, the inpatients' responses to treatment was characterised by side effects

and withdrawal symptoms, lack of motivation, non-adherence to treatment (defaulting), and mixing prescribed treatment with illicit drugs.

5.4.3.4.1 Sub-category: Side effects and withdrawals symptoms

Observation of side effects and withdrawal symptoms was noted from a majority of inpatient substance users. In most cases, experienced nurses observed withdrawal symptoms on the day of admission, such as stomach cramps, and vomiting. Some of those who vomit do not respond positively to medication in the early treatment stages, as the substance wearing off from the body (weaning) was confronted with the new reality of medication and detoxification (Ford, 2010, Peltzer et al., 2018). The following excerpts depict the extent of the inmates' side effects and withdrawal symptoms.

Participant 9: *First day of admission they vomit a lot, but some do not vomit…another thing is that they hallucinate after starting treatment when they are facing reality now and drugs are slowly wearing off, they hallucinate some of them they become psychotic. When they are asleep, they talk about things they have done, they run away we do not know what they are running from. You will hear some saying I killed them, I killed them, such a person struggle.*

Participant 1*: What they do is that they sleep too much that is the problem which they have. With those who use nyaope they will complain of stomach cramps. They will complain of vomiting, they vomit a lot. That is one of the problems which they have, whereby you give medications still they vomit.*

Participant 10: W*ith nyaope they complain of stomach cramp, they complain of vomiting…So with ratex and swimming pool powder that thing is too strong, you will find them complaining of stomach cramps and without smoking those things. They vomit, diarrhoea, stomach cramps everything painful joints, aggression, disrespect especially where a person was using dagga. Some they become psychotic in a short space of time …*

It is important for nurses caring for substance use inpatients to address the issue of side effects and withdrawal symptoms, because it is the stage during which the inpatient could resist or adapt to the treatment itself (Edward et al., 2014; Peltzer et al., 2018). As the primary service users, the inpatients could render the treatment provided as either effective or not, based on the initial response to treatment during the withdrawal stages.

5.4.3.4.2 Sub-category: Lack of motivation

Both the extrinsic (i.e. family/friend/colleague support) and intrinsic (internal/personal) variants of motivation play a significant role in the recovery process, especially in cases of substance use treatment (Blobaum, 2013). The following observation by the participant exemplifies the role of motivation in the healing process of inpatients:

Participant 4: *… some of them they are not serious when they come here, hence, we have RHT (Refusal of Hospital treatment), some of them or most of them they fidget with security so they* [are compelled to] *leave ...*

Participant 12: *As nurses we get attached to the patient and hear different stories. They all have different stories to tell, and all of them have different reasons why they are here … you will find there is one that was brought here by court. You will* [also] *find there is one that was brought here referred by a school, you will find the is one referred by work, you will find there is one that was brought here or he was forced to come here. You will find one who is like: "I am done, I do not want drugs anymore in my life", and they come here. So, that is the kind of a situation that we have … they all behave differently. You will find that one who does not want to be here would be saying: "So why, I just came and I am wasting my time here".*

Participant 8: *These people are not the same. Others you would think they are using substance intentionally, because when you ask them why are they coming for readmission? They would say sister that time I was not ready to come, my girlfriend or my mother said I should come so that I can get a car or house.*

It is evident from the preceding excerpts that the inpatients need external support and encouragement (prompting) to endure and persevere during their admission at the treatment centres. In this regard, motivation provides a non-medical and psychological (even spiritual) support system to the inpatients.

5.4.3.4.3 Sub-category: Non-adherence/Defaulting

Non-adherence/defaulting premises on the inpatients not complying with the treatment schedules of the healthcare facility, which could occur at any stage of their admission. Isidore et al. (2014) caution that non-adherence to medication schedules increases the risk of recidivism.

Participant 5*:* *December time people sign RHT (Refusal of Hospital treatment), because they will be thinking and asking themselves that, why should I be here when is Christmas, they sign RHT, we are struggling, even the admission we call them they do not want to come, some of them during towards*

Christmas they will be seated there and there will be convincing each other so that they stop the treatment, the next thing they come to say we are leaving, we cannot wait. As a nurse you just have to make them sign and if they want to go they go you call their parents, usually we just call the parents and inform them, because even if we call the parents and inform them that he has decided to signed RHT, there is nothing they could do to convince him to stay".

Extrapolated from the above statement is that, the month of December is the period during which most inpatients' intrinsic motivation levels are at the lowest and dominated by extrinsic motivational factors, to the extent of even signing RHTs; which is an indication that they are not coming back voluntarily.

5.4.3.4.4 Sub-category: Mixing prescribed treatment with illicit drugs

The mixing of prescribed treatment with illicit substances exemplifies the most severe form of defeatism (nihilism) and flagrant disregard for treatment protocol (Goswami & Goswamee, 2017; Isidore et al., 2014). Such behaviour is also indicative of the lowest level of intrinsic motivation in terms of which the inpatient displays a 'giving up' attitude of being defeated because nothing else seems to matter anymore. The following statements also show a degree of severe non-adherence in the process of inpatients' mixing of treatment prescriptions with illicit drugs brought from outside - on the very premises of the healthcare facility!

Participant 2: *Some of them bring some medication and they say this one is the medication I take at home; you find that they mix the very same medication with something and smoke it.*

Participant 15: *Heroin, nyaope and dagga and those with alcohol, methamphetamine, cat, rock, rock cocaine, heroin and methamphetamine, even diazepam, methadone … they mix heroin with dagga and they then say this is nyaope but even the heroin itself they call it nyaope and some of them they are injecting themselves and you see the veins are gone.*

The situation described above resonates with the report by SACENDU (2015), that nyaope/whoonga (mixture of cannabis and heroin) was the primary substance of use observed at its treatment sites. From the study's perspective, that such drastic behaviour occurs on the premises of substance use treatment facilities themselves, should not be necessarily construed as an indictment to the security lapses as those institutions. Rather, it should be viewed as a reflection of the magnitude of the scourge of drug and substance use in society - which did not originate at those facilities. (Recently, the relaxation of South

Africa's risk adjusted COVID-19 level three regulations has seen an alarming spike in the levels of alcohol consumption, resulting not only in domestic violence cases and femicide, but also in the increase of trauma-related hospital bed occupancy rates directly related to alcohol abuse in society (Young, 2020).

5.4.4 Theme 2: Attitudes and Support of Inpatients' Family and Relatives

This theme addresses the sixteen nurses' experiences regarding the attitude of the substance using inpatients' family and relatives during the treatment period of these inpatients at the three treatment centres. Table 5.7 shows the categories entailed in Theme 2 from the perspectives of the nurses treating these inpatients. The level of support provided to inpatients constitutes an integral aspect of their recovery (APA, 2010; Swanepoel et al., 2015). In addition, such support is also beneficial for reshaping the particular inpatients' (intrinsic and extrinsic) motivation and attitudes towards the use of illicit substances and drugs.

Table 5.6: Theme 2: Attitudes of patients' relatives

Theme	Category
Attitude and support of the family and relatives on the provision of inpatient substance user's treatment	Limited support/Rejection by relatives; and Parental involvement and support

5.4.4.1 Category: Limited support/Rejection by relatives

Limited support and/ or rejection of inpatient substance users by relatives was mentioned by the nurse participants, especially during weekends or at discharge. Relatives did not come to fetch their children, based on some previous experiences that caused the family to lose faith in the rehabilitation of the child (and not in treatment centres' ability). Some relatives even went to the extent of asking for the admission of their drug using children during the festive season in December so that they (relatives/custodians) could have a "nice" holiday unperturbed. The following excerpts exemplify the nurses' experiences in this regard:

Participant 6*: The morals are not quite good, and even the parents, you will find that when they come here, especially when they need to come and fetch them … they don't want to hear anything about the patients. We tell them that there is no place where you can dump your child and say that he is a bad child, you just have to come over, and we inform them that we are together in this, so that we help him to be a better person … like now*

December time they will be phoning us, to inform us that, they want to go to Durban (for holiday), I want to go on holiday please take him, so that they sit back and have peace of mind.

Participant 14*: You know other parents, when they realise that their children are doing wrong things, they chase them away and tell them that, you must not come back to my house again, just stay on the street, and the child is here and he has changed and the parents are still having that mentality, and when they are discharged they are going back to square one (relapse).*

The above-cited experiences from the nurses are indicative of the extent to which poor or inadequate support systems could in themselves be the source or catalyst for continued substance use even after discharge from the treatment centre. Such a state of affairs is a further reflection of the need for family and relatives' support in ensuring that physical, psychological and medical treatment interventions work synchronously (Dossey & Keegan, 2016: 856; George, 2002: 243).

5.4.4.2 Parental involvement and support

Similar to the support of the extended family (relatives), the involvement and support of inpatients' own family is critical for the recovery/rehabilitation and reintegration to society (Department of Social Development, 2013; Wilson, 2013). As opposed to relatives' support and involvement, the participants unequivocally mentioned that parents of substance abuse inpatients were both involved and supportive in the treatment and recovery process of substance users. For instances, substance users were given "pass out" by the social workers at the treatment centres, in which case the parents would come and not hesitate to fetch them for the duration of the "pass out" - which is different from an RHT (refusal of hospital treatment and subsequent unofficial self-discharge). Again, in the event that a substance user felt sick and parents were notified, they obliged and would take the particular sick inpatient to the nearest clinic or hospital for relevant medical treatment. The following statements by the nurses demonstrate the cooperation and involvement of parents:

Participant 4: *The social workers even call parents for a family-sessions … on Saturday social workers give pass out and the parents come fetch them in the morning and we instruct them that by six o'clock they must be back. By doing this we are testing them and preparing them as they leave and come back, to see if they are able to remain sober. On coming back we do multidrug urine test, and they are being searched. You will not believe how many drugs we find from them …*

Participant 2*: When they get sick we call their parents and explain to them the situation of their child, because of our structure which does not have enough medical service, we call the parents to come and take the child to the nearest clinic because they are not coming from same place some are coming far. They are coming from all over, it is better when he goes to the clinic that is nearer to home so that when the programme is finished, he can go and do follow-up at the nearest clinic.*

It is instructive that parents were more involved than extended family members, considering that the home is the primordial site at which children would be most likely to emulate drug use habits and attitudes by parents prior to being influenced by external factors such as peer pressure and other socio-economic circumstances (Poudel & Gautam, 2017; Thorkildsen & Eriksson, 2015).

5.4.5 Theme 3: Emotional, Coping and Support Experienced by Nurses in the Provision of Inpatient Care and Treatment

In terms of the above theme, four main categories were identified, namely: nurses' emotional experiences; their coping mechanisms; challenges experienced; as well as the nature of support needed in the course of executing their duties. Nurses in their various categories constitute an indispensable aspect of any viable healthcare system (Parr, 2015: 8). Therefore, it was essential for the study to find out from the treatment centres' nurses themselves, their experiences specific to their experiences in relation to their involvement in the care and treatment of inpatient substance users. Table 5.7 below depicts these main categories and their related sub-categories.

Table 5.7: Theme 3: Nurses' provision of care experiences

Theme	Categories	Sub-categories
Emotional, coping and support experienced by nurses in the provision of care and treatment to the inpatient substance user	Nurses' emotional experiences	Depression and anger; Fear; Love; Non-judgementalism/ Acceptance; Self-fulfilment; and Emotional attachment.
	Nurses' coping experiences	Stress relief medication; Prayer; and Engaging with patients
	Challenges experienced by nurses	Work pressure; Lack of relevant training; Limited support and working without guidance

Theme	Categories	Sub-categories
	Support needed during care and treatment provision	HIV/AIDS related training; Information on different types of drugs and treatment; and Material support

5.4.5.1 Category: Nurses' emotional experiences

Nurses' emotional experiences were further displayed by depression and anger; fear; love; acceptance; self-fulfilment; and empathy to inpatients.

5.4.5.1.1 Sub-category: Depression and anger

The following statements show that depression and anger were some of the direct experiences emanating from the nurses at the treatment centres:

Participant 9*: You know it does affect us at times you find yourself depressed*

Participant 5*: Sometimes you feel angry because he is an adult when you are talking with him nicely and he does not respond nicely to you or what you are asking him, he would say you are at work and you get payed because of me.*

Caring for inpatient substance users sometimes evokes both anger and depression in nurses due to a variety of reasons. Accordingly, it is imperative that nurses should be professional at all times. As such, continuous in-service training is necessary in fields such as anger management, which would enable them to cope with work-related stress factors (Rawson et al., 2004; Thorkildsen et al., 2015).

5.4.5.1.2 Sub-category: Fear

The following statement shows that fear was another emotionally destabilising factor in nurses' execution of their work.

Participant 7*: Sometimes you become so nervous because at some other point we are not aware if they did check the mental status or not, because others they look like they are mentally ill. They are giving us trouble, especially during the night. They just look at you and you find that you are busy writing here and when you raise your head, you find him looking at you and we end up locking the door because we are females and security are just*

monitoring them but you can feel that no man something is not right, and they are so clever they can manipulate all of us.

Especially for female nurses, the ever-present spectre of fear has the potential to produce sub-optimum performance of their work (Dack et al, 2013). In such instances, it is imperative for the management of treatment centres to ensure that there is maximum security at their centres without turning these institutions into maximum security prisons.

5.4.5.1.3 Sub-category: Love

Despite feelings and sporadic experiences of fear, anger and depression, the participants expressed that they cared for and treated the inpatient substance abusers with love to show them that substance addiction was not tantamount to a condemnation, since there were people who loved theme. The following statement demonstrates the live with chich the nurses related to the patients un the performance of their work:

Participant 1*: According to me, if I want to help other people or if a child or a person is having a problem, I must try and help him and come closer to him and give him love, so that he can see that this is not the end of the world there are people who love me, you give him that total love, you treat him as your child, we do not harass them, we do not shout at them we help them, when they become patients, they become patients, on my side I am one of the friendliest nurse here, I am the friendly one, I do not have the straight face, I won't lie, I don't have I want to be honest with you, I have that jolly part.*

The prevalence of love (rather than antagonism and discord) is a demonstration of maturity on the part of the nurses, and enables them to also enjoy their work in an environment characterised by good rapport between service user (inpatients) and service provider (nurses) (Gouse et al., 2016; Parr, 2015).

5.4.5.1.4 Sub-category: Non-judgementalism/ Acceptance

According to the participants, non-judgementalism/ acceptance of the inpatients was viewed as cathartic in terms of helping to establish and enhance good rapport and better understanding of the inpatients' condition. The following excerpt attests to this realisation:

Participant 4*: First of all you must not be judgemental to them, you must treat them with respect, you must give them love, and you must also support them if they come to you and in need of any help, so if he come to you and sit down you give an ear you listen, you can support him where you can support him and then he will feel much better, and sometimes there is that thing*

that comes to your mind telling you that this people are in pain, sometimes I have to understand their situation, even if it was my child I would understand and is like as if you are nursing a bipolar person like when they start their thing starting to be high and even though you get angry but at some point you have to come down, and say but this people come here because they need help so I need to calm down.

Isidore et al (2014) and Jacobsen (2017) confirm that good rapport between nurses and their inpatients instils confidence and trust between the parties. For therapeutic purposes, such rapport emanates from the inpatients' realisation that the nurses do not judge or condemn them. They are then confident to divulge personal or undetected issues that may be helpful to the recovery process.

5.4.5.1.5 Sub-category: Self-fulfilment

Participants reported self-fulfilment after helping substance abusers. Sometimes participants help with material things such as clothing. Nurses also reported feeling happy when they see a substance user coming for inpatient treatment, for nurses it means they are coming because they need help. It again makes nurses to feel happy when they see substance users finishing the treatment programme.

Participant 2*: I feel so good, I feel on top of the world that at least I have helped somebody, somebody did not go to bed in an empty stomach, somebody has something to put on , sometimes it is cold they do not have jersey, I bring from home and give.*

Participant 7: *For me I feel like woow! that is when I start to notice why I went to school, the minute I see him stepping in looking at me it means he has trust in me since he didn't go to look for help outside he has concluded with his mind that I am going to get help and with me I must be there and make sure I meet his needs.*

Participant 4*: It does not make me happy to see young children coming in with this addiction, but I can say yes, I mean like I feel happy when I see them coming because it means that they need help they want to stop, because at home they cannot just say today I am waking up and say I stop, it means they have trust in us, that we are going to help them. For them coming here looking for help is something that make me happy, even though this thing of substance addiction by itself it does not make me happy.*

Participant 1: *You feel good especially if you see him finishing the six weeks programme also when you do not admit him again in the next three months.*

5.4.5.1.6 Sub-category: Empathy to inpatients

As opposed to other negative emotions or experiences (e.g. depression, anger and fear), self-fulfilment (in the same mould as non-judgementalism and acceptance) emanated from the good rapport in terms of which the nurses empathised with their inpatients to the point of even establishing an environment of familyhood. Hence, the nurses would feel pain when realising that their inpatient(s) has relapsed. The following nurses' statements capture their experiences and reactions in this regard:

Participant 1: *Us nurses and patients, we become family at the end of the day. You find that one of us connects with the patients, at the same time with their parents, all of them. That is the reason it is so painful for us after the patient is discharged and you find that the patient has relapsed, we become angry like you are the mother of the patient, because we had been together for two months. We have been with that patient for two month and we have been there from day one, at the time where the patient was very sick, until the patient become well. There are some of the patients who will come and tell you their story, they will tell you everything happening at home they will tell you how they suffer they will tell you how did they start substance use, they will tell you all those kinds of stories. That is how we connect with the patient. … you always have that mother instinct, you know…you will end up saying, this is my child, at the end of the day, is no longer nurse patient relations only but the relation become family.*

Participant 4*: When patients are discharged, it feels like now my brother or my son is going, I will never see him again. I will only see him maybe once a month or a week when he is coming for aftercare*…

Participant 8: *My daughter used to say, 'you love your patients more than us', because I used to attend the devotion and every time, I have got a scripture, tomorrow I am going to read this, do you understand? And then my daughter will be saying yaaah, the patients comes first before us, and I say it is because there is no other work that I did, only nursing.*

Interstitial to the above statements is the fact that a more humane rapport develops between service users and service providers over time from the day of admission at the treatment centre. Such kind of internal support from the nursing staff warrants that parents and relatives should also play their part in ensuring that the inpatients are fully recovered and reintegrated into their respective families and society at large (Greaves et al., 2015; Nemutandani et al., 2018).

5.4.5.2 Category: Nurses' coping mechanisms

In any working environment, stress and its causes were most likely to become major negative contributors to employees' wellness and productivity (Ford, 2011:246). In the case of substance abuse treatment centres, stress levels were likely to escalate, given possible acts of violent behaviour and mental health threats posed by some inpatients. In this regard, coping mechanism addresses the strategies and abilities of participants to counter the possible impacts of stress in their day-to-day duties (Berring et al., 2016). The participants intimated that their coping mechanisms or strategies to various work-related stress factors included (but not limited to) stress relief medication, prayer; and engaging with patients.

5.4.5.2.1 Sub-category: Stress relief medication, prayer and engaging with patients

The following statements reflect on the three afore-cited coping mechanisms to which the treatment centres' nurses resorted when faced with the extant possibility of being overwhelmed by the inpatients' circumstances:

Participant 3*: But you just tell yourself, calm down, I usually take rescue to calm myself down, we have got it* [stress] *here.*

Participant 2*: I cope by prayer, you know prayer works, usually if there is something we or the patient's situation has touched me so much that I can't forget, when I wake up, I will go to my room and I close the door, I will not kneel I will sit down, because I have got a carpet (I call it Itlazi), and then I will sit there and listen to myself, read my bible, afterwards when I come out from that room, I will be smiling with my grandchildren, then is done.*

Participant 5*: Even them when they throw tempers, you give them* [rescue] *they calm down, Yahh, one on one and then talk to them and they turn to understand different people, that this one you do not need to make or do funny thing next to her and she is on duty, they now study you, your behaviour, you find that when you are on duty there is nothing and unlike others.*

It is apparent that while exercising their coping strategy of individual behaviour modification sessions with the substance use inpatients, the latter would also take advantage of the situation. For instance, inpatients exploited the situation by knowing which nurse was strict and not generous in allocating good behaviour points. The resort to prayer as a coping strategy used by nurses also reflects on the multi-dimensionality of substance use and its related disorders (SUD) (Adams et al., 2014), described by Holyoke and Stephenson (2017) as a mind-body-soul therapeutic approach.

5.4.5.3 Category: Challenges experienced by nurses

In essence, the study considers nurses' challenges as hinging principally on their own practice-related issues, and those peculiar to their inpatients as service users (Clancy et al., 2007; van den Heever et al., 2013). The sixteen nurse participants indicated the challenges they experienced in the form of: working under pressure, lack of relevant training, and limited support and working without guidance or supervision.

5.4.5.3.1 Sub-category: Work pressure

Shortage of nurse was mentioned by participants as one of the challenges they face when providing care to inpatient substance users. There is a mismatch between the available skeleton staff and the abnormal number of substance users brought for admission at the same time.

Participant 8*: We work in a skeleton staff, on top of that the politicians bring abnormal number to work with, when it comes to the example of admitting 400 a day… with them you find that maybe they are 100 and you are the only one there*

Staff shortages were a perennial feature of many substance use treatment centres (Carelse, 2018). Nursing human resource challenges had a negative effect of rendering the capacity of these centres ineffective. Furthermore, the increase in the nurses' workload inevitably becomes a seminal ground for the high stress levels suffered by nurses in the course of their daily duties.

5.4.5.3.2 Sub-category: Lack of relevant training

In conjunction with the pressure induced by nursing human resource deficiencies, lack of relevant training in substance use treatment was frequently mentioned by participants as a challenge that affected their provision of nursing care to inpatients, as shown in the following statements.

Participant 11*: … I haven't got any qualification, only that I learnt … when I came here and I became used to that, I think we have only one professional nurse who is psychiatric trained, but she also does help, and know here they are few that are becoming psychotic. Otherwise most of then they do not show anything on the day of admission, we do not have dispensing course and we are using schedule 5 schedule 6, even the Valium is schedule 5, you cannot use this without being signed by the doctor, so*

the previous doctor use to order somewhere, where we give diazepam he use to sign, which is not good enough we need to be covered.

Participant 6*: Others they did Psychiatric Nursing, so it helps them those who have diploma, like those who has done four years diploma (general, psychiatric, community and midwifery), they did basic of psychiatric nursing, so they help some of us who don't have any idea about psychiatric nursing or psychiatric patients, we do have one sister. She has done psychiatric, so she helps us though it is very rear, generally observation if you can assess the patient and you could see some signs that you are not happy about then you will ask about that.*

The fact that only few professional nurses were adequately trained in Psychiatric (which serves as justification or grounds for one of the study's recommendations), implies that continuous training was absolutely necessary in order to obviate any burnout that could arise (Edward et al., 2014). It is the study's contention that the prevalence of a poorly trained cadre of nurses with renders treatment centres vulnerable to litigations emanating from cases such as lack of knowledge in dispensing scheduled medication without a doctor's prescription. Substance use treatment is a highly pharmacological and psychology-intensive environment (American Psychiatric Association, 2010; Malliarakis & Lucey, 2007). Lack of proper training in this regard constitutes an extreme risk to both the affected treatment centres and the healthcare system as a whole (SACENDU, 2015).

5.4.5.3.3 Sub-category: Limited support and working without guidance

Participants mentioned the lack of support and working without guidance (unsupervised) as some of the difficulties they encounter when providing care to inpatient substance abusers. With a modicum of support from their employer (management support), it is obvious that some problems still existed, such as debriefing by themselves at their homes; working without guidance or supervision due to unfilled vacancies left by nurses in-charge who left their positions the previous year. Furthermore, the medication standing orders were not signed by a prescribing doctor, which subjected them to professional danger should anything happen to the inpatient. In such an eventuality, they would be found to have violated the nursing code of conduct and other applicable rules. They are not medical doctors, and are not allowed to prescribe medicines to their inpatients. The following statements are emblematic of these assertions.

Participant 4*: The nurses and care workers we do not have any programme like group sessions, to help us. I do debriefing by myself, at my home.*

Participant 1*: Our sister in charge has just left November. The very doctor who works with us is a General practitioner, but there are those standing orders that are not signed of which they are not covering us, I was just saying this I think it was today this afternoon I once spoke to them management about unsigned standing order and suggested that we have to write protocols and doctor sign, but it was not done, with us, anything can happen, we are not covered.*

Similar to the lack of adequate training for some nurses at the treatment centres, limited support (exemplified by unsupervised work) was likely to result in below-par performance and low capacity of the treatment centres to render quality services (Geyer & Lombard, 2014: 330; Swanepoel et al., 2015).

5.4.5.4 Support needed during care and treatment provision

Given the range of challenges experienced by the nurses, it is imperative that they be provided with adequate support in the provision of care to their inpatients (Swanepoel et al., 2015). In the context of the study's findings, the nature of support needed was found to be relevant and interstitial to the very challenges and coping mechanisms; that is, practice- and treatment- related support. In this regard, support needed by the nurses during treatment and care provision was linked to: HIV/AIDS related training; information on different types of drugs and treatment; follow-up care after discharge; and inpatient material support.

5.4.5.4.1 HIV and AIDS related training

Given the spread of HIV/AIDS through transmission modes such as self-injection, the risks are even greater to substance users using similar needle injection modes to administer their used substance (Dack et al., 2013). According to NIDA (2012), people who inject drugs (PWID) accounted for 1 (one) in 10 cases of HIV-postive cases. Nessa (2015), also found that injecting drug users' sharing of needles was the most likely cause of vulnerability to acquiring and spreading HIV/AIDS due to the users' lack of information in this regard. The need for nurses' HIV/AIDS training was expressed by one of the participants thus:

Participant 4: *Nurses to have training for HIV courses, we can be more advanced.*

Participant 7: *And even if you give HIV medication you give it to the right person, should you leave it and if it is there and then you take time to return and check, it will disappear. At the time when it is time for the medication you only call*

that person and you give it. It will disappear you won't know what happened. With HIV people they always eagerly waiting for them.

The above-cited two statements are complementary and illuminate on the gravity of the nurses' working environment. It is irrefutable that nurses at the treatment centres are confronted with a 'twin' problem of substance abuse and looming HIV/AIDS infection by the self-same substance using inpatients who also steal HIV/AIDS treatment for use in their concoctions of the used substance. In this regard, the study views the demand by the participants (especially those with insufficient Psychiatry training) for HIV/AIDS related training as an important part of advancing their skills and knowledge.

5.4.5.4.2 Information on different types of drugs and treatment

The work environment of nurses in substance abuse treatment centres is characterised by multi-dimensional treatment- and disease-related factors. Hence, the need for continuous support to keep the nursing (and management) personnel abreast of developments in the treatment and care of substance abuse inpatients. In addition to other treatment options (i.e. physical, psychological and spiritual), medical treatment involves the usage of licit drugs/medication by the nurses on the (chemically intoxicated) bodies of the addicted inpatients' bodies. As such, the environment is drug-intensive. Accordingly, the nurses' demand for HIV-related training still holds sway with their demand for training and having information about different substances. Such a demand was justifiable, more so that none of them had ever been taken to substance addiction course and it would be good to receive training and get certificate which they could produce as a proof of having been trained. The following statements attest:

Participant 6: *Management of the centre want us to upgrade … they want us to go for some trainings, which is in the process right now, so that we have more knowledge about substances. Currently there is no one of use who has received substance addiction training. I mean if you look at our society now the drugs are taking over, so why can't we start training with those who have experience, because we have been working with substance patients for a long time, if there is a course somewhere, where is done for drug people*

Participant 9: *There must be an advanced training for nurses, with that I am able to go somewhere and say that this is the certificate of my training.*

According to the South African Nursing Council's (2015) Government Notice No. R. 48 (as amended by No. R. 71 (1997), training in Pharmacology (among other curriculum

subjects) is a requirement for the Diploma in Clinical Nursing. From the study's perspective, there is a very dire need for training and retraining. The assertion by Participant 9 above is tantamount to an absolute indictment of the treatment centre personnel and management. It is worth stating that the 'indictment' above resonates with the assertion by Björkdahl et al. (2013), that some nurses do lack the necessary knowledge of substance abuse treatment.

5.4.5.4.3 Sub-category: Follow-up care after discharge

The discharge of a substance abuse inpatient signifies the culmination of of on-site treatment, and the beginning of the actual recovery journey whose success could be measured by meaningful social reintegration and non-recidivism (Zhu & Whu, 2018). This is acritical stage, considering that most drug users (75%) relapse between 3-6 months following discharge (Adinoff et al., 2010). After the treatment is completed, nurses recommend that aftercare should be strengthened as part of supporting substance abusers. The following statement by one of the nurses indicates the inadequacy of aftercare and the potential such inadequacy poses on the relapse of discharged substance abusers.

Participant 7*: According to me, sometimes I feel that when they* [discharged inpatients] *go back home, aftercare is not enough. If I do have money I can organise something like coming back to attended aftercare or something like training to keep them busy.*

Participant 2*: We do not have aftercare, because the social workers are dealing with that, but they are not doing aftercare, they also refer them back to Alcohol Anonymous meetings, they attend meetings there.*

Notwithstanding aftercare deficiencies for substance users after discharge, the participants mentioned the prevalence of an exit plan for service users. The programme provides that substance abusers be linked with relevant external resources and referring agents. In terms of the exit plan, reparation for life outside the institution involves the therapist working in collaboration with the referring agency to link the discharged service user with community-based support groups as part of aftercare services. The therapist assists the discharged inpatient to prepare for disengagement and deal with negative impacts such as stigmatisation towards addiction. Wilson (2013) cautions that stigmatisation of substance abuse could become a negative motivating factor, rather than a positive attribute in the recovery process of discharged substance use inmates. From

the study's perspective, it is of extreme importance to ensure effective and continuous monitoring and evaluation of the collaborative effect of the exit plan.

5.4.5.5.4 Sub-category: Inpatient material support

Participants unequivocally mentioned the dire need for the material (non-medical) support of inpatients, based on their socio-economic circumstances. Many were from poor communities; some were homeless, with their parents having no knowledge of their whereabouts; while some were without clothes. Nurses mentioned that they normally get some extra clothing from their friends and families and bring them to the centre as a donation for those who were admitted without clothing. Some were also visibly malnourished on the day of their admission to the treatment centre users, then they bring bread and milk and make tea and give them. This dire situation was captured by the nurses thus:

Participant 10*: Others as I have mentioned before they come here without knowledge of their parents. Sometimes it becomes so difficult that they come with no cloths, you will look at home your children's cloths and bring them, you help them with bread, because vitamins makes them eat a lot and one meal is not enough, they must at least have a snack in between meals. It requires that they have some bread and milk to make some tea after supper, they are having supper at 5 o'clock and they are going to bed at 10 pm. By that time they are already hungry so at 9 o'clock they need something which they can have, usually we make tea for them, or they eat something instant. They always need to have a loaf of bread or something instant with them, not all of them, but for that particular patient whom you can see that he is suffering he doesn't have parents. No pass, out no one is coming to bring him something, you see and then if you bring them something and then there are sorted.*

Participant 5*: Sometimes when it is cold they do not have jersey, at least I did bring that old jacket for my son, I became happy that someone is having something to put on, he is not feeling cold he is comfortable like others.*

Among some of the causal factors, poverty was generally associated to being another major factor of substance use (Felicilda, 2015; Groshkova et al., 2013; Social Work, 2015). It is against this backdrop that addressing the material needs of inpatients constitute a vital aspect of their recovery. Although it is not the primary responsibility of treatment centres, failure in this regard could weaken and render the inpatients' recovery process virtually improbable.

5.4.6 Theme 4: Unclear Procedures and Approaches, Resource Shortages, in the Provision of Inpatient Care and Treatment

Table 5.8 depicts the above-cited theme, its various categories, as well as the identified sub-categories. The three identified categories in this regard, premised on lack of inter-professional and inter-disciplinary approaches; suggested in-patient treatment approaches; as well as resource shortages.

Theme	Categories	Sub-categories
Unclear procedures, resources, and approaches in the provision of care and treatment to the inpatient substance user	Lack of inter-professional and inter-disciplinary approaches	*Unscreened patients; and Treatment referral for other conditions*
	Suggested in-patient treatment approaches	*Multi-disciplinary approach; Skill development approach; Psycho education; Medical treatment/ Detoxification; Laying ground rules and admission control procedures; Withdrawal symptom management; and Management of chronic conditions*
	Shortage of resources	Inadequate infrastructure

Table 5.8: Theme 4: Unclear procedures, resources and approaches

5.4.6.1 Category: Lack of inter-professional and inter-disciplinary approaches

In terms of the above category, two prominent sub-categories were identified, namely: unscreened patients, and treatment referral for other conditions. Participants revealed that they lacked inter-professional support from psychiatrists. Their patients were mostly examined by a doctor who is a general practitioner (GP) and not a specialist. The doctor treated every inpatient in the same manner, and approached substance addiction as a minor ailment. Nurses further indicated that the incompetency of their GP compelled them resort to their own knowledge and experience in treating their patients, whose need for psychotherapy and psychological attention were mostly not attended to, as mentioned below.

Participant 3: *I think the side which we are lacking is the psychiatric side because we do not have psychiatric doctor, we have a general doctor and he doesn't have a broader picture, he will be treating these children like he is treating minor ailments, he is not going to think out of the box that okay this person*

is a service user and he is complaining about this, how or can I help them with these treatment or can I help them with something else, he doesn't have that, our Doctor he is treating everybody the same. If maybe you have got a problem and you ask questions and you want some advice he would not give you a good advice that you can think of. So most of the time we are using our knowledge, we do not even consult him we are using our knowledge and we use own brews (mixtures) you know us nurses, we have combinations, we combine, combine and combine and give the patient and then they will feel much better, they are not going to kill him. Yes, but our doctor no, we are not happy about him, he is a General Practitioner from outside so he comes only on sessions. The other area is psychologist, our patients have experienced a lot of rejection, trauma and are depressed, it would be better if they are seen by a psychologist.

Similar to the challenge of training, it is the view of this study that the ostensible lack of inter-professional approaches and support at the treatment centres may jeopardise the expected level healthcare service delivery by the public. Such a state of affairs is unacceptable, and poses another 'indictment' on the capacity of the centres to fulfil their obligation to society.

5.4.6.1.1 Sub-category Unscreened patients

The nurse participants reported occasional gross negligence of the screening of inpatients on the day of their admission. For instance, there were times where substance users were brought in large numbers and no proper procedure was conducted to exclude and document any other contagious medical conditions that may endanger the lives of nurses and other inpatients. Unscreened patients were generally not motivated to complete their treatment programmes (Jacobsen, 2017; Isidore et al., 2014). The following statements highlighted issues related to unscreened patients.

Participant 4: *The work load is a lot because one month this year, they brought 481 people* [inpatients]*, they were brought in by buses and it was about eight buses and a lot of vans, they were taken from the streets, you see if they come being 481 struggling with them throughout, if they finish the programme, and they become right it is good but others along the line they discharged themselves. Look out of the 400 and something about 85 managed to complete the programme the rest they left.*

Participant 9: *When it comes to the example of admitting 400 and at the first place they are not screened they did not come via the procedure. The right procedure they should start from their social worker and the psychosocial report is compiled even if when we are approving we know the kind of*

person whom we are expecting like he is a known TB patient, or he is a difficult or whatever, but those who are coming buy a bus they are risk to our health, so you are not free when nursing them because you're in the sickbay and you can never control them. Those ones, when it comes to morals they are worse

From the above statements, it is clear that the nurse participants relate unscreened patients to human resource challenges that lead to a nurse-inpatient imbalance. It is *fait accompli* that such a state of affairs was inimical to quality healthcare provision and weakens the capacity of the treatment centres to deliver the expected levels of services. Such a situation tends to confirm the observation by the International Narcotics Board Report/ INBR (2015: 48) that 1 (one) of every 18 people suffering from drug use disorders in Africa receive treatment each year. This implies that the larger population of drug users were not receiving treatment or may not be suffering from drug use disorder.

5.4.6.1.2 Sub-category: Treatment referral for other conditions

When substance users are admitted, the possibility exists that they may be suffering from other medical or mental conditions (comorbidity). In such instances, treatment centre nurses immediately refer the substance user to the hospital for further care because they are not equipped to manage such eventualities. The following statements highlight the inter-professional essence in the treatment of substance use inpatients.

Participant 5*: Even in between the detoxification should we realise that there is a mental condition which is not suitable for our clinic, we take them to the hospital and then they are admitted in the psychiatric wards, and they are treated there, and only when they are stable with the medication, they come back to us.*

Participant 1: *We refer to the social workers if there is something that is not okay, to speak to the social workers and they intervene and they are the once who attend to those social problems, like those who are hypertensive we do follow them and make it a point that we send them to the clinic if they are from far and then if they are from around maybe the parents can just take the patient to the clinic.*

Participant 2: *They are seen by the doctor once for the period of admission, unless there is something that needs the doctor in between then we refer them to the doctor, but he only comes once a week.*

Inpatients at treatment centres have a chance to be seen by the doctor at least once per week. Should the need arise, they do consult the doctor again. Should nurses identify any

social problems while the substance abuser is still under detoxification, they refer them to social workers. Treatment programmes also utilise the services of a psychiatrist and psychologists on a referral basis, as confirmed by the participant below.

Participant 5: *The* [treatment] *programme consists of the following role players: psychologist, occupational therapist, psychiatrist and medical practitioners. Each discipline attends to the service user according to* [their] *needs but the psychologist and Psychiatrist is more on referral*

The above assertion (of inter-professional prevalence) seems to contradict the assertions already made by Participant 4 and Participant 1 in sub-section 5.4.5.3.3, who ascribed their limited support to inadequacy of skills. 5.4.6.2 Category: Suggested inpatient treatment approaches

In the context of this study, the suggested inpatient treatment approaches by nurses are viewed largely as responses to the challenges experienced in the course of their healthcare provision to inpatients. These approaches were categorised further as: multi-disciplinary and skill development approaches; psycho education; medical treatment/ detoxification; as well as management of withdrawal symptoms and chronic conditions. Furthermore, these responses are viewed as intended for the betterment of substance use services.

5.4.6.2.1 Sub-category: Multi-disciplinary approach

Contrary to assertions by Participant 4 and Participant 1 in sub-section 5.4.5.3.3, both statements by Participant 5 in sub-section 5.4.6.1.2 cohere with the various participants' statements in the current sub-section (5.4.6.2.1). In the latter part, the participants statements respectively indicate the salience of inter-professional and inter -disciplinary approaches that inpatient substance treatment requires. In this regard, the critical stakeholders were cited as: nurses, social workers, doctors, pastors and the skills development team.

Participant 13*: Because when they come in here we are doing the nursing part, there should be a registered nurse next to the social workers, to make sure that the social worker is admitting the right person, because at times they may have dual diagnoses, which we are not allowed to admi, as a nurse, you do not have to be harsh towards them because they become negative.*

Participant 3*: Because there are social workers who are doing the admissions, and whatever related to social aspects of their life.*

Participant 5*: The therapist that is the social worker is the driver of the therapeutic programme, which includes individual therapy and life skills groups.*

Participant 1: *We have a general doctor and he does not have a broader picture*.

Participant 3*: On weekend they are very nice they behave very well, they do not have problems, they are calm and collected and on Sunday there is a pastor coming here he gives a sermon for two hours and they like to go to church so much*

The most common denominator in all of the above-cited statements is that an unequivocal pronouncement is made on the indispensable role of inter-professional approaches in the treatment of substance use. Such an orientation is inevitable, considering the mind-body-soul aspect that situates the treatment of substance use in a multi-dimensional context. Furthermore, the nurses' confirmation of the need for inter-professional approaches in substance use treatment, simultaneously indicates the extent to which human resource and skills shortages could compromise the provision of quality healthcare service delivery (Edward et al., 2014; Goswami & Goswamee, 2017).

5.4.6.2.2 Sub-category: Skill development approach

Counselling and skills development were mentioned by participants as a form of inpatient treatment approach at the inpatient treatment centres. Inpatient counselling at the treatment centres was usually conducted by social workers in group sessions addressing aspects such as life skills, anger management, stress management, and conflict management. The main purpose was to impart skills and to empower substance users to be able to use the skills after their discharge and reintegration to societies.

Participant 3*: The social workers are doing a great job because now they are the ones who are doing anger management to deal with all those things. The behaviour part of it is done by social workers and at 10 o'clock they go to classes. They have classes with a social worker or auxiliary social workers' groups. The professional social workers are the ones who deal with the problem, they call the parents trying to get the collateral regarding problems, to find out what went wrong …*

Participant 3*: The anger management, stress management, conflict management and leadership skills … when attend those classes with social workers, they teach them, when a patient is focused … they will sit back and reflect, that today or this week we want this one to be our leader so that he could show his leadership skills preparing him for the outside world so that when he is outside … he going to deal with other people in the community and how to avoid conflict, so he is given a responsibility.*

It is evident from the above statements that counselling and skills development are initiatives undertaken by different professionals inside and outside the treatment centres. Such an approach necessarily calls for effective collaborative efforts to monitor and evaluate the progress of the inpatients (Khademiyan & Ganaatiyan, 2009; SACENDU, 2015).

5.4.6.2.3 Sub-category: Psycho education

Psycho education is another treatment approach used by nurses in the inpatient treatment centres. Nurses indicated that they educated substance users from the day of admission about the importance of basic hygiene; for example, bathing and changing of clothes. Team leaders and some of the rehabilitated substance users give motivation speeches and also assist to educate and orientate newly admitted substance abuser. In the instance that a substance user has no toiletries, nurses make sure that this specific need is met by the following morning. The following statements by various nurses show the various (formal and informal) components of on-site psycho education.

Participant 5*: We teach about hygiene, and we make them wash……we get involved because of poor hygiene we encourage them to go and bath … because some of them are such a problem when they are here and we talk to them that 'you cannot come to breakfast when you have not bathed you have to come to breakfast being clean' … we educate them about the importance of hygiene, and we do follow ups ...*

Participant 11*: And after that the team leader will show him the bathroom and the shower, so that he can go and take a bath. If he doesn't have clothes, these patients are kind … they do care they share, if maybe he doesn't have anything and you could see that he is dirty, they will take his clothing and put it there and soak … and they will give him something to change, and it will be better to go for a bath and after that they try to make them comfortable.*

Participant 7*: If a team leader get involved it becomes a walk over, in case the new patient does not have toiletries, they will borrow him maybe for that time but the following morning we make it a point that he has got everything, soup, toothbrush, toothpaste, Vaseline, roll on, and face clothes.*

Participant 14: *The other nursing part of our work is health talk because we have to give them health talk, especially those who complain of painful joints or headache we have to make it clear that we cannot continue giving them pain tablets, because is another cause of addiction and also those who are complaining of insomnia we have to be fair with them. And that is when you have to take the nursing side of us. Because there is no way you can continue to give medication as if is a chronic medication. Health*

talk about the, effects of drugs I think that part is important because when someone think of relapsing and think of what you had told him what drugs does to the immune system and to their mind, I think some of them even if they can relapse they know what they are doing to themselves, they would know that they are smoking their lives.

Participant 4*: Some you find out that they neglect themselves. You find that they come with contagious diseases like STIs (Sexual transmitted infections). Some women after using nyaope you find that she has a bad smell and she still does not take care of herself. What I do is to educate her to talk to the nurses, and talk about her problem … we do give health talk … they spike (inject) heroin, share needles, we educate them that when you share needles you do not know the disease status of the person whom you are sharing the needle with, we encourage that they do voluntary counselling and testing for HIV. We test for pregnancies, some you find when they are using nyaope they do not see their menstruation, then when they come here a person will tell you that since I saw my periods six months back and when you ask her if she is pregnant or not she does not know. We check if they are pregnant or not and then they can be given antibiotics for STIs.*

It is evident that the psycho education entails an eclectic approach intended to address the physical, hygienic, psychological and overall well-being and development of inpatients to prepare them for life after their discharge from the treatment centres. From the perspective of the study, such an approach coheres with the min-body-soul 9holistic) treatment perspective or approach advocated by proponents such as Dossey and Keegan (2016: 4), Hoad and Leddy (2006:40), Von Bertalanffy (1975:122), and others.

5.4.6.2.4 Sub-category: Medical treatment/ Detoxification

Medical treatment involving detoxification is pivotal to treatment and withdrawal symptom management of substance abuse inpatients. Such treatment also revolves around the administration of certain medicines or drugs in order to gradually reduce and eventually eliminate any residual effects of the used substances (Ford, 2010, Peltzer et al., 2018). Participants confirmed the administration of certain medicines/drugs to substance use inpatients in varying dosages in order to reduce withdrawal symptoms. Some of the medication included vitamins and analgesics. Participants further reported that substance users usually responded very well to medication, especially those on methadone. Despite the latter assertion, it should still be borne in mind that the participants lamented the lack of training, support and knowledge in certain drugs as a critical concern to them.

Participant 2*: Then we give medication, if they were taking heroin we are using methadone for it, what methadone does it reduces the withdrawal symptoms, we start at smaller dose, we start of by giving 5ml and the following day 4ml, if is a syrup, is the 4mls, 3mls, 2mls then 1ml in five days and day 5 the course is complete, methadone and then they continue with vitamins for 10 days, getting them in the morning and in the afternoon after super*

Participant 9*: They respond very well because we are using methadone. On arrival we give them 5 mls, on others if he is a heavy smoker or he is spiking so we increase the dose for the first time and the following day we decrease, and then the enrolled nurses give them the vitamin tablets. We give vitamin a, vitamin b, vitamin c we also give thiamine, ascorbic acid. Symptomatically we use Buscopen, Brufen, Panado, we have medication that helps them with pain*

Participant 13: *You have to have medication for withdrawals, if they vomit we give metoclopramide, if they complain of pain we give paracetamol, body pains we have paracetamol or if it is just mild headache, and diclofenac for the joins pains. We differ some people wait until they see it, but usually with me once I admit I make it a point that I combine metoclopramide and analgesia for pain, for stomach cramps I add Buscopan, and then I am able to watch. And you find that they settle if you give before. … It is a standing order actually, the metoclopramide we do not have to wait, it is a standing order for them and their withdrawal symptoms.*

Participant 5: *Those cat, rock, cocaine heroin and methamphetamine, even alcohol we give them diazepam we do not give them methadone, methadone is for heroin only. The dose are different, those who are smoking they are not very difficult and they are not hectic, but those who are spiking (injecting) they are very difficult, that is why their dose is higher to prevent those severe withdrawals, and it works for them, you give them methadone 5mls once a day and then the following day we decrease and at night we are giving them sleeping tablets. Because they are used to smoke before they go to sleep, they have a problem of insomnia, they can't sleep, so we help them by giving them sleeping tablets and methadone and some treatment, for stomach cramps, hot flashes, backache, painful joints we give them Voltaren injection, because oral may take long, so we want something that is going to treat them immediately, because of joints pains and the back, they cannot even walk, with injection 5 minutes is enough, they are better.*

Participant 10: *If he comes in the morning, and then we give him methadone, he will go and sleep, maybe after 2 to 3 hours he will come back, complaining of the very same painful joints, fatigue, those hot flashes, then we give them the IMIs, Voltaren, Metoclopramide, Buscopan, we mix it and then we give them a shot IMI and he will go back to sleep, after that, he forgets*

that he was in pain, everything is gone, but as the time goes and he is still complaining we treat him with Brufen, and Panado.

Nurses viewed withdrawal symptoms management in different ways, though they agree that there is specific medication to treat specific symptoms. There are protocols and standing orders for some of the medication. Some of the nurses indicated that in the case of a standing order, they did not have to wait, they administered the drug as prescribed or scheduled. Other nurses prefer to administer the medication immediately at the time of admission, while some believe in first waiting for withdrawal symptoms to show.

Based on the assertions by Participants 2, 9, 13, 5, and 10 above, the study concludes that the requirement by the SANC (2015) for nurses to acquire formal education and training in Pharmacology, to be valid and justifiable.

5.4.6.2.5 Sub-category: Management of chronic conditions

Substance use poses a great risk to those users of illicit substances already suffering from terminal or chronic illnesses (Ammit, 2016; Nies & McEwen, 2011). This very fact accentuates the importance of screening substance users from the very first day of admission. Inversely, the treatment centres' capacity to manage inherent chronic conditions of inpatients could be severely affected if the problem of unscreened patients (indicated in sub-section 5.4.6.1.1) persists indefinitely. The following statement reflects the nurses' awareness of possible chronic diseases that may be present in substance users.

Participant 6: *If they* [substance abusers] *come with any chronic treatment … we do inform them to came with their chronic medication cards so that we can take them to the clinics and we are able to give them necessary treatment*

The management of inpatients' chronic conditions is integral to both the medical interventions and treatment programmes available at the treatment centres. Whether they were diagnosed by their private practitioners prior to admission, or diagnosed at the treatment centres, nurses do manage those conditions. Some come with treatment from home, and those who do not bring medication come with clinic follow-up cards and nurses take substance users to the clinic to get medication.

5.4.6.3 Category: Resource shortages

Resources - be they human, financial, or infrastructural - are an indispensable requirement for the achievement of sustainable levels of service provision in any public or private organisation (Haoses-Gorases, Kartjire & Goraseb, 2013). For instance, financial resources ensure the sustainability of the healthcare facilities and their personnel (Van Dyk, Tlou & van Dyk, 2017). On the other hand, infrastructural resources ensure the physical availability of appropriately structured healthcare facilities; while human resources ensure the availability of appropriately qualified and skilled personnel to manage and operate all levels of the particular institution or organisation (Gouse et al., 2016).

5.4.6.3.1 Sub-category: Inadequate infrastructure

In this study, the financial viability or constraints of the three treatment centres was not explored. Nonetheless, the nurse participants already alluded to some challenges associated with human resources (e.g. sub-section 5.4.5.4). However, some of the participants cited lack of adequate infrastructure as one of the challenges they experienced in the provision of care to inpatient substance abusers. The following statement categorically reflects on the shortage of beds as an example of infrastructure-related challenges.

Participant 12*: We have 20 beds overall (admissions and treatment) … we have patients who are on treatment side and patients that are on admission side and are new, but we also put old patients that are on treatment because of limited space on the side of treatment. Once we discharge or let's say that maybe we discharge two from treatment side we take two that has been there for long time on admission side to treatment side.*

The above statement shows that the shortage of beds impacts negatively on the treatment cycle. For instance, fewer beds in the admission section means that some newly admitted inpatients (who are still under detoxification) have to be mixed with the older inpatients (who are already on treatment) in their section of the centre, and when space becomes available in the treatment side, nurses then move the equivalent number from the admission to the treatment area. In addition to augmenting to the critical shortage of human resources, constraints associated with infrastructure greatly compromise the efficacy of the healthcare system as a whole (Geyer & Lombard, 2014; Swanepoel et al., 2015).

5.4.7 Theme 5: Suggested inpatient care and treatment programmes

Based collectively on its research problem, aim and objectives, the study focused on the nature of available substance use treatment programmes as a framework against which the capacity of the treatment centres could be determined (Goran, 2011). Furthermore, sub-sections 2.6.3.3 and 2.6.3.4 in this study provided the conceptual parameters or frameworks against which treatment plans are traditionally organised and implemented. In this regard, the study also focused on the quality (i.e. content) of existing programmes and the mechanisms applied to evaluate these programmes. In the context of this study, programmatic evaluation and monitoring provides a measure against which the efficacy and capacity of these inpatient substance use treatment programmes could be determined (Myers et al., 2008; SACENDU, 2015). Table 5.9 depicts the inpatient treatment programmes in respect of their main and sub-categories.

Table 5.9 Theme 5: Suggested inpatient care and treatment programme

Theme	Categories	Sub-categories
Suggested inpatient care and treatment programmes	Existing treatment programmes	Orientation, pre-admission and ground rules; Admissions policy/ procedures;
	Programme evaluation	

5.4.7.1 Category: Existing treatment programmes

From the respective participants' assertions, it was confirmed that their health facilities do have existing inpatient substance use treatment programmes, and that these programmes were operationalised from the day of admission. Participants reported further that for everything done at the inpatient treatment facilities, it was scheduled and accompanied by rules, about which admitted substance users were categorically informed. In essence, the foremost objective of the rules and schedules is to ensure that service users reintegrate routines and structure back into their lives (Poudel & Gautam, 2017; Ramlagan et al., 2010). In the context of this study, care workers are responsible for these activities. The latter is confirmed by various statements of the nursing staff (participants), such as the following:

Participant 12: *We inform them* [newly admitted inpatients] *about everything, that we bathe at what time, then time for breakfast, no sleeping wear* [clothing] *at*

breakfast, time to wake up … and you make your own bed then go to the bathroom, bathe, change and go for breakfast, so we tell them everything which they need to know, sleeping time, treatment time, and the team leader will add on what we had told them because they do have their files, which has all the rules of the clinic

5.4.7.1.1 Sub-category: Orientation, pre-admission and ground rules

Substance abuse inpatients come to treatment centres from various backgrounds, some of which were characterised by a state of wantonness and non-adherence to formally structured surroundings governed by rules and authority (Nies & McEwen, 2011). It is for this particular reason that pre-admission control measures and procedures (ground rules) are applied to orientate and educate substance users about the rules and policies of the inpatient treatment centres, which assists nurses to contain and manage substance users' behaviour as they provide nursing care (Bartlett et al., 2013). The following statements act as precursors to the situation.

Participant 5*: From the gate security searches them … and a social worker comes to assess them … they write everything … they again do therapeutic assessment. When the social workers are done, they inform the professional nurses. From there … we* [nurses] *take the patient from them* [social workers] *and we do strip search*

Participant 2: *On admission they are lectured about rules. You do this as they give the rules, they tell them about the policy because they are the ones who are dealing with the rules the social workers.*

Participant 6: *During admissions, care worker and nurses help each other searching the patient, when the patient is undressing the care worker is searching the patient's bags maybe to look for drugs because sometimes they hide the drugs. To avoid that I have to search thoroughly even though the security has done that. We look in their socks, underwear, in their shoes, everywhere because they open holes on the shoes and put drugs*

It is evident from the above-cited excerpts that treatment programmes make provision for assessment on the day of admission so that the practitioners could gather as much information as possible about the substance abuser's addiction record and behaviour. The information gathered will also inform on the individual screening sessions.

5.4.7.1.2 Admissions policy/ procedures

Following the pre-treatment searches, proper laying of ground rules commences in conjunction with orientation for the newly admitted inpatients, who are initially kept in the

admission areas until detoxification is completed prior to their transfer to the actual treatment section of the centre. The admissions procedures and ground rules involve a familiarisation of inpatients to adhere to house rules and the daily or weekly activity schedule and allocating them to respective case managers. Further to the admission procedures, participants also mentioned that after first admission, they can readmit one substance user for the second time (following a first recidivism), but not more than that. Readmission may only happen three months after the first discharge, and subject to availability of space. This was emphasised in the following statement:

Participant 1*: We only take them twice, admission first time, second time is the last one we do not take them back again. They know, they know they know, that it is your last chance if you came here for the second time you won't be coming and they only came three months after discharge, depending on waiting list.*

Some of the treatment programmes in this regard, address daily schedules and rules as indicated in Table 5.10 below.

Table 5.10: In-patients' daily schedules

Time/ Schedule	**Main Activity**
6h00	Wake-up, take a bath and bed making
07h00-08h00	Breakfast, devotion, announcements and medication
8h30-12h00	Fun walk, tuckshop, toiletries & making phone calls
11h45-12h15	Lunch
13hh00-14h00	Psychologist group sessions
14h00-15h00	Spiritual group sessions
15h00-15h30	Issuing of clean linen and tea time
15h30-16h30	Physical Exercises
17h00	Supper
17h15-18h00	Relaxation and TV watching (Change of shift by care section)
19h00-20h00	Medication
20h00-20h30	Evening tea
20h30-21h00	Devotion
21h00-22h00	Relaxation, TV watching and bathing
22h00	Lights switched off and care workers do regular rounds in the rooms to check for unbecoming behaviour

From the table above, it is clear that it is the intention and approach of the treatment programmes to address the holistic needs of the inpatients; that is, mind, body and soul. It is also instructive that the daily or weekly programme(s) itself (themselves) do simultaneously

5.4.7.1.3 Recreational and physical wellness programme

In the context of this study, the recreational and physical wellness components of the treatment programme(s) refer to those activities that mainly have a direct social, bodily (non-medical) effect and alleviation of all other pressures induced by substance addiction. The following statement attests to the availability of such activities.

Participant 5: *At times there is TV, snooker, we have soccer ball at times they even challenge the mental hospital patients, they go that side to play soccer, and they go with security.*

It was established further that recreational and physical activities included a 'fun walk', physical training exercises, and swimming (the swimming pool was out of order at the time of conducting the study). The main purpose of physical exercise is to increase the inpatients' level of fitness, physical health and a sense of wellbeing. They are also meant to increase self-discipline and respect of the rules, thus lessening misbehaving, frustration and anger.

5.4.7.1.4 Psychologist group sessions

In addition to the physical exercise and development component of the treatment programme, the psychological aspects of substance addiction are addressed by means of inpatient group sessions under the guidance and supervision of a sessional psychologist or psychiatrist who is available on Thursdays only, or Narcotics Anonymous group meetings available biweekly on Saturdays only. During these sessions, educational tools such as videos are utilised as part of psycho-education, emphasising on drug dependency (addiction) and its associated triggers and cravings.

It is also the objective of these sessions to educate and enable inpatients identify different triggers and to respond accordingly. The inpatients will be able to differentiate between a trigger, thought, craving and use of substances. During recovery, there are often certain feelings or emotions that trigger the brain to think about using substances (Jason & Glenwick, 2016; Myers et al., 2010). As a whole, the psychoeducation initiatives focus on withdrawals, cravings, the physical and psychological effects of drugs, as well as defence mechanisms against triggers and peer pressure. The psycho-education repertoire further addresses HIV/AIDS awareness; physical effects and management of stress related illnesses; anxiety and panic attacks; as well as depression treatment and its related coping mechanisms.

Inpatients are informed about triggers that can easily cause relapse. They are made aware of them as well as high risk situations. Furthermore, the service user obtains more information about how to cope and maintain challenges, fears and sobriety; as well as living beyond abstinence are shared with outgoing service user. The family is also prepared for aftercare and support systems. Emergency contacts are also shared with the service user and the family members. For determining the programme's efficacy, the service user must be able to indicate what might trigger his/her thoughts into relapse.

5.4.7.1.5 Personal hygiene and medical programme

The treatment centres have a personal hygiene and medical programme as a component of the treatment regime provided in those centres. They are educated about the importance of basic hygiene, in addition to the medication that is administered to normalise the chemical functioning and balance of their bodies (Adinoff et al., 2014). Personal hygiene emphasises on routines such as bathing and bed making at the regulated time; the importance of nutrition; environmental awareness; and dental care.

All service users are assessed medically upon admission. There is also sessional doctor who are available on Tuesdays and Thursdays only. The medical programme, also called 'My health is my responsibility', addresses the following topics:

- Health education; signs, symptoms of stress and defence against it;
- Medical and drug information sessions to substance users.
- Effects of drugs on physical and psychological functioning.

The above-cited treatment components impact mostly on inpatients' treatment and recovery process. For the nursing staff's primary healthcare concerns, the following medical treatment programme components were noted:

- Medication is administered daily, and only during specified times informed by the assessment process;
- No service user is allowed to be in possession of any medication if he was on treatment prior to admission. Such medication should be handed over to medical staff to administering it;
- Medication is used mainly to prevent addiction relapse;
- Wellbeing clinics are held twice a day;
- Formation of nursing diagnosis and treatment of disease; and
- Medication administering, recordkeeping, and monitoring of effects.

It should be noted that in all programmatic treatment components, there is information that addresses inpatients' recovery needs, as well as details pertaining entirely to the nursing staff in relation to implementation of the treatment programmes.

5.4.7.1.6 Spiritual programme

In addition to the range of other treatment options mentioned thus far, spiritual group sessions constituted a significant component of the core spiritual programme. This category of treatment options and approaches is cognate from spiritual theories that acknowledge the healing power of mind-body and body-soul connections with the involvement of pastors and religious organisations (Holyoke & Stephenson, 2017). Additionally, inpatients were noted to appreciate spiritual services by pastors, especially where such religious programmes have been institutionalised as part of the treatment and rehabilitation initiatives by the particular treatment centre (Isidore et al., 2014). In this regard, church services were rendered by volunteers on Sundays.

On the whole, the spiritual programme was anchored on the following principles:

- Respect for the right to practice the religion of choice is respected, but religious practices that are harmful to the service users' wellbeing are prohibited; and
- Time is allocated daily for service users to attend morning prayers, and these meetings provide the opportunity for all members of the nursing team to announce the day's programme.

5.4.7.1.7 Individual and family relations programmes

Inpatient treatment centres provide for individual or patient engagement sessions during the treatment period. The individual therapy is based on specific needs of female service users' (girl children and adults), and follow-up appointments. In essence, the purpose of the individual development treatment programme is to educate substance abuse inpatients about relationships.

In addition, the family relationship programme provide for the particular treatment centre to arrange family open days to assist families to reconnect as part of preparing the inpatients' reintegration once discharged from the treatment centre. Furthermore, the family relationship building initiatives focus more on openness, trust and mending

relationships among members (e.g. the importance of apology and keeping ones' promises. Family open days are organised quarterly and provide families with the opportunity to meet therapists and obtain clearer information about their loved ones' treatment plan. In such contexts, families are also able to obtain more information concerning their expected form of involvement in assisting with inpatient rehabilitation and support.

5.4.7.1.8 Coping and life skills development

From the findings of the study, it emerged that coping strategies were an indispensable requirement for both inpatients and nursing staff, albeit for different reasons. For nursing staff, coping strategies were required to assist them in addressing the pressures of work, while the inpatients needed to cope specifically with the various demands of the recovery process. Besides the internal service providers (nurses and other healthcare professionals), there are also external organisations which provide their services on Saturdays, educating substance users on a wide range of skills. The latter was confirmed thus:

Participant 3*: … people from outside skills development organisations … come on Saturday, and on Friday they* [inmates] *are having a meeting, and on Sunday there is a church sermon, you see it is so nice and full of activities.*

In terms of treatment modalities, life skills development (of which coping is an integral part) reflects an orientation towards behavioural therapy in terms of which substance users are incentivised through acquisition of competency skills, behaviour and attitude modification to reinforce complete abstinence (Gouse et al., 2016; Rawson et al., 2004). The coping and life skills development programme focuses on:

- Anger management: How to address fear, prevent panic attacks, and avoiding grudges;
- Conflict management: Video on assertiveness, problem solving and soft skills development (communication skills);
- Self-empowerment skills: e.g. how to prepare a CV, job interviews, entrepreneurship;
- Family relationships: e.g. value of family, forgiveness and support within families;
- Cultural diversity (directed by Care-Officers): active citizenship participation; democratic values (Mabuza et al., 2014);
- Goal- setting and time management (provided for inpatients' homework).

It is the view of the study that the treatment programmes at various inpatient substance use centres entail a holistic core and focus on the overall treatment, betterment and development of inpatients once they leave the premises of these centres on discharge. However, it is the efficacy (implementation and desired outcomes) of a treatment programme that is crucial, rather than its ontological structure (Hill & Hupe, 2014). It is for this reason in particular, that an evaluation of these programmes was necessary, which still coheres with the 'capacity factor' entailed in both the problem statement and research aim and objectives of the study.

5.4.7.2 Programme evaluation

Moore et al. (2014) intimate that programme evaluation determines the standards and impact of implementation, as well as the quality of outcomes in relation to organisational objectives. In the context of this study, the assessment interview and patient control point system were referred to as the preferred or available programmatic evaluation tools.

5.4.7.2.1 Assessment interview

The fundamental purpose of the (pre-admission) assessment interview is to establish a rapport with the service users, and gather as much relevant information as possible about them. The assessment interview process is then followed by individual sessions informed by the assessment statement of outcomes that determine the content of individualised development plans for each inmate. The purpose of developing individualised plans is to assess the strengths and weaknesses of each service user (inpatient), after which a treatment plan is then agreed upon by the service user and a multi-disciplinary team (MDT). The team is also responsible for drug testing in the unit, and conducting medical lectures covering the following topics as informed by the assessment:

- Mental health care: Interim mental state examination on admission;
- Preliminary psychiatric diagnosis or revising current psychiatric diagnosis;
- Psychiatric services and interventions such as arranging consultations with psychiatrist and changing of treatment plans;
- Individual psychiatric interviews to determine the effects of psychiatric medication; and
- Hospital referrals as the need arises.

As a component of treatment, the interviews-based assessment is viewed in this study as a granting a fair and mutually beneficial opportunity, since all concerned parties are able

to clarify and understand each other's expectations (on the treatment centre's part) and needs (on the newly admitted inpatient's part) respectively.

5.4.7.2.2 Sub-category: Patient control points system

According to the participants, the patient control point system is based on an accumulative basis, and functions on the principle of behaviour and attitude modification for non-conforming inpatients. In this regard, a point was recorded against every act of misdemeanour committed by the particular inpatient. The more the number of transgression of the rules, the closer the inpatient was to serious repercussions that could include expulsion from the substance use treatment. The nurse participant's statement below outlines the nature and purpose of the point system.

Participant 9*: … we have got a point system, let me show you … we allocate points, if it is ten* [points] *you go. If you misbehave you get a point and they* [inpatients] *know … if it reaches the dismissible stage we dismiss, because we had already told him on arrival, we give him our rules that here at our clinic we have rules and we have a points system … and on the first day you have your ten points. As you are doing wrong we are going to deduct, we minus throughout the six weeks and if you exhausted all your ten points, it is a clear dismissal. For us it means you do not know why you are here … that mentality from the street you do not bring it here, you must change.*

According to Cerna (2013), With its focus on ways of improving implementation, the process of evaluation could help to distinguish between interventions that are inherently faulty and those that are poorly delivered (Cerna, 2013). Such interventions help to determine if programmes, guidelines, policies and procedures have been executed as intended in the design

5.5 MERGING OF SALIENT QUANTITATIVE AND QUALITATIVE DATA (FINDINGS)

A convergent analysis of the quantitative and qualitative findings has revealed several areas of confluence and complementarity. Accordingly, Table 5.4 serves as a reference point or framework against which the merged (and cross-referenced) quantitative and qualitative data is presented in summarised form in this section[1]. This synoptic approach was necessitated by the copious nature of the thematic categories and associated sub-categories.

[1] A more detailed merging of statistical data and qualitative statements is presented in the 18-page Annexure F

5.5.1 Merged/ Converged Analysis of Theme 1

This theme focused on the psychological and emotional behaviour hampering inpatient substance users' care and treatment. In determining the hampering factors, it was worth examining the critical aspects of the inpatients' repertoire of behavioural, emotional and attitudinal characteristics. Their socio-demographic information showed that a majority (60%, n=146), of the inpatients were aged 21-30 years, an age at which peer pressure (more than emulated family habits) was most likely to have an impact on their substance use habits (Wilson, 2013). Another majority (30%, n=74) had been addicts for 7-10 years.

The relevance of such a scenario is that it provides relevant post-admission information for the multi-disciplinary teams working at the treatment centres to identify, plan and implement relevant substance use treatment options consonant with addressing undesirable behaviour such as anger, lying, violent tendencies, theft, suspicious drug taking on the centre's premises, and disrespectfulness. Such planning would not have been possible without an accurate determination of the inpatients' predisposing factors for drug use; response to treatment; as well as family history and its effect or impact on the recovery process (Amoore, 2016).

5.5.2 Merged/ Converged Analysis of Theme 2

The theme focused on attitude and support of inpatients' family and relatives. The fact that a majority (70.5 %, n=172) of inpatients lived with their parents (of whom only 4% (n=9) used drugs) prior to admission at the treatment centre, unequivocally implies that the centrality of their family background could not be underestimated despite the fact that a majority (82%, n=200) of the 244 substance use inpatients stated no biological family member who was using illicit substances. Contrastingly, the fact that a majority (90%, n=223) of the inpatients were single, necessarily justifies the incorporation of life, social, and family relationship skills among inmates to also develop or enhance their self-esteem, motivation and emotional intelligence capacities (Blobaum, 2013). Living with patients is transitory. However, non-financial family support is continuous and critical, especially in an environment where about 95.1% (n=232) of the inpatients were unemployed (in 2016).

The above situation is important, because it complements the nurses' qualitative statements (in sub-section 5.4.4.1) which reflect that there was more of inpatient support from their family than their relatives.

5.5.3 Merged/ Converged Analysis of Theme 3

The theme focused on emotional, coping and support experienced by nurses in the provision of inpatient care and treatment. This theme basically illuminates on the challenges experienced by the treatment centres' nursing staff, and the coping mechanisms applied in response. Examples in this regard included lack of relevant training concerning HIV/AIDS training and relevant information on types of drugs for substance use information.

The pressures of work unavoidably impose that nurses resorted to prayer for spiritual succour and relief/solace. In this regard, empathy with the inpatients' conditions would have been natural, given that they too (by a majority of 55.7% (n=136) subscribed to a system of belief/faith (Christianity) that embraced prayer to engage one's inner spiritual power to counter the different temporal challenges and pressures they faced (Thorkildsen & Eriksson, 2015).

5.5.4 Merged/ Converged Analysis of Theme 4

The theme focused on unclear procedures and approaches, resource shortages in the provision of inpatient care and treatment. It is the concerted view of this study that, the fact that only a paltry 59.6% (n=144) of the inpatients completed the detoxification programme, sufficiently justifies the escalation of factors associated with both the ack of inter-professional and inter-disciplinary approaches; as well as suggested in-patient treatment approaches. The detoxification completion figures may not be surprising, considering that a majority (92.2%, n=240) of the inpatients had not consulted a psychiatrist prior to their admission at the treatment centre. Also, a majority (73.4%, n=179) of inpatients had abused at least two types of substances.

Based on the above statistical information, the study contends that an ineffective screening process could render the detoxification and general treatment options to be ineffective. Arguably, detoxification of inpatients constitutes the single most important factor to gauge the success or otherwise of any substance use treatment programme (Department of Social Development, 2013; Edward et al., 2014).

5.5.5 Merged/ Converged Analysis of Theme 5

The theme focused on inpatient care and treatment programmes. In this regard existing

treatment programmes and their evaluation constituted a significant framework to determine the capacity of the treatment centres to thwart the ever-increasing scourge of substance use. Despite the 59.6% detoxification completion rates, the three substance use treatment centres could be credited with a semblance of implementation success, given that only 16% (n=40) were ever readmitted due to recidivism.

The majority of inpatients (47.1%, n=115) consumed or used 4-6 ‘bags’ of illicit substances daily, followed by 18% (n=44) who consumed 7-8 ‘bags’. This is a high consumption rate of about 65.1% of inpatients (n=159) consuming an average of 4-8 ‘bags’ daily prior to their admission. Such a situation implies that thorough screening processes should be put in place, and the well-designed treatment programmes should be implemented. The degree of implementability should be complemented by protracted evaluation standards and practices (Cerna, 2013).

5.6 CONCLUSION

This chapter discussed both the quantitative and qualitative findings of the entire study in respect of the sociodemographic characteristics of both the substance use inpatients and nurses involved in the study. By contrast, however, the inpatient characteristics were only confined to the quantitatively obtained sociodemographic information reflected in their 244 admission records for 2016. The inpatients’ treatment seeking behaviour, history of substance addiction and medical characteristics constituted the crux of their quantitative information.

Meanwhile, the nurses’ characteristics were obtained both quantitatively and qualitatively through their verbatim lived experiences. Since they constitute a critical aspect of the problem being researched, it is the nurses’ qualitative information that yielded five themes, each with its categories and sub-categories. Chapter 6 presents the summary of key findings, main conclusions, recommendations and study limitations.

CHAPTER SIX: PROPOSED NURSING CARE GUIDELINES OF INPATIENT SUBSTANCE USERS

6.1 INTRODUCTION

The previous chapter (Chapter Five) presented integrated and convergently results derived from both the qualitative and quantitative data, and further present and discussed meta-inference of the self-same findings. Meanwhile, the current chapter presents evidence-based suggestions for a framework of nursing care guiding principles for treatment of inpatient substance users. SUD is a complex condition that requires comprehensive care to address patient's needs holistically (Ammit, 2016). For holistic well-being to be achieved, the collaboration of multidisciplinary team members is required. The researcher's suggested framework of eclectically derived guiding principles emanates from relevant literature reviewed, the theoretical framework of the study, the merged qualitative and quantitative strand results, the DSM-5 criteria, and well considered perspectives of the researcher. Therefore, the findings of the study presented in Chapter Five constitute the most seminal premises for the eclectic development of the proposed guiding principles.

It was the researcher's initial aim to propose a repertoire of nursing care guiding principles for inpatient substance users, in order to improve the implementation of nursing care and treatment. To achieve this goal, the researcher initially planned to identify the characteristics of inpatient service users from inpatient treatment centres in selected provinces, and to explore the experiences of nurses when providing care to substance users. Furthermore, the researcher sought to understand how inpatient treatment programmes confirm the analysed nurse's experiences when providing care at substance use inpatient treatment centres.

6.2 PURPOSE OF THE GUIDING PRINCIPLES

The purpose of the proposed guiding principles (detailed in Section 6.6) is to enable and assist nurses when providing care to inpatient substance users, in order that they achieve comprehensive and holistic health outcomes. Furthermore, the suggested principles will assist nurses to add value in the care and treatment of substance users, while also broadening their understanding of the inter-relatedness of the care and treatment systems (Gouse et al., 2016; Wilson, 2013). To a large extent, these proposed guiding principles and their associated variables are a response to the researcher's realisation and

observation of the lack of comprehensive and coordinated guiding principles for nurses when treating and providing care to their substance use inpatients (Clancy et al., 2007). Currently, addiction nursing does not form part of the undergraduate nursing curriculum in South Africa, and there are no specialised courses specifically for addiction nursing, while SUD is becoming a huge public health concern in the country. It is against this background that the value and efficacy of the proposed guidelines was conceived.

6.3 SCOPE OF THE GUIDING PRINCIPLES

As both a profession and field of scientific enquiry, nursing is a broad field in practice as well. Similarly, substance abuse is located in many fields within the social sciences domain (Gentles et al., 2015). As such, the scope of the proposed guiding principles is confined to short- and long-term inpatient treatment programmes. Furthermore, the guiding principles are applicable only to substance abuse treatment centres which provide detoxification. However, these guidelines are flexible for adaptation to those facilities that do not provide detoxification programmes. In addition, the proposed guidelines may be adapted to other relevant multi-professional contexts of addiction, other than nursing.

Based on the convergent analysis of themes generated through the mixed-methods of primary data collection and the broad review of literature, the researcher identified ten areas for the particular focus of the proposed guiding principles, namely: sociodemographic intake; screening and substance use history; psychological domain; social domain; spiritual domain; physiological domain; narrative summary; evaluation and progress notes; treatment planning and implementation; and discharge plan.

Substance addiction is an evolving field impacted on by a range of ongoing developments, including the emergence of new substances, ongoing research findings, and the nursing-medical profession's treatment and care options (Hogarth et al., 2016). Accordingly, the current research and suggested guideline principles may not cover all national and international substance addiction elements. For this reason in particular, the researcher will regularly update the suggested nursing care guiding principle whenever the need to do so arises.

6.4 PROCESS OF DEVELOPING THE PROPOSED GUIDELINES

A description of the process of developing the proposed guidelines is essential, because such description also defines the actual pillars on which the guidelines and their outcomes

(i.e. principles) are premised as nursing curriculum indicators (Björkdahl et al., 2013; Bunyan et al., 2017). For the purpose of developing the proposed guiding principles for inpatient substance users' nursing care, the study simultaneously explored and described the characteristics of inpatient substance users, experiences of nurses when providing care to inpatient substance users, together with inpatient treatment programmes. These guidelines were formulated in the context of the merged quantitative and qualitative findings presented in Chapter Five of this study, complemented by the reviewed literature (Chapter Two) and guided by the theoretical frameworks outlined in Chapter Three. The reviewed literature enabled the alignment of the proposed guidelines to WHO best practices in the sphere of drug dependency treatment, while the theoretical framework allocated conceptual parameters and structure to these guidelines (Miles et al., 2014; WHO, 2008).

6.5 SUGGESTED MINIMUM REQUIREMENTS

In the context of the proposed guidelines, the description of minimum requirements relates to both the service user (inpatient substance user) and the service provider (nurses and other healthcare professionals providing care and treatment). Such differentiation of requirements is essential, given that the user and the provider have different needs and experiences (Were, 2014). For the service user, the requirements are aimed at facilitating an effective treatment process from admission, screening, discharge and post-discharge care with little, or no risk of relapse. For nurses as service providers, such requirements further enhance the narrowing of the theory-practice gap in substance addiction, while also fostering a culture of ongoing skills development. In this study, the latter assertion is absolutely critical, given the demand for professional support mentioned by nurses variously in Chapter Five (especially sub-sections 5.4.5.3, 5.4.5.4 and 5.4.6.1).

Addiction treatment requires the full involvement of the patient, and should be tailored to patient needs, which will be directed by available resources (Van Dyk et al., 2017). The following 'list' constitutes requirements or factors for consideration in establishing an enabling environment and framework for the effective materialisation of the proposed nursing care guidelines and principles:

- An inpatient treatment facility which adheres to the South African infrastructure legal requirements;

- Addiction trained and competent staff supported by a detoxification unit, a pharmacy and an efficient record management system;
- A multidisciplinary team comprising a psychologist, an occupational therapist, a nurse, a medical doctor, social workers, psychiatrists, care workers; spiritual care providers;
- An evidence-based treatment programme addressing biopsychosocial and spiritual aspects of a substance user;
- Availability of policies and procedures, for instance, admission and referrals according to the National Department of Social Development's requirements;
- Good working relationship with other relevant government departments;
- Identified relevant local, provincial and national non-governmental organisations for collaboration and referrals; and
- Qualities of nurses based on the following attributes: non-judgmentalism; acceptance and tolerance, compassionate about work, loving and assertiveness;

In addition to their nursing qualifications, the following constitutes the repertoire of knowledge and skills required for substance use nursing care:

- Knowledge of WHO principles of drug dependency treatment;
- Knowledgeable of the bio-psychosocial-spiritual model;
- Knowledge of basic substance use information;
- Knowledge of detoxification, with reference to specific substances;
- Models of addiction aetiology;
- Knowledge of evidence-based treatment;
- Basic understanding and knowledge of general systems and nursing theory;
- Knowledge of relevant legislative frameworks; and
- Willingness to constantly improve competencies, because substance addiction is an evolving field.

The researcher reiterates that all of the preceding sections in this chapter (6.1 to 6.5) are actually an encapsulation of both the resolution of the research problem as much as the accomplishment of the stated objectives of this study. In that regard, Table 6.1 below depicts the requirements for an effective and implementable substance use training, nursing care and treatment provision programme in respect of its requisite processes, scope, purposes, guidelines and principles, structure facilitation approach and evaluation mechanisms based on the bio-psychosocial-spiritual approach or model.

Table 6.1: Summary of proposed guiding principles framework for nurses' substance use training and treatment programme

Guiding Principle	Purpose/ Aim	Basic Assessment Components/ Scope	Guidelines/ Framework
1. Socio-Demographic Intake	*Establishing good patient rapport; *Collection & identification of relevant socio-demographic information; *Information gathered to serve as basis for development of individual treatment and care plan.	Age; Marital status; Education; Employment; Profession; Religion; Race	*Design of socio-demographically relevant intake form; *Intake to be conducted in friendly, welcoming environment; *Intake at admission, should consider protective and risk factors; *Constructive collation of collected information.
2. Screening and Substance Use History	*To determine SUD severity; *To obtain information on substance use; *Screening provides for individualised interventions; *To predict drug interaction levels.	Substance used; Name of substance; Substance mixtures; Date of first use; Frequency of use; Quantity used; Previous admissions; Number of admissions; Reason for relapse; Screening tool used	*Design of screening focusing on previous substance use history; *Continuation of friendly welcoming environment encompassing privacy and confidentiality; * Collected information to be collated constructively in terms of physiological psychological, social and spiritual factors likely to perpetuate specific drug use.
3. Psychological Domain	*Identifying psychological problems and co-occurring mental health disorders; *Understanding level of psychological functioning.	Mental status examination; Level of motivation; Risk; History of mental condition, trauma, treatment, schooling, conduct history; developmental stage establishment	*Design of psychological assessment form inclusive of psychological variables and mental condition history; Assessment to be conducted by professionally qualified and experienced nurse
4. Social Domain	*Determine SUD impact on social life; *Establishing patient support system; *Establishing any predisposing, precipitating and perpetuating social issues and events.	Personal hygiene; Household, Family, Work and Community responsibilities; Family tree; Number of children and household; Social problems; Any family member/relative using substances	Design of social assessment form with all basic assessment components; Comparison of compiled information with psycho-social report during admission application
5. Spiritual Domain	*Identifying spiritual factors and history to predict treatment; *Determine spiritual levels and motivation; * Establishing any predisposing, precipitating and perpetuating spiritual issues and events	Religious affiliation and disconnection; Spiritual gifts; Family religious affiliations.	Design spiritual assessment form encompassing assessment components; Religious leaders' involvement during treatment; Combining spiritual history with physiological, psychological, social and spiritual predisposing factors.

Guiding Principle	Purpose/ Aim	Basic Assessment Components/ Scope	Guidelines/ Framework
6. Physiological Domain	*Identifying effective physiological interventions & co-occurring medical conditions; *Obtaining full medical history for treatment; *Early detection of health problems.	Vital signs; Intoxication; Withdrawal symptoms; Nutrition; Body mass index; Medical history; Full body examination; Dental health	Design assessment form with all relevant and necessary medical history questionnaire in conjunction with all other domains; Utilising evidence-based withdrawal cases.
7. Narrative Summary	*Collection and collation of relevant patient information; *Facilitation of patient participation in treatment plan.	Risk and protective factors; Motivation; Summary of main issues.	Lucidity of narratively collected and presented information; Collected information to be reflective of both nurse and patient perspectives.
8. Treatment Planning and Implementation	*Identification of inter-related domain components; *Establishing a clear individualised treatment plan	Needs identification and goal setting; Relevant investigation activities; Identify and strengthen resources;	Patient-centred recovery planning; SMART objectives for each goal; Patient involvement in all treatment stages; Prioritisation of life-threatening needs; Reasonable and practical planning of activities
9. Evaluation and Progress Notes	*Record keeping & achievements; *Assessing viability & planning weaknesses	Identifying information; Nurse particulars; Progress notes.	Capture all performed activities and progress notes, including time, place and facilitator; Safety and privacy of patient records.
10. Discharge Plan	*Enablement of treatment continuity; *Provision of clear information to all professionals involved in post-discharge treatment; *Preparation and collation of information for any future relapse by patient.	Relevant patient identifier information; Date of admission; Relapse prevention and crisis management plan	Provide all relevant patient information in identification book; Database for all available national and local resources; Availability of crisis management plan and resources for crisis management

6.6 PROPOSED GUIDING PRINCIPLES OF INPATIENT SUBSTANCE USE NURSING CARE

In its holistic context, Table 6.1 is reflective of the actual integration or merging and further interpretation of both the qualitative and quantitative findings, as much as it provides the seminal basis for applying the proposed nursing, training, care and treatment guiding principles in substance use. In this regard, it is noteworthy that Sections 6.6.1-6.6.10 provide and further detail an integrated interpretation of the proposed guiding principles of inpatient substance use nursing care programmes.

6.6.1 Guiding Principle 1: Socio-Demographic Intake

6.6.1.1 Purpose

To establish good rapport with the patient; and
To collect and identify important and appropriate sociodemographic information.
The information gathered will assist in laying of the foundation for treatment and the development of an individualised care plan.

6.6.1.2 Basic components of assessment and description

Age: The number of years as per birth certificate. The age assists, amongst others, with determination of the developmental stages, connections with other social, environmental, cultural and spiritual domains.
Marital status: The status could be married, single, widow, widower or cohabiting. Current status assists with formulation of the social, cultural and environmental aspects of an individual and his/her family.
Level of education: The highest level of education assists with the determination of functional capacity, occupational skills and interpersonal skills.
Employment status/source of income: This should indicate whether a person is employed, unemployed, self-employed or any other source of income, period of current status, and reasons for change of status. Employment status assists with an indication as to the effects of SUD on different areas of the patient's life.
Profession/occupation/formally and informally obtained skills: This should indicate the profession and artisan skills of patients, which enables a determination of the strengths

of the individual during treatment plan and goal formation, as well as the functional level and extent of the effects of SUD.

Religion: Current religious affiliation and before SUD. It gives an indication on the aetiology and effects of SUD, as well as assisting in the treatment planning and identification of the individual patient's strength.

Race: Information about race is vital in determination of genetic exposure of certain conditions, including SUD (Clancy et al., 2007; Malliarakis & Lucey, 2007).

6.6.1.3 Guidelines

Design an intake form with most relevant sociodemographic variables and collect information relevant to the context.

Intake should be conducted in a safe and comfortable welcoming environment in order to encourage patients to feel safe when discussing sensitive issues. Welcome the patient, do self-introduction, explain the procedure and purpose to encourage the patient to be comfortable.

Intake could be conducted during admissions. It should be limited to at least five minutes, excluding introductions and welcoming. Should the patient be intoxicated, or is not possible to collect information, the nurse should collect preliminary basic information and reschedule the intake.

After obtaining information, formulation or constructing of meaning should be undertaken, identifying physiological, psychological, social and spiritual factors that might have predisposed, precipitate, perpetuate SUD. Additionally, protective factors and risk factors should be identified, to assist and enable the nurse collecting the information to effectively plan for inpatient treatment.

6.6.2 Principle 2: Screening and Substance History

6.6.2.1 Purpose

To determine the severity of SUD; and

To obtain information regarding the use of specific substances.

It provides an opportunity for individualised interventions. Knowledge of substance history allows health professional to predict the level of drug interactions (Scot, 2019; UNODC & WHO, 2008).

6.6.2.2 Basic components of assessment and description

Substance used: Current and in lifetime (including tobacco, alcohol, cannabis, prescription medication, codeine, caffeine products, alcohol and any other addictive chemical), If more than one is listed or indicated.

Name of substance: The names include registered or colloquial names of substance. Names assist in determining the classification and action of substances. Furthermore, some names are contextual, and this may give an indication of the mixtures and strength of substances.

Mixtures of substance: It should be clear whether patient is using mixed substances, or as single dose. This assists in determining and planning for detoxification.

Date of first use: It should be indicated when each substance was first used. This assists with the determination of the reasons for starting, the developmental stage at which it was started and correlation of issues in other domains of the individual patient's social, psychological and spiritual areas.

Reason for starting the use: What the patient thinks it was his/her reasons for starting the use of specific substances. This assists with the formulation of diagnosis and treatment planning in addressing the underlying courses of SUD.

Route of administration: Establish whether the patient is smoking, injecting, sniffing/snorting, or using multiple methods of administration. The information is vital in the anticipation of medical conditions linked to the route of administration and withdrawal severity.

Frequency of use: The number of times patient uses substance per day enables the nurse to understand the possible damage resulting from SUD.

Quantity of substance being used: Together with the frequency, the quantity of the abused substance is a predictive factor of the suspected extent of damage in all areas of the patient's life.

Last time of use: The number of hours or days after the last use assists in determining the onset of withdrawals.

Previous attempt to stop the use of substance without assistance: The reasons should be established, even for any previous attempts, as well as the experience thereof and the reason for relapsing.

Previous admissions: Presence and number of previous admissions assists in giving the nurse a picture of what the patient already knows, and the treatment plan may move from known to unknown.

Type of previous admissions. If more than one, it should be listed indicating when, where, length of treatment, type of admission and reasons for relapsing.

Reasons for relapse: Specific reasons that caused the patient to relapse. This gives an idea of treatment interventions that do not work, and an improvement plan could be made on the previous interventions.

Reason to stopping the use if any: Reasons for stopping each substance. It gives an indication of the patient's success (or otherwise) in stopping the use of substances in the past. The same could be used as a protective factor.

Type of current admission: Whether voluntary or involuntary.

Previous admissions: If more than one listing is indicated.

Number of admissions: Number of admissions gives a picture of the patient's level of motivation to stop substance use.

Where: Previous treatment centre at which the patient was admitted gives an idea of the type of treatment the patient has already been exposed to.

When: The time at which the patient received addiction, treatment help to conform some of the information which the patient may try to lie about. In addition, it assists in determining prognosis for the current admission.

Type of admissions: Voluntary or involuntary admissions provides the nurse with a profile of the patient in relation to treatment seeking behaviour.

Period of abstinence: Past abstinence achievements are important positive factors, they become instrumental when affirming the patient.

Reason for relapse: All reasons for relapse are instrumental during relapse prevention because they are already risk factors for another relapse.

Evidenced based screening tool: Use one of the relevant evidence-based screening tools to determine the severity of SUD (e.g. Alcohol, Smoking and Substance Involvement Screening Test (ASSIST), and Alcohol Use Disorder Identification Test (AUDIT). When feedback is provided, it will motivate the patient to realise the need for inpatient treatment.

6.6.2.3 Guidelines

Design screening form with most relevant substance history variables and all other relevant information. Continue to conduct interviews in a safe and comfortable welcoming environment to encourage patient to feel safe to discuss his/her sensitive issues.

To be as much close as possible to truthful answers, nurses should avoid being judgemental and confrontational, and should always show respect to the patient. Where

answers are not clear, probe as a way of provoking forgotten past experiences.
After obtaining substance history, formulate or construct meaning from the information obtained, identifying physiological, psychological, social and spiritual factors that might have predisposed, and precipitate and perpetuate the use of specific substance.
Identify protective factors and risk factors, this will assist the nurse who is collecting when planning the treatment. The protective factors could be used to affirm the patient (Table 6.2).

6.6.3 Guiding Principles 3: Psychological Domain

6.6.3.1 Purpose

To identify psychological problems;
To identify co-occurring mental health disorders;
To understand the level of psychological functioning;
To identify psychological courses of substance use; and
To identify and understand mental health status.

6.6.3.2 Basic components of assessment and description

Mental status examination: Including screening, all relevant questions should be answered. Where a sign or symptom of mental health problem is identified, it should be probed. Knowing what came first between SUD and mental condition assists during treatment planning.
History of mental condition and treatment: The presence of recent or old mental conditions should be established. If any existing mental condition is not controlled, the patient may not benefit from SUD treatment.
Level of motivation: The patient's level of motivation on admission should be identified. This helps nurses in treatment planning and assists the patient achieve the next level of motivation.
Risk assessment: Establish if patient poses any risk to self, others or the environment. Suicide scale may be used to measure the possibility of suicide.
Trauma history: Any experiences of childhood or adult life trauma.
Schooling history: Any grade failed, school performance from preschool to present, if dropout reason for dropping out. Check if patient has learning difficulty. Also identify patient's attitude towards learning. This helps in formulation of the problem.

Developmental stage: Identify the developmental stage of the patient. It assists during treatment planning.

Conduct history: Identify the presence of conduct disorders, it assists in formulation of predisposing factors.

Communication: Ability to express emotions and communication style at home.

6.6.3.3 Guidelines

Design psychological assessment form with most relevant psychological variables and collect information relevant to the context and as per treatment programme.

Design a form for mental status examination and include all required elements according to mental health practices.

Nurses conducting this part of assessment should have a background and understanding of mental health.

Obtain the history of any mental condition's recent and lifetime signs and symptoms as much as possible. Arrange for collateral from close family members if indicated. After obtaining psychological history, formulate or construct meaning from the information obtained, identifying physiological, psychological, social and spiritual factors that might have predisposed, precipitate and perpetuate the use of specific substance. Additionally, protective factors and risk factors should be identified. This will assist the nurse when planning for treatment. The protective factors could be used to affirm the patient.

6.6.4 Principle 4: Social Domain

6.6.4.1 Purpose

To establish the extent of effects of SUD on the social aspect of individual;

To establish support system of the patient;

To identify the social reasons for the use of substances;

To establish the need for family remedial during the treatment programme; and

To identify and address social situations which might have predisposed, precipitate and perpetuating the use of substance by the patient.

6.6.4.2 Basic components of assessment and description

Personal hygiene: It indicates dysfunctional daily living activities.

Household responsibilities: Cleanliness and food preparation in the house. These indicate the level of social dysfunction due to SUD.

Family responsibilities: Ensuring children's care, looking after parents and other family members. This provides an indication of the extent of substance use.

Community responsibilities: Participating in community activities, such as funerals.

Work responsibilities: Attending to such responsibilities as work responsibilities, honouring time for work, charges about misconduct.

Social problems: For instance, fights with the family and loss of friendship.

Family tree: Number of children, parent's marital status, upbringing.

Home type: Living in the streets, with friends, or own house.

Exposure to substances: Any family member using substances, availability of substances at school, work or community, and the level of substance acceptant in the family and in the community.

Number of children: If patient has children, it could be identified as a protective factor or reason for motivation to stop substances.

People staying/ living with: Some people are enablers of addiction. Obtaining and compiling such information is of assistance when planning relapse prevention including any family member using substances and nature of relationship with that member.

Forensic history: Obtain any relevant forensic history, if more than one list indicating. Knowledge of forensic history helps with planning for occupational development and behaviour modification.

Functionality: Changing of moods, thoughts, and adaptation in different situations.

Criminal record: Nature/type, date and place of offence, any accomplices (e.g. gangs), arrest, prosecution, imprisonment, date of release and reason for release.

Collateral: From family members, friends, colleagues, family doctors or any relevant person.

6.6.4.3 Guidelines

Design social assessment form with most relevant social variables and collect information relevant to the context and as per treatment programme.

Obtain collateral from any relevant or significant others to verify information provided by the patient.

Compare provided information with the psychosocial report provided during application for admission processes.

After obtaining social history, formulate or construct meaning from the information obtained, identifying physiological, psychological, social and spiritual factors that might have predisposed, precipitate, perpetuate the use of specific substance. Additionally, protective factors and risk factors should be identified. This will assist the nurse who is collecting such information when planning the treatment. The protective factors could be used to affirm the patient.

6.6.5 Principle 5: Spiritual Domain

6.6.5.1 Purpose

To identify spiritual factors and history to predict treatment;
To determine spiritual levels and motivation; and
To establish any predisposing, precipitating and perpetuating spiritual issues and events.

6.6.5.2 Basic assessment components and descriptions

Religious affiliation: Christianity or other religion, the extent of engagement, history from childhood. Some of the religious affiliations are substance addiction enablers.
Religious disconnection: Establish if patient thinks there is disconnection between him/her and supernatural power.
Spiritual gifts: SUD may be as a result of beliefs or conviction of some spiritual factors.
Family religious affiliations: Determine risk and protective factors

6.6.5.3 Guidelines

Design spiritual assessment form with most relevant spiritual variables and collect information relevant to the context and as per treatment programme.
Keep non-judgemental attitudes for patient to be comfortable when answering sensitive issues such as belief systems. Beliefs are subjective, and patients are more likely to give false information (Tomagová et al., 2016).
Encourage the involvement of religious leaders during treatment programme, provided they are not substance use enablers.
After obtaining spiritual history, formulate or construct meaning from the information obtained, identifying physiological, psychological, social and spiritual factors that might have predisposed, precipitate, perpetuate the use of specific substance. Additionally, protective factors and risk factors should be identified. This will assist the nurse who is

collecting when planning the treatment. The protective factors could be used to affirm the patient.

6.6.6 Guiding Principles 6: Physiological Domain

6.6.6.1 Purpose

Identification of physiological conditions for effective intervention;
To identify co-occurring medical conditions;
To obtain full medical history for proper treatment, care and intervention planning;
Early detection of health problems to reduce the severity of the condition;
Treating medical conditions improve public health outcomes; and
Early treatment helps reduction of burden of diseases and state cost containment.

6.6.6.2 Basic components of assessment and description

Vital signs: Vital signs examination gives a picture of health status of the patient. The initial measurement serves as baseline incise of change in condition.
Intoxication: Observe for signs and symptoms of intoxication in relation to specific substance of use.
Withdrawal symptoms: Identify signs and symptoms which are the result of discontinuing the use of substance in relation to specific substance. Also identify any symptoms which might be as a result of adverse reaction to the use of substances.
Nutritional status: Malnourished or well nourished, for treatment planning.
Body mass index: Check body weight and height.
Tests and investigations: Tests-multidrug urine testing and blood borne viruses.
Dental health: Ask and check for any dental problems.
Medical history: Obtain old and current individual medical history, which may include chronic and acute conditions, treatment. In addition, obtain family medical history to determine predisposition to medical conditions; previous and current treatments, including prescribed and self-medication; and
Full body examination, history of injuries, especially to the head..
Systemic history: Obtain history of all bodily functioning. This is important for determining the health status of the patient and detection of any health concerns. Furthermore, it assists in prevention of medication contraindications.
Full body examination: All the new and old wounds, scars, tattoos, body deformities must be identified, described, plotted and labelled on the full-body examination form. This

serves as a baseline should anything happen inside the centre, or any false accusations emerge.

6.6.6.3 Guidelines

In conjunction with other domains (i.e. purposes and basic assessment components), design an assessment form with all relevant and necessary medical history collection questionnaire.
There should be all the necessary equipment for measuring vital signs.
Identify, manage or refer all medical emergencies.
Identify and make use of evidence-based withdrawal scales, for instance: the Objective Opioids Withdrawal Scale, the Subjective Opioids Withdrawal Scale, and the Clinical Institute Withdrawal Assessment for Alcohol.
Conduct an objective observation of intoxication before, asking about the last use of substance, to avoid patient disguising the signs and symptoms. Similarly, conduct an objective observation for the indicated substance to determine the onset of withdrawal signs and symptoms. Subjective withdrawal assessment, or asking the patient about the withdrawal, influences patient to fake withdrawals, especially those already exposed to addiction treatment.

There should be availability of relevant means to conduct rapid tests, such as those for blood borne viruses. This requires a good relationship with testing laboratories. In case of medical conditions which requires immediate and serios medical intervention, nurses should be able to report to the medical practitioner.

There should be a clear referral system in the facility, and understood by all nurses.
After conducting physiological assessment, formulate or construct meaning from the information obtained, identifying physiological, psychological, social and spiritual factors that might have predisposed, and precipitate, perpetuate the use of specific substance. Additionally, protective factors and risk factors should be identified. This will assist the nurse who is collecting when planning the treatment. The protective factors could be used to affirm the patient.

6.6.7 Guiding Principle 7: Narrative Summary

6.6.7.1 Purpose

To present all collected information in a logical and intelligible manner;

To indicate the extent to which the nurse has understood the patient's situation; and
To facilitate patient participation in his/her treatment.

6.6.7.2 Basic components of assessment and description

Identifying information: e.g. age, gender and substance use history.
Summary of main issues: Sociodemographic, substance history, psychological, social and spiritual.
Motivation: Stage of change where the patient is at.
Protective factors: Identify areas of patient's life that could assist with good prognosis.
Risk factors: Identified areas that could affect good prognosis from all the domains.
Patient treatment preferences: Identify, main reason for the patient's admission, and areas where patients need assistance.

6.6.7.3 Guidelines

Write all the collected information in a clear and logical way, avoiding slang/colloquial language and spelling mistakes. The narrative should focus on achieving abstinence and focus on the problematic area.
The nurse should present the collected information according to his/her own understanding and words. The nurse should write what both nurse and patient understood about the patient's situation. Both subjective and objective information should be written.

6.6.8 Guiding Principle 8: Principle 8: Treatment Planning and Implementation

6.6.8.1 Purpose

To identify and understand the inter-relatedness of domain components;
To establish a clear plan and path that directs the treatment of an individual; and
To tailor the treatment plan according to individual patient needs.

6.6.8.2 Basic components and description

Identify needs: Identify what the patient needs in order to facilitate comprehensive and holistic treatment, such as shelter, addiction treatment, and legal services.
Set goals: Develop goals from the needs, e.g. to obtain shelter.
Set objectives: All goals must be justifiable.

Activities including investigations: Activities to achieve objectives and goals.
Identifying and strengthening resources: Multidisciplinary team and all available resources. All care planning should be communicated with members of multidisciplinary team in a created environment. Incidents with identified needs should be referred and linked to available resources.
Timeframe: Clear date and time for performing each activity.
Identify barriers and challenges: This could be personal challenges, including low-self-esteem and resources.
Implementation: As much as possible, all activates should be undertaken as planned, indicating the persons involved and how they will be performed.
Monitoring: Checking all activities, and keeping all records. Re-planning of care and re-prioritisation of needs, and communicating with members of the multidisciplinary team.

6.6.8.3 Guidelines

Encourage patient to take a lead in planning for his/her recovery.
Work with the patient in all basic components of treatment planning, such as identifying needs and setting goals.
For each goal, there should be SMART objectives, (i.e. specific, measurable, simple, attainable and time bound).
Activities should be practical and planned in a reasonable manner.
Goals should be prioritised, with life threatening needs attended first.
When planning with the patient, have an understanding on the role of the multidisciplinary team, so that their autonomy is always respected and understood. Identified barriers should have possible mitigating proposals. Have an understanding of time schedule of multidisciplinary team to avoid conflicts of referrals.
A nursing care plan is not complete without its combination with another multidisciplinary team member. Therefore, multidisciplinary team members, including nurses and the patient, should consolidate and develop one joint treatment plan (George, 2002; Ulrich & Kear, 2014).

6.6.9 Guiding Principle 9: Evaluation and Progress Notes

6.6.9.1 Purpose

To keep record of all activities that were undertaken and achieved;
To enable re-assessment and re-planning; and

To check the viability and any inherent weaknesses in the initial plan.

6.6.9.2 Basic components of evaluation and description

Identifying information: e.g. names.
Nurse: e.g. name, credentials and signature of nurse collecting the patient information for treatment.
Progress notes: What has been achieve or not.

6.6.9.3 Guidelines

Enter all activities performed in the progress notes, reflecting times, place and persons who performed the activities.
The names and credentials of nurse or professional writing the progress notes should also be reflected.
All patient records should be kept safe and be treated as confidential. This maxim should always be borne in mind: *What is not written is not done.*

6.6.10 Principle 10: Discharge Plan

6.6.10.1 Purpose

To enable continuity of addiction treatment outside inpatient treatment facilities; and
To provide clear information to all the professional and stakeholders who will be supporting and treating the patient post discharge;

The copy in the file will serve as a reference for future treatment, should the patient relapse and be readmitted.

6.6.10.2 Basic components and description

Patient personal details: The official name, surname, identity number and other relevant identifying information.
Date of admission and diagnosis: The day on which patient was first admitted, and details of substance use history.

6.6.10.3 Summary of treatment progress

Goals: Attained and outstanding goals, their objectives, identified strength and barriers,

and resources needed.

Relapse prevention plan. Identified risk, their degree and mitigation of risks.

Crisis management plan: Contact details and names, place and responsibilities.

6.6.10.4 Guidelines

Include the name of the patient, identity number, and other identifying information as written on the identification book

Include the date of admission and date of discharge to assist those who will be taking over to have background of the treatment duration.

Provide a clear written treatment progress, challenges experiences. The report should reflect physiological, psychological, social and spiritual progress.

Contact details of the discharging facility should be included.

Provide space for feedback to discharging centre for continuity and follow-up purposes.

Make the patient aware of discharge letter content and provide space for patient to acknowledge the content.

Relapse prevention plan, written with the involvement of patient, detailing all identified risks according to the degree with mitigations for each.

A database should be established for all available and relevant national and provincial resources.

Crisis management plan should be available and provide emergency contacts for people, professionals and available resources for crisis management.

6.7 CONCLUSION

Accruing from the eclectic domain of the reviewed literature, the theoretical framework and integrated (merged or converged) empirical evidence, this chapter presented and discussed the proposed guiding principles for nurse training and substance abuse treatment programmes The guiding principles are fundamentally premised on the bio-psychological-spiritual approach, and clearly indicate the structure and organisation of such programmes in terms of five principal components, namely: their purpose, scope, implementation and assessment and minimum requirements. Chapter Seven presents a summary of the study, recommendations, suggestions for future research and study limitations.

CHAPTER SEVEN: SUMMARY OF KEY FINDINGS, MAIN CONCLUSIONS, RECOMMENDATIONS AND STUDY LIMITATIONS

7.1 INTRODUCTION

The previous chapter outlined and highlighted the most critical aspects relating to the findings of the study, with a partiular focus on the proposition of a framework of guidelines and principles for effective implementation of inpatient substance use programmes. As stated earlier in the research design and methods chapter (Chapter Four) of the study, these findings were the product of both the mixed-methods and covergent research design of the study, which reflected on the separate data collection processes and their concurrent analytic perspectives generated through the emergence of common themes (Doyle, 2009:180; Kumar, 2012:17). In the current chapter, the summary of key findings and main conclusions are presented as interconnected aspects that addressed both the phenomenon of substance use and the researcher's intentions in undertaking an investigation on this phenomenon (Brink et al., 2018:144; Grant, & Osanloo, 2014:17).

The current chapter also addresses the extent to which the study's objectives were achieved, which underpins the very reasons for undertaking the study in the first place. It is on the basis of the validity of these reasons that the achievement of the study objectives effectively becomes both the measurement and determinant of the significance and contribution of the study (Brink et al., 2014:144; Kumar, 2012:108). Additionally, the chapter thematically outlines the main conclusions derived from the key findings that also serve as reliable evidence of the extent of achievement of the study's stated aim and objectives. The chapter also presents the study limitations and recommendations. It was also of critical essence that a summary of the nature and quality of the proposed substance use programmes be presented in this chapter, because it necessarily constitutes the premise of the study's significance and contribution as well. In essence, then, the present chapter is emphatically the culmination of both the theoretical and practice-related aspects of inpatient substance use factors that have been aptly encapsulated in all of the preceding chapters.

7.2 SUMMARY OF KEY FINDINGS

The summary of the key findings is not peripheral to the research process as a whole, but projects the extent to which the study's objectives were obtained in the context of some

of the major themes that emerged during the convergent interpretation/ analysis stages (Fetterman, 2010; Green, 2013). In this regard, the research questions were, inevitably and necessarily so, instrumental factors in providing a context in which the efficacy of the study objectives could be determined and established (Creswell & Creswell, 2018).

7.2.1 Achievement of Objectives

In addressing its stated objectives, the study focused on a general question linked to the overall aim of the study, as well as a combination of specific qualiattive and quantitative questions, all of which are individually and collectively linked to the objectives of the study. The research questions are:

- What are the specific or known theoretical and practical characteristics of inpatient substance use?
- What are the experiences of nurses providing care to inpatient substance users? and
- How could the capacitation of nurses be improved as well as inpatients' health status?

The objectives of the study are:

Objective 1: To explore, identify and describe the characteristics of inpatient substance use in both its theoretical/ conceptual and practical contexts;

Objective 2: To explore, describe and analyse nurse's experiences regarding the provision of nursing care to inpatient substance users at selected treatment centres; and

Objective 3: To develop guidelines and principles for the capacitation of nurses and improvement of substance use inpatients' health status.

The re-presentation of both the research questions and objectives in this chapter is an indication of the existing nexus between the achievement of the study's objectives and its significance as a factor of the value of the study (Kumar, 2012:110). Furthermore, the re-presentation demonstrates the link between the research questions and objectives as a determinant of the accuracy of the findings and relevance of the methods used in collecting pertinent data (Anney, 2014). It is worth noting that, similar to the nature of the study objectives themselves, a determination or 'measurement' of their achievement is critically located in three areas of the study, namely: the substance use inpatients, the nurses caring for them, as well as the nature of inpatient substance use programmes.

7.2.1.1 Attainment of objective 1

The first objective of the study was: *To explore, identify and describe the characteristics of inpatient substance use in both its theoretical/ conceptual and practical contexts.* This objective was optimally achieved by means of an eclectic approach that focused on the specific theoretical and actual/ practical characteristics of inpatient substance use. For instance, Chapter Two (pp. 19-50) provided both the local and global domain of substance use characteristics. In this regard, the characteristics of substance use included its manifestation and attendant disorders (DUD and SUD); and its treatment in the context of the nursing profession. On the other hand, Chapter Three (pp. 51-58) situated and emphasised the value of aetiological models and theories as emblematic of critical substance use characteristics. Finally, Chapter Five clearly articulated the ***practical*** context of inpatient substance use in terms of the socio-demographic aspects of the (244) substance users themselves (pp. 79-82) and substance use history/ journey (pp. 82-93).

7.2.1.2 Attainment of objective 2

The second objective of the study was: *To explore, describe and analyse nurse's experiences regarding the provision of nursing care to inpatient substance users at selected treatment centres.* This objective was optimally achieved. Initially Section 2.8 (pp. 42-50) of this study provided a contextual overview of the nursing environment of inpatient substance use treatment in the South African context, having provided a similar global overview in Section 2.6 (pp. 34-39). Furthermore, the entire Section 5.4 (pp. 93-140) describes and explains a range of experiences (including challenges and coping mechanisms) regarding themselves, their patients, the treatment programmes, as well as the broader working environment in which they rendered their services. Their experiences also related to the external environment of their patients (i.e. families and relatives), as well as spiritual, psychological and physiological issues of these inpatients. Compared to the inpatients' predominantly quantitative data, the nurses' qualitatively obtained information and data was extremely useful in the actualisation of the study fulfilling its mission and objectives. In this regard, it could be argued that the qualitative data acquisition method was optimally instrumental in the generation of more knowledge and better insights to the resolution of the research problem. However, this does not in any way diminish the value of the quantitative processes od data collection, especially that it

was on their account that the convergent analysis of data was successfully adopted and implemented.

7.2.1.3 Attainment of objective 3

The third objective of the study was: *To develop guidelines and principles for the capacitation of nurses and improvement of substance use inpatients' health status*. This objective was also optimally achieved. Firstly, the reviewed literature enabled the researcher's awareness and knowledge concerning the requirements of a viable substance abuse treatment programme. It was based on such awareness and knowledge that the researcher was able to understand *how* effective drug and substance use treatment programmes were developed internationally according to certain best practice standards.

Secondly, the researcher's own professional experience and personal observations in the execution of her duties enabled her to further make an informed evidence-based determination of the characteristics of such programmes. Therefore, the weaknesses and strengths of the current treatment programmes complemented the literature-based knowledge and the participant-centred knowledge from the nurses themselves. The protracted engagements with nurses (reflected in Chapter Five) bore significant results translated into realistic situations with the framework of guiding principles that constitute the entire Chapter Five. Therefore, the researcher has no doubt that, not only was the study's third objective achieved superlatively, the framework of guiding principles is also not superficial. It is based on actual practice and focuses on improvement of the substance use treatment situation itself.

7.2.2 Main Conclusions

The study's main conclusions emanate largely from the finding themselves, since these findings yielded the five thematically categorised core variables on whose basis the conclusions are made (Adams et al., 2014; Austin & Sutton, 2015). Table 7.1 below depicts the evidence-based framework/ context for the thematically derived main conclusions in the context of the study's findings. The themes themselves are derived from the study's main findings as represented in Chapter Five. Similar to the study's objectives, it is also worth mentioning that the main conclusions further encompass three symbiotically linked aspects of the study, namely: the nurses as providers of care to the

inpatient substance users (e.g. themes 3 and 4); the inpatients themselves as recipients or users of nurses' are services (e.g. themes 1 and 2); and the nature of the treatment programmes (e.g. theme 5). Due to the combined enormity of the quantitative and qualitative sub-categories, only the main categories and their attendant themes are highlighted as foundational tenets of the main conclusions in this chapter. Accordingly, Table 7.1 below depicts the main themes and categories.

Table 7.1: Summary of key findings in respect of main themes and categories

Main Theme	Main Category/ Attributes
1) Psychological and emotional behaviour hampering inpatient substance users' care and treatment	Emotional status and behaviour of inpatient; Unpreparedness of the inpatient; Predisposing factors for drug use; and Response to treatment.
2) Attitude and support of inpatients' family and relatives	Parental involvement; and Rejection by relatives.
3) Emotional, coping and support experienced by nurses in the provision of inpatient care and treatment	Nurses' emotional experiences; Nurses' coping mechanisms; Challenges experienced by nurses; and Support needed during care and treatment provision.
4) Unclear procedures and approaches, resource shortages in the provision of inpatient care and treatment	Lack of inter-professional and inter-disciplinary approaches; and Resource shortages;
5) Suggested inpatient care and treatment programmes	Existing treatment programmes; and Programme evaluation

7.2.2.1 Psychological and emotional behaviour hampering inpatient substance sers' care and treatment

From the statements of the 16 participant nurses at the three substance use treatment centres, it was evident that the nurses were generally confronted with a range of the inpatient's psychological and emotional problems (e.g. anger and violent behaviour) which hampered the treatment of these very inpatients. In conjunction with their redisposing factors for drug use, these problems generally rendered the inpatients unprepared and unresponsive to treatment. In such circumstances, the study concludes that nurses' multi-skilling and multi-professional involvement at the treatment centres is

required to improve the quality of treatment and care provided to inpatients (Geyer & Lombard, 2014: 330; Swanepoel et al., 2015).

7.2.2.2 Attitude and support of inpatients' family and relatives

The findings indicated that there was more parental involvement than rejection by relatives of the substance use inpatients. There was a further indication from the inpatients' records that there was more of a likelihood to find a substance abusing relative (i.e. uncle, confirmed by 82% (n=201) of inpatients) than a family member in the same house (confirmed only by 9% (n=23) of the inpatients). In conjunction with the inpatients'' predisposing substance use factors and further confirmation by nurses, it is imperative that adequate support be provided to families of substance use inpatients to reverse relapse trends (NIDA, 2018: 24; Ramlagan et al., 2010). This conclusion is endorsed also by the fact that the majority of substance use inpatients (70%, n=172) lived with their parents.

7.2.2.3 Emotional, coping and support experienced by nurses

Nurses' emotional experiences generally emanate from their stressful work environment (Thorkildsen & Eriksson, 2015). As such, the nature of their challenges necessitates enduring coping mechanisms and support systems to be provided by the healthcare system itself, families of the patients (as representative of the public). It is clear that in the environment of substance use treatment centres, reciprocated support is needed by all parties, albeit for different reasons and purposes. To the extent that the element of spirituality was observed from both the inpatients and nurses, it then clearly indicates that the relief medication taken by nurses to cope with the stressful environment is not the only panacea. Similarly, the medical treatment and psychological treatment options provided to patients necessitates the involvement of non-physical approaches, those spiritual domains viewed as unscientific in the academic community. Nonetheless, it is on the basis of the apparent spirituality of the nurses and inpatients that the study draws the conclusion of the need for spiritual or faith-based institutions to also enhance inpatients' recovery process. 7.2.2.4 Unclear procedures, approaches and resource shortages

For a profession such as nursing, particularly for treatment of substance use maladies, the lack of effective inter-professional and inter-disciplinary involvement in substance abuse treatment is clearly an indictment on the health care facilities and the system as a

whole. Considering that infrastructural resource shortages were cited as a major problem by nurses, unclear procedures could compound the problem of quality treatment programmes for substance use. In the context of this study, unclear procedures constitute one of the core reasons for the researcher's undertaking the current study for purposes of exploring and developing a framework of guiding principles that are prominent in Chapter Six. Nonetheless, the nurses could be credited for not only referring to the problem of unclear procedures, but also proposing a repertoire of cogent and holistic interventions, such as multi-disciplinary approaches, skills development for nurses, and psycho education for the substance use inpatients. However, these well-intended propositions could become futile in the main, provided that infrastructural challenges are addressed, particularly in the public healthcare sector (Carelse, 2018; Cordon, 2013).

7.2.2.4 Suggested inpatient care and treatment programmes

Consonant with the third objective of this study, the nurses' demand for improvements in the existing treatment programmes is an apt demonstration of their love for their work and commitment to improving the quality of thereof. In many public and private organisational settings, productivity and low morale results from lack of commitment (Dossey & Keegan, 2016; Marf et al., 2016). Most importantly, the nurses' commitment extended even further by their suggestions for programme evaluation as a means to determine the efficacy or otherwise of the existing and proposed innovative substance use treatment programmes (Makhubela-Nkondo, 2013; Moore et al., 2014). In the previous chapter (Chapter Six), programme evaluation was included among the range of core requirements for driving a substance use training programme for nurses.

It is the researcher's well-considered view that all the evidence-based and thematically derived main conclusions are both contiguous symbiotically linked with the study's achievement of its stated objectives. To that extent, there was no conflict between the objectives and research questions on the one hand, as well as the findings and the recommendations on the other. The existence of any conflictual situation in this regard, would have implied that has not achieved an important function of contributing to the body of knowledge on substance use treatment approaches (Mellish, 2012; Miles et al., 2014); especially in a South African substance use environment where the sale and distribution of alcohol, for instance, has had to be suspended "with immediate effect" by the President of the country during Level 3 of the COVID-19 risk-adjusted strategy.

7.3 STUDY LIMITATIONS

The limitations referred to in this study do not necessarily constitute any substantive weakness for this important investigation. The study was conducted at only three Gauteng Province public substance use treatment centres, which could pose a generalisability challenge to other similar institutions in other parts of Gauteng Province; as well as private and rural substance use treatment centres in other parts of the country that are not funded by the Gauteng Province Department of Social Development in Gauteng and other inpatient treatment centres in other provinces.

Also, the study was conducted with only a single category of healthcare service providers, and excluded other relevant healthcare stakeholders such as doctors, social workers and psychiatrists. Also excluded were family members of inpatients, spiritual leaders, NGOs. These, and other stakeholders in the private and public sectors, are very important components of rendering effective treatment programmes of substance use (George, 2011; Ulrich & Kear, 2014). Should the research have been conducted throughout the country (which is improbable, considering the logistical and financial considerations), there would, possibly, have been significant impact on the development of addiction nursing specialisation in South African nursing education.

7.4 RECOMMENDATIONS

In this study, the recommendations essentially accrue from the extent of the objectives' achievement as a factor of the evidence from which the validity and reliability of the study and its processes could be established (Babbie, 2010; Morse & Field, 2013). It is worth noting that all the below-mentioned recommendations are intended for the improvement of both the treatment of substance use patients and the concomitant treatment programmes.

7.4.1 Recommendations for Substance use Inpatients

The most significant aspect of the recommendations listed below is that they encompass even predisposing substance use factors ***prior*** to the onset of the substance addiction problem. In that regard, the latter conforms to the ages-old adage: *Prevention is better than cure:*

- Developing facilities for rehabilitation programmes, and halfway houses that offer all relevant developmental skills as part of relapse prevention;
- Development of substance use resource centres to address determinants of substance abuse, as part of prevention and treatment;
- Promotion of schools that are safe from substance use, including the inclusion of a series of lessons to leaners from early childhood to secondary school level;
- Increase inter-departmental cooperation in government, in order to manage all causes of substance addiction from prevention to treatment level;
- Increase substance users and their family's timely access to treatment services collaborate and cooperate to ensure that rehabilitation is designed and implemented in a coherent and efficient manner;
- Efforts should be made for education, sports and recreation prevention measures, community-based intervention, health and job creation opportunities for teenagers during school holidays to involve different stakeholders and other community organisations to ensure a multiple stakeholder approach to substance use; and
- Establish and capacitate the Ombudsperson focusing specifically on substance use.

7.4.2 Recommendations for Nurses and Substance use Treatment Programmes

It is worth noting that, due to their enormity, the recommendations pertaining to the framework of health care guiding principles appear in Chapter Six. Additionally, the programme-related recommendations are viewed eclectically as enhancing the research objectives (particularly the third objective), as well as the contribution of the study in respect of development of quality substance use treatment programmes. In the view of the study, the following two recommendations are sufficiently inclusive of the requisite elements or components for implementing an effective substance use treatment programme:

- The developed guidelines should be part of the Continuing Professional Development (CPD) of nurses and multidisciplinary teams to enhance their skills and improve the knowledge and skills of different categories to manage, care and treat substance addiction better;
- The requisite programmatic components or elements for an effective and implementable substance use training, nursing care and treatment provision programme should clearly define processes; scope; purposes of the guidelines and

principles; minimum participation and implementation requirements; structure; facilitation approach; and evaluation mechanisms based on the inclusive bio-psychosocial-spiritual ***approach*** or model; and

- The evaluation approach and mechanism should entail should necessarily take the following aspects into serious consideration: socio-demographic intake of inpatients; screening and substance use history; the psychological, social and spiritual domains of inpatients; treatment planning and implementation; as well as progress reports and discharge plans.

7.4.3 Recommendations for Further Study/ Future Research

Substance addiction is a fast-growing global public health problem (Ramlagan et al., 2010; UNODC, 2015). In this regard, the study recommends further research involving all critical internal and external stakeholders to enhance the continuous evaluation of existing substance abuse treatment programmes to enhance their quality, fitness-for-purpose and appropriateness to local conditions.

7.5 CONCLUDING REMARKS

The study aimed at developing a framework of nursing care guiding principles for inpatient substance users. The findings reveal that the needs of inpatient substance users are complex. Care and treatment of substance users is comprehensive, and it is directed at helping the totality of the individual. The findings have disturbingly revealed that the totality of care and treatment of inpatient substance users is not satisfactory. Those entrusted with their daily care are not adequately equipped with knowledge of substance use and addiction, and there is a lack of support when it comes to complementing the treatment programme with appropriately trained and skilled multidisciplinary team members.

The study is considered relevant and significant, to the extent that it highlights the need to develop and improve the infrastructural, financial and human resource environment of public health care institutions in general and substance use treatment centres. The use of substances by the youth, inadvertently portrays the country's healthcare system as fragmented and poorly managed.

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ANNEXURE A: CONSENT TO PARTICIPATE IN THE STUDY

CONSENT TO PARTICIPATE IN THIS STUDY

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the voice with the use of voice recording.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname…… (please print)

Participant Signature……..Date……

Researcher's Name Grace Tshilidzi Ravhura.

Researcher's Signature……..Date…….....

ANNEXURE B: PARTICIPANTS' CONFIDENTIALITY BINDING FORM

TITLE OF RESEARCH: Inpatient substance user's care and treatment: innovative guiding principles for nurses.

RESEARCHER: GRACE TSHILIDZI RAVHURA

As a member of this research team I understand that I may have access to confidential information about study sites and participants. By signing this statement, I am indicating my understanding of my responsibilities to maintain confidentiality and agree to the following:

- I understand that names and any other identifying information about study sites and participants are completely confidential.

- I agree not to divulge, publish, or otherwise make known to unauthorized persons or to the public any information obtained during this research project that could identify the persons who participated in the study.

- I understand that all information about study sites or participants obtained or accessed by me during my participation is confidential. I agree not to divulge or otherwise make known to unauthorized persons any of this information.

- I agree to notify the researcher immediately should I become aware of an actual breach of confidentiality or a situation which could potentially result in a breach, whether this be on my part or on the part of another person.

_____ _____ _____

Signature Date Printed name

_____ _____ _____

Signature of the researcher Date Printed name

ANNEXURE C: PARTICIPANT INFORMATION SHEET

PARTICIPANT INFORMATION SHEET

Date:

TITTLE OF THE RESEARCH PROJECT:

INPATIENT SUBSTANCE USER'S CARE AND TREATMENT: INNOVATIVE GUIDING PRINCIPLES FOR NURSES.

PRINCIPAL INVESTIGATOR:	**SUPERVISOR:**
Grace Tshilidzi Ravhura	**PROF MAKHUBELA-NKONDO**
116 STEYN STREET	**THEO VAN WIJK BUILDING**
EDUAN PARK	**PO BOX 329**
POLOKWANE	**UNISA**
0699	**0003**
E-mail: tgravhura@gmail.com	**E-mail: makhuon@unisa.ac.za**
Contact number: 0795296607	**Contact number: 012 4296588**

Dear Prospective Participant

My name is Grace Tshilidzi Ravhura and I am currently registered for PHD nursing at the University of South Africa. I am conducting a study titled: **Inpatient substance user's care and treatment: innovative guiding principles for nurses.**

My supervisor is Prof O.N. Makhubela-Nkondo (Department of Health Studies), University of South Africa. We have funding from University of South Africa postgraduate funding. You are being invited to take part this research study. Please take some time to read the information presented here, which will explain the details of the research. Feel free to ask me or my supervisor any questions about any part of this research that you do not fully understand what this research entails and how you could be involved. It is important that you are entirely satisfied that you clearly understand. Also, your participation is entirely voluntary and you are free to decline to participate.

WHAT IS THE PURPOSE OF THE STUDY?

This study is expected to collect important information that would help in the development of nursing care guiding principles for the inpatient substance users in South Africa.

WHY HAVE YOU BEEN INVITED TO PARTICIPATE?

You have been purposively selected, from the list of nurses in your treatment centre and you have been invited to be part of focus group and participate in the study because of your experience of being a nurse who has been working at the inpatient treatment centre for more than one year. Focus group will be constituted by 5-10 nurses. Your participation in the study will contribute to the understanding of nurse's experiences of providing nursing care to inpatient substance users.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

Your participation in the research of about one to two hours focus group interview will entail group interview. If you agree to participate you will be requested to participate in a group interview which will be facilitated by the researcher. You will be expected to actively participate under the guidance of the facilitator and your answers will be heard by other group members.

CAN YOU WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participation is voluntary and that there is no penalty for non-participation. Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

I expect that you will benefit from attending the focus group interview on a professional and personal level. If you agree to participate you will not only contribute to the understanding of nurses' experiences when providing care to inpatient substance users, but you may gain pragmatic skills related to the provision of nursing care to inpatient substance users.

On the broader picture, it is envisaged that the findings of the study will lead to the development of guiding principles that will promote the health status of inpatient people who are using substance.

The development of guiding principles will assist nurses who are providing care to substance users in provide quality nursing care.

Furthermore, policy makers within the Department of Social Development will be guided by the guiding principles developed in providing support to nurses caring for inpatient people using substances.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

No long-term risks are anticipated because of your participation in the research. There could be a risk of recall psychological trauma by nurses who are providing care to people who are using substance during interview. The risk will be mitigated, by referral to the psychologist of your institution in case nurses become traumatized during focus group interview, they will be referred for psychotherapy.

The study will require that you invest some of your valuable time in the research focus group interview. The session will be scheduled at a time that seems to be suitable to most participants.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

I will treat all information resulting from your participation as confidential. Your identity, as well as the identity of your treatment centre, will not be recorded in any research or research report. You have the right to insist that your name will not be recorder anywhere and that no one, apart from the researcher and identified members of the research team, will know about your involvement in this research or your name will not be recorded anywhere and no one will be able to connect you to the answers you provided. Your answers will be given a code number, or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings.

Focus group is an interview of small group of subjects interviewed together, prompting a discussion. While I will make every effort to ensure that you will not be connected to the information that you share during the focus group interview, I cannot guarantee that other participants will treat information confidentially due to the group nature of the interview. I shall, however, encourage all participants to do so. For this reason, I advise you not to disclose personally sensitive information during the group discussions.

Records relevant to the study will be available only to people engaged in the oversight of the study (members of the relevant Research Ethics Committees) and those engaged in the execution of specific research activities (transcription and coding), unless you give permission for other people to see the records. If transcription services or an external coder is used, I shall obtain confidentiality agreements from such individuals to protect your privacy.

I will store electronic copies of your answers for a minimum period of five years on a password protected computer.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Hard copies of your answers will be stored by the researcher for a period of five years in a locked cupboard at my home 116 Steyn street Polokwane for future research for academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

You will not be paid to take part in the study. There will be no costs involved for you if you do take part. You will be provided with lunch during the interview as the focus group is intended to take place during lunch time.

HAS THE STUDY RECEIVED ETHICS APPROVAL?

This study has received written approval from the Research Ethics Review Committee of the University of South Africa. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you wish to be informed of the final research findings, please contact Grace Tshilidzi Ravhura on 0795296608 or email: tgravhura@gmail.com. The findings are accessible UNISA repository. Departmental and/or mobile phone numbers are acceptable.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact the researcher, contact details provided above.

Should you have concerns about the way in which the research has been conducted, you may contact the Supervisor contact details here. 012 4296588

Makhuon@unisa.ac.za.

Thank you for taking time to read this information sheet and for participating in this study. Thank you.

Signature:

Name: GRACE TSHILIDZI RAVHURA

ANNEXURE D: ADMISSION RECORDS INFORMATION

No	Socio-demographic variable	Responses and code	VALUES
01	Age group years	Under 10……...1 10-15……2 16-20……....3 21-30…….....4 31-40……5 40+ ……..…6	
02	Gender	Male……..…1 Female…….…2	
03	Marital status	Married……..…1 Single……...2 Divorced…….3 Widowed……4 Separated…..……..5 Co-habiting……6	
04	Has children	Yes ……1 No…….....2 Not known…….3	
05	Race	Black……1 Coloured……..2 White ……3 Indian……4	
06	Educational status	No formal education……..…1 Primary education (grade-7)…….....2 Secondary education (grade 8-12)……..….3 Post-secondary education…..….4 Not known……5	
07	Employment status	Unemployed ……..…...1 Self-employed……..…2 Employed by government.…….3 Employed by private companies...4 Volunteering…….5 Not known……6	
08	Occupation	None ……1 Professional …….2 Non-professional……..…….3	
09	Religion	Christianity ……..1 None Christianity……2 None ……..3	
	History help seeking		
10	How long has the service user been using substances	Less than one year…....1 1-3 years… ……....2 4-6 years……....3 7-10 years……...4 10+……..…… …5 Not stated……...6	
11	Have the service user ever been admitted to a treatment centre.	Yes…….…….…..…1 No ……....2 Not known……3	
12	If ever admitted to what kind of treatment centre	Government……..…....1 Private…….....2 Not known……...3	

No	Socio-demographic variable	Responses and code	VALUES
		Not applicable……..99	
13	How many times	One……1 Two …….2 Three +……..…3 Not known……..4 Not applicable……99	
14	Type of current admission	Voluntary……..……1 Involuntary……..…..2 Statutory…….3	
	Substance used		
15	Reason for starting substance use	Not known……..……...1 Unemployment or loss of employment…….…….2 Bereavement..…….……..3 Peer pressure……..……..4 Social problems……5 After life trauma……6 Multiple reasons including above…….12	
16	Number of substance currently using.	One……..…1 Two ……..……2. Three ……..….3 Four……..…….4 Five +…..……..…5	
17	Current substance (if more than one indicate all)		
	Dagga/ cannabis	Yes ……1 No……2	
	Alcohol	Yes ……1 No……2	
	Heroin	Yes ……1 No……2	
	Rock	Yes ……1 No……2	
	Nyaope	Yes ……1 No……2	
	Crystal math	Yes ……1 No……..…2	
	KAT	Yes……..1 No……2	
	Rock cocaine	Yes……..1 No……2	
	Mandrax	Yes……..1 No……2	
	Glue	Yes……..1 No……2	
	Did the person smoke cigarette	Yes……...1 No ……2	
18	Route of administration	Injecting……..1 Smoking……..……2 Injecting/snorting,Smoking/ sniffing……..…4	

No	Socio-demographic variable	Responses and code	VALUES
19	How many bags of substance per day	1-3……..……..1 4-6 ……..……2 7-10 ……..……..3 11-15……..……4 16+……..……5 Depend on having money……....6 Not known……7	
20	The last time of usage before the current admission	On the day of admission……..…1 1 day before admission……...2 Within a week of admission……..3 More than a week before admission……..4 Not known……...5	
21	Any family members using substance	Yes……..…1 No ……..……..2 Not known……3	
22	If any family member using substance the relationship.	Cousin……..…1 Lover/partner……..……2 Siblings…….……3 One or both parents…….4 Uncle ……12 Not applicable……99	
23	What type of home did patient stay in	Own house……..…1 Parents house……2 Renting……..…3 Streets……..…4 Relatives ……5 Friends……....7 Not known ……..8 Partner/lover……9	
	Medical/Physical symptoms		
24	Any medical history	Yes ……1 No……...2	
25	Type of medical history	Physiological……..……..1 Mental ……..……2 Not applicable……..…..99	
26	Medical treatment	Yes …….……..1 No……2 Not applicable…….……3	
27	Ever been diagnosed with mental illness, on treatment	Yes ……...1 No ……..……2 Not applicable……..99	
28	Dental problems	Yes ……1 No……..…2	
29	Any suicidal ideation/thought	Yes……..……..…..1 No ……...……2	
	DETOXIFICATION PERIOD		
30	Did the service user under gone detox	Yes……..……...1 No ……..…..2	

No	Socio-demographic variable	Responses and code	VALUES
31	Did the service user completed the detox	yes…….....1 No……...……2 Not applicable……..99	
32	Blood pressure on admission	Normal……1 Not normal……..…2 Not recorded……3	
33	Last blood pressure	Normal…….……...1 Not normal…….……..2 Not recorded……3	
34	Blood sugar on admission	Normal……..1 Not normal……2 Not recorded……3	
35	Blood sugar on discharge	Normal……..1 Not normal……2 Not recorded……3	
	Treatment period		
36	Times with the psychiatrist	None …….……..1 One…….…….2 Two ……..……3 Three ……..……4 Four +……...5	
37	Times with the psychologist	None ……..1 One…….……2 Two ……3 Three …….....4 Four +……..5	

ANNEXURE E: DATA CODING BOOK

Q. No	Questions	Responses and code	CODE
	Socio-demographic data		
01	Age group years	Under 10……..…1 10-15…..……..2 16-20……....3 21-30……....4 31-40……..……..….5 40+ ……..…….6	AGE
02	Gender	Male……..….1 Female…….…2	GENDER
03	Marital status	Married……..……1 Single……..…..2 Divorced……..3 Widowed……..….4 Separated…….....5 Co-habiting……...6	MARRY
04	Has children	Yes ……1 No…….....2 Not known……..…3	CHILD
05	Race	Black…….…1 Coloured……..….2 White ……...3 Indian…….…..4	RACE
06	Educational status	No formal education……..…1 Primary education (grade-7)…….....2 Secondary education (grade 8-12)……..….3 Post-secondary education…..….4 Not known……5	EDUC
07	Employment status	Unemployed ……...1 Self-employed…….2 Employed by government…….3 Employed by private companies..4 Volunteering……..5 Not known……6	EMPLOY
08	Occupation	None ……1 Professional …….2 Non-professional…….…….3	OCCUP
09	Religion	Christianity ……...1 None Christianity……..….2 None ……3	RELIG
	History help seeking		
10	How long has the service user been using substances:	Less than one year……....1 1-3 years… ……....2 4-6 years……...3 7-10 years……....4 10+……..……5 Not stated…….6	LOU
11	Have the service user ever been admitted to a treatment centre.	Yes…….……1 No ……....2 Not known……..….3	TREATA
12	If ever admitted to what	Government……..…....1	TREATK

	kind of treatment centre	Private……...2 Not known……..…3 Not applicable……..…99	
13	How many times	One……..1 Two ……...…….2 Three +……...…3 Not known……..4 Not applicable……..……99	TREATT
14	Type of current admission	Voluntary……..……...….1 Involuntary……..…….....2 Statutory……...3	ADMITC
	Substance used		
15	Reason for starting substance use	Not known……..……..….1 Unemployment or loss of employment……..……2 Bereavement..…….…….……..3 Peer pressure…….……..4 Social problems……5 After life trauma……6 Multiple reasons including above…….12	RSABUSE
16	Number of substances currently using.	One……..……1 Two ……..…2 Three ……..….3 Four……..……4 Five +…..……..….5	NOSUBS
17	Current substance (if more than one indicates all)		
	Dagga/ cannabis	Yes ……1 No……2	CANNAB
	Alcohol	Yes ……1 No……2	ALCOHL
	Heroin	Yes ……1 No……2	HEROIN
	Rock	Yes ……1 No……2	ROCK
	Nyaope	Yes ……1 No……2	NYAOPE
	Crystal math	Yes ……1 No……..…2	CRYMATH
	KAT	Yes……1 No……2	KAT
	Rock cocaine	Yes……..1 No……2	ROKCOC
	Mandrax	Yes……1 No……2	MNDRX
	Glue	Yes……1 No……2	GLUE
	Did the person smoke cigarette	Yes……...1 No ……2	SMKCIG
18	Route of administration	Injecting……..1 Smoking……..…2 Injecting/snorting, Smoking/ sniffing……..4	MODE

19	How many bags of substance per day	1-3……..……..1 4-6 ……2 7-10 ……..……..3 11-15……..……4 16+……..……5 Depend on having money……..……..6 Not known……7	BAGDAY
20	The last time of usage before the current admission	On the day of admission……..…1 1 day before admission……...2 Within a week of admission…….3 More than a week before admission……...4 Not known……..5	LSTUSE
21	Any family members using substance	Yes……..…1 No ……..2 Not known……3	FAMSUB
22	If any family member using substance the relationship.	Cousin……..…1 Lover/partner……..2 Siblings…….….3 One or both parents……4 Uncle ……12 Not applicable.……..…99	FAMREL
23	What type of home did patient stay in	Own house……..…1 Parents house……2 Renting……..….3 Streets……..…4 Relatives ……5 Friends……...7 Not known ……..8 Partner/lover……9	HOMTYPE
	Medical/Physical symptoms		
24	Any medical history	Yes ……1 No……....2	MEDHIST
25	Type of medical history	Physiological……....1 Mental ……..…..2 Not applicable……..99	MEDTYPE
26	Medical treatment	Yes ……1 No……2 Not applicable……3	MEDTRT
27	Ever been diagnosed with mental illness, on treatment	Yes ……..1 No …….……...2 Not applicable……...99	MENTTRT
28	Dental problems	Yes ……..1 No…….…2	DENTPR
29	Any suicidal ideation/thought	Yes……..……..1 No …….……2	SUICIDE
	DETOXIFICATION PERIOD		
30	Did the service user undergone detox	Yes…….….1 No ……2	DETOX
31	Did the service user completed the detox	yes……....1 No……...….2 Not applicable…….…..99	DTXCOM
32	Blood pressure on	Normal……1	BLDPA

	admission	Not normal……..…2 Not recorded……3	
33	Last blood pressure	Normal……...1 Not normal…….……2 Not recorded……..3	BLDPD
34	Blood sugar on admission	Normal……1 Not normal……..2 Not recorded……3	BLODSA
35	Blood sugar on discharge	Normal……1 Not normal……..2 Not recorded……..3	BLODSD
	Treatment period		
36	Times with the psychiatrist	None …….…….1 One……..…2 Two …….…...3 Three ……..…..4 Four +……..5	PSYCHI
37	Times with the psychologist	None ……1 One……2 Two ……..3 Three ……..……...4 Four +..…….……5	PSYCHO

ANNEXURE F: CONVERGENT COMPARISON AND OF QUANTITATIVE AND QUALITATIVE RESULTS

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
Sociodemographic		
Age	**Age groups of participants:** 21-30 years (60%, n=146), **Period of using substances:** (14%,=33) for 1-3 years, (30%, n=74) for 7-10 years, (28%, n=69) for 4-6 years, (21%, n=52) for 10 year plus, **Reason for starting substances:** (19. 7, n=48) = peer pressure	***Peer pressure*** *"…especially those who are young, because we do admit those who were born in 1998, teenagers or still teenagers"* *"…Peer pressure is the problem and some will be like no I did it because I saw someone doing it my friends were using substances and then I said to myself , let me try, that let me try lead him to become addicted "*
Gender	**Gender** Male=(80%, n=196) Female=(20%, n=48)	***Fear*** *we end up locking the door because we are females and the security they are just monitoring them but you can feel that no man something is not right,* **Psycho-education** *"…we test for pregnancies some you find when they are using nyaope but they do not see their mensuration, then when then come here a person will tell you that since I saw my periods six month back and when you ask her if she is pregnant or not she does not know, we check if they are pregnant or not and then they can be given antibiotics for STIs"*
Employment	**Employment status** (95%, n=232) unemployed, (2%, n=5) self-employed (2%, n=5) employed by private companies, (0.4%, n=1) doing volunteering work and (0.4%, n=1) not known. **Reasons for starting substances** (16.4%, n-40) =Unemployment, (16.4%, n-40)= loss of job	**Low socio-economic status** *"I realised something that most of them, it is through poverty that they abuse substances,* *"you will find the Is one referred by work.."* *here is no food, there is nothing at home.* **Homelessness** *"Others they are from street…"*
Religion	**Religion** (55.7%,n=136) Christians, (7%, n=17) other religions which are non-Christianity (37.3%, n=91no religious affiliation	**Pastor** *"on weekend they are very nice they behave they do not have problems, they are calm and collected and on Sunday there is a pastor coming here he gives a sermon for two hours and they like to go to church so much*" **SPIRITUAL PROGRAMME** *"The right to practice religion of their choice is respected, but religious practices that are found to be harmful to the service users' wellbeing are not promoted".* *"Time is allocated daily for service users to attend morning prayers"*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
Physiological		
Detoxification issues	**Number of those who did detoxification:** (92.2%, n=226)= undergone detoxification **Period of using substances:** (30%, n=74)= 7-10 years, (28%, n=69) = for 4-6 years, (21%, n=52)=10 year plus, (14%,=33) =1-3 years, **Types of substances used:** Heroin= (88.6% n= 217), cannabis= (83.6%, n=204), Tobacco= (7.4, n=18), Rock cocaine = (5.3%, n=13), kat= (2.9, n=7) and nyaope = (5.3%, n=13) **Number of bags used per day:** (47.1%, n=115) =4-6. (18%, n=44)=7-8 bags, (17.28%, n=42) =1-3 bags, (8.2%, n=20), 11-15 bags, (6.1%, n=15) used 16+ (1.6%, n=4) dependent on the availability of money **Number of substances used:** (73.4%, n=179) = Two, (20.1%, n=49)-0ne, (4.9%, n=12= three, (1.6%, n=4) =Four. **Route of administration** (66%, n=161) = smoked, (23.8%, n=58) =injected, and (9.8%, n=24) more than one route **Number of those who completed** (59.62%, n=144) complete detoxification,	**Doctor** *"We have a general doctor"* **Withdrawal symptoms management** *"It is a standing order actually, the metoclopramide we do not have to wait, it is a standing order for them and their withdrawal symptoms" "If he comes in the morning, and then we give him methadone, he will go and sleep, maybe after 2 to 3 hours he will come back, complaining of the very same painful joints, fatigue, those hot flashes, then we give them the IMIs, voltaren, Metoclopramide, buscopan,* **Withdrawal symptoms management** *"The dose are different, those who are smoking they are not very difficult and they are not hectic, but those who are spiking (injecting) they are very difficult, that is why their dose is higher to prevent those severe withdrawals, and it works for them, you give them methadone 5mls once a day* **Medical treatment /Detox issues** *And then the enrolled nurses give them the vitamin tablets. We give vitamin a, vitamin b, vitamin c we also give thiamine, ascorbic acid. Symptomatically we use buscopen, brufen, panado, we have medication that helps them with pain,"*
Medical conditions	**Presence of medical history:** (27%, N=65) had medical history (24.2%, n=59) had physiological medical conditions. On admission blood pressure, (71%, n=172) normal, (7%, n=3) abnormal (22%, =65) blood pressure not recorded.	**Nurses** *"…because when they come in here we are doing the nursing part…" "…to make sure that the social worker is admitting the right person, because at times they may, there are dual diagnoses, which we are not allowed to admit"* **MEDICAL PROGRAMME** *"All service users are assessed medically upon admission"* **Referral for treatment of other conditions** *"Like those who are hypertensive we do follow them and make it a point that we send them to the clinic…"*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
		Medical treatment /Detox issues *And then the enrolled nurses give them the vitamin tablets. We give vitamin a, vitamin b, vitamin c we also give thiamine, ascorbic acid. Symptomatically we use buscopen, brufen, panado, we have medication that helps them with pain,"* **Management of chronic conditions** *"If they come with any chronic treatment, they came with their clinic chronic cards, we do inform them to came with their chronic medication cards so that we can take them to the clinics and we are able to give them…"* *"No service user is allowed to be in possession of any medication if he was on treatment prior admission, it shall be handed over to medical staff to administer it".* **Unscreened patients** *"The right procedure they should start from their social worker and the psychosocial report is compiled even if when we are approving we know the kind of person whom we are expecting like he is a known TB patient, or he is a difficult or whatever, but those who are coming buy a bus they are risk to our health, so you are not free when nursing them because you're in the sickbay and you can never control them, those once when it comes to morals they are worse…"*
Mental condition	**Mental health:** (3%, n=6) suffered from mental conditions (3%, N=6) are receiving mental health treatment. (17%, N=42) had suicidal ideation **Period of using substances:** (30%, n=74)= 7-10 years, (28%, n=69) = 4-6 years, (21%, n=52)=10 year plus, (14%,=33) =1-3 years **Substances used:** Heroin= (88.6% n= 217)), cannabis=(83.6%, n=204), Tobacco= (7.4, n=18), Rock cocaine =(5.3%, n=13), kat= (2.9, n=7) nyaope =(5.3%, n=13) **Psychiatric consultation:** (0.4%, n=1) =once, (0.4, n=1) = three times, (92.2%, n=240) did not consult the psychiatrist **Number of bags used per day:**	**FEAR** *"Sometimes you become so nervous because at some other point we are not aware if they did check the mental status or not, because others they look like they are mental ill"* **Nurses** *"…because when they come in here we are doing the nursing part…" ""…to make sure that the social worker is admitting the right person, because at times they may, there are dual diagnoses, which we are not allowed to admit"* **Co-occurring of disease** *"…after 10 days, some of them do present with hallucinations condition so depending on the severity we call the parents to take them to take them to Local hospital"* **Referral for treatment of other conditions** *"Even in between the detoxification should we realise that there is a mental condition which is not suitable for our clinic, we take them to the hospital and then they are admitted in the psychiatric wards, and they are treated there, and only when they are stable with the medication, they come back to us"* **Management of chronic conditions** *"If they come with any chronic treatment, they came*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
	(47.1%, n=115) =4-6. (18%, n=44)=7-8 bags, (17.28%, n=42)=1-3 bags, (8.2%, n=20),11-15 bags, (6.1%, n=15) used 16+ (1.6%, n=4) dependent on the availability of money. **Number of substances used:** (73.4%, n=179) two types (20,1%, n=49) one substance , (4.9%, n=12) four substances and, (1.6%, n=4) use four substances.	*with their clinic chronic cards, we do inform them to came with their chronic medication cards so that we can take them to the clinics and we are able to give them…"* *"No service user is allowed to be in possession of any medication if he was on treatment prior admission, it shall be handed over to medical staff to administer it".* **MENTAL HEALTH CARE** *-Mental state examination* *-Preliminary psychiatric diagnosis or revising current psychiatric diagnosis* *-Psychiatric services and intervention such as arranging consultations with psychiatrist and changing of treatment plans* *-Individual psychiatric interviews as to determine the effects of psychiatric medication* *-Referral to hospital as need arises"*
Route of administration	**Route of administration:** (66%, n=161) = smoked, (23.8%, n=58) =injected, and (9.8%, n=24) used more than one route of administration.	**Smoking** *"…nyaope is use in different ways the same nyaope you can smoke it, the same nyaope you can inject it…" "…some of them smoke, some of them they sniff and they end up having epistasis, quite a lot those who sniff"* **Injecting** "*They are so smart, what they do they use a syringe 2mil syringe, is either a 2ml or a 5 mil, and they use a needle. Because nyaope is power, they use water and they dissolve nyaope, for them to put the nyaope inside the syringe and make sure there is no air and particles, they use that top part of cigarette, and that is how they prevent anything to go inside the syringe. From there that is when they go for the vein they look for the vein, the simplest vein that they find is the elbow one. That is where you find scars"* **Injecting** *"…those who spikes they have problem of HIV which comes with injecting and also they are sharing needles"*
Substance poly-use	**Number of substances used** (73.4%, n=179) = used two substances, (20.1%, n=49)=one, (4.9%, n=12)= three (1.6%, n=4)=four substances	**Poly substance use** *"heroin, nyaope and dagga and there are those with alcohol and methamphetamine and then cat , rock as well, rock, cocaine heroin and methamphetamine, even diazepam, methadone…"* *"They mix heroin with dagga and they then say this is nyaope but even the heroin itself they call it nyaope and some of them they are pricking themselves and you see the veins are gone" "…the kind of the nyaope that they are using others they talk about adding ratex , vim, some they use ratex mix together with crashed ARV and they smoke, they use it in different ways, even the place is*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
		different even here there are different types of nyaope, but the common one is ratex mix with ARVs, an sometimes is ratex with vim..." "Nyaope is done with swimming pool powder, is done with ratex, is done with jik, there is also vinegar inside". **Mixing prescribed treatment with illicit substances** *"Some of them bring some medication and they say this one is the medication I take at home, you find that they mix the very same medication with something and smoke it"*
Psychological/ behavioural issues		
Motivation to stop substance abuse	**Readmission** (16 %, n=40) have been admitted before and received addiction treatment before. **Type of admission:** (97%= 236)=voluntarily admitted. **Number of those who completed and these who did not complete detoxification.** (59.62%, n=144) did complete detoxification, (33.61%, n=82) did not complete detoxification	**Reasons for coming to the institution** *"you will find there is one that was brought here by court, you will find there is one that was brought here referred by school, you will find the Is one referred by work, you will find there is one that was brought here or he was forced to come here, you will find one who is like I am done I do not want drugs anymore in my life and they come here, so that is the kind of a situation that we have and but all five points that I have pointed out, all five reasons they all behave differently, you will find that one who do not want to be here would be saying, so why, I just came and I am wasting my time here" "These people are not the same. Others you would think they are using substance intentionally, because when you ask them why are they coming for readmission? They would say sister that time I was not ready to come, my girlfriend or my mother said I should come so that I can get a car or house"* **Admission** *"We only take them twice, admission first time, second time is the last one we do not take them back again. They know, they know they know, that it is your last chance if you came here for the second time you won't be coming and they only came three months after discharge, depending on waiting list"* **Non-adherence** *"December time people sign RHT (Refusal of Hospital treatment), because they will be thinking and asking themselves that, why should I be here when Christmas is, they sign RHT, we are struggling…"* **Lack of motivation** *"…You do not have to be harsh towards them because they become negative they will be signing out, saying that no it is useless they are telling me what to do, they are instructing me to do this and that".* *"Number one, we have different issues number two some of them they are not serious when they come here, hence we have RHT (Refusal of Hospital*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
		treatment), some of them or most of them they fidget with security so they leave, they jump and they leave right" **Sneaking drugs** *"He came in with a food container with pap and meet, but inside the food was drugs"* *"Some they put in the seams of clothing, you have to check the seems even the hair, if the hair is big they put it inside it you will not see it"* **Trigger and cravings** *"The objective of the session is to learn to identify different triggers in order to know how to respond to them. The participant will be able to differentiate between a trigger, thought, craving and use of substances* *During recovery there are often certain feelings or emotions that trigger the brain to think about using substances.* *Indicate which of the following might trigger (used to trigger) thoughts of using".* **After discharge** *"According to me sometimes I feel that when they go back home, aftercare is not enough. If I do have money I can organise something like coming back to attended after care or something like training to keep them busy".*
Reasons for substance use	**Reasons for substance use** (19. 7, n=48) = peer pressure, (6.6%, n= 16) =social reasons, (4.9%, n=12) =bereavement, (4.1%, n=10) =trauma in their lives, (0.8%, n=2) =multiple reasons, (16.4%, n-40) =Unemployment, loss of job= (16.4%, n-40).	**Peer pressure** *"…especially those who are young…," "… teenagers or still teenagers. Peer pressure is the problem and some will be like no I did it because I saw someone doing it my friends were using substances and then I said to myself , let me try, that let me try lead him to become addicted"* ***Multidisciplinary support*** *"The other area is psychologist, our patient have experienced a lot of rejection, trauma and are depressed"* **Disrespect** *"The challenges of working with them, at first is they do not have any respect and they just talk anyhow"* **Exposure to substances** *"Others they will tell you that their family members, like a father, he is using the substance"* **Loss of family members** *"They come for admission with different reasons, others they will tell you, is because I lost my father, others they will say because of poverty, others will say friends"*
Reasons for not completing	**Number of those who did not complete detoxification.** (33.61%, n=82) did not complete	**Lack of multidisciplinary support** *"I think the side which we are lacking is the psychiatric side because we do not have psychiatric*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
detox and leaving the treatment.	detoxification **Reasons for starting substances** ((4.9%, n=12) =bereavement, (4.1%, n=10) =trauma in their lives,	*doctor"* *"The other area is psychologist, our patient have experienced a lot of rejection, trauma and are depressed, it would be better if they are seen by a psychologist"* **Loss of family members** *"They come for admission with different reasons, others they will tell you, is because I lost my father, others they will say because of poverty, others will say friends"*
Reasons for completing detox and staying on treatment.	**Number of those who completed detoxification.** (59.62%, n=144) did complete detoxification, **Type of admission** (97%, n=236) of the 244 voluntarily admitted, (0.4%, n=1) involuntary admission	**Engaging of patients** ***Assessment interview*** *-Aim is to establish a rapport with the service users, and gather as much as possible information about them.* *-This process will then be followed by individual sessions* *Individual Development plan* *-The purpose of this facet is to assess strengths and weaknesses of the service users.* *-MDT together with the service user will then agree on a treatment plan.* **Using points system to control patients** *there are those who can do something that will be irritating to the others, just to provoke fight, and immediately we call them and allocated points, he stop immediately, it does work it works for us, a lot"* **Material support** *"Sometimes it becomes so difficult that they come with no cloths, you will look at home your children's cloths and bring them, you help them with bread, because vitamins makes them eat a lot and one meal is not enough.."* *"Sometimes when it is cold they do not have jersey, at least I did bring that old jacket for my son"* **Emotional attachment** ***"****Us nurses and patients, we become family at the end of the day, you find that one of us connect with the patients,* "We have been with that patient for two month and we have been there from day one, at the time where the patient was very sick, until the patient become well **Acceptance** *"First of all you must not be judgemental to them, you must treat them with respect, you must give them love, and you must also support them if they come to you and in need of any help, so if he come to you and sit down you give an ear you listen, you can support him where you can support him and then he will feel much better" this people are in pain, sometimes I have to understand their*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
		situation, even if it was my child I would understand and is like as if you are nursing a bipolar person like when they start their thing starting to be high and even though you get angry but at some point you have to come down, and say but this people come here because they need help so I need to calm down" **LOVE** *"I must try and help him and come closer to him and give him love, so that he can see that this is not the end of the wold there are people who love me, you give him that total love"* **Involvement in sport activities** *"At times there are TV, snooker, we have soccer ball at times they even challenge the mental hospital patients, and they go that side to play soccer…"* **Daily schedule** *so we tell them everything which they need to know, sleeping time, treatment time, and team leader will add on what we had told them because they do have their files, which has all the rules of the clinic"* ***Treatment plan*** *-Physical exercise, to increase their level of fitness, physical health and a sense of wellbeing are established through physical exercise. Exercise includes swimming (the swimming pool is out of order currently). These activities are meant to increase self-discipline and respect of the rules, thus lessening misbehaviour, frustration and anger."* **<u>Random Drug Tests</u>** *"Test are done randomly when a need arises. This is initiated by the therapist according to the therapeutic progress of the service user and they can also be done if there is suspicion of drug taking within the center. Results of such tests are incorporated to the individual development plans"* **Psycho education** *"Health talk about the, effects of drugs I think that part is important because when someone think of relapsing and think of what you had told him what drugs does to the immune system and to their mind, I think some of them even if they can relapse they know what they are doing to themselves, they would know that they are smoking their lives"* **Involvement of parents** *"On Saturday the social workers give pass out and the parents come fetch them in the morning and we instruct them that by six o'clock they must be back. By doing this we are testing them and preparing them as they leave and come back, to see if they*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
		are able to remain sober. **Laying the rules** *"On admission they are lectured about rules, you do this as they give the rules they tell them about the policy because they are the* **Climate meeting** *"Every morning 9 O'clock, we have a meeting here", with substance abusers and all staff members, we call it climate meeting, to vent out whatever, to hear maybe if there a problems, so we solve those problems accordingly*"
Social/environmental issues		
Reason for using substances	**Reasons for using substances** (19. 7, n=48) = peer pressure, (6.6%, n= 16) =social reasons, (0.8%, n=2) =multiple reasons, (16.4%, n-40) =Unemployment, loss of job= (16.4%, n-40). **Family member using substances** (16.8%, n=41) of the 244 substance user have a family member who is using substances. **Relationship with the family members using substance** (9.4%, n=23) = siblings, (3.7%, n=9) one or both parents, (1.6%, n=4 uncles, (1.6%, n=4) = lover or partners **Who the SA staying with** (70.5 %, n=172)= parents, (7.4%, n=18)= relatives, (4.1%, n=10)=renting, , (0.8%, n=2)=friends, (0.4%, n=1) =street, (0.4, n=1)=partner, own houses = (4.9, n=12) **Employment status** (95%, n=232) = unemployed,	**Peer pressure** *"…especially those who are young, because we do admit those who were born in 1998, teenagers or still teenagers. Peer pressure is the problem and some will be like no I did it because I saw someone doing it my friends were using substances and then I said to myself , let me try, that let me try lead him to become addicted "* **Exposure to substances** *"Others they will tell you that their family members, like a father, he is using the substance"* **Loss of family members** *"They come for admission with different reasons, others they will tell you, is because I lost my father, others they will say because of poverty, others will say friends"* **Low socio-economic status** *"I realised something that most of them, it is through poverty that they abuse substances"* **Homelessness** *"Others they are from street, because of them coming from streets when they come here the social workers they try and trace for the family"*
Substance users' Home	**Staying with** (70.5 %, n=172) parents, (7.4%, n=18) friends, (4.1%, n=10) renting, (11.5%, n=28) not known, (0.8%, n=2) with friends, (0.4%, n=1 street, (0.4, n=1) partner or lover and (4.9, n=12)own houses **Readmission** About (16 %, n=40)	**Homelessness** *"Others they are from street, because of them coming from streets…"* ***Rejection*** *"You know other parents, when they realise that their children are doing wrong things, they chase them away and tell them that, you must not come back to my house again, just stay on the street,* **Hygiene** *"…they come here very dirty, smelling…"* **Nutritional status** *"When they come here on the first day first day you find that they, are malnourished, very malnourished, you would not like their skin"*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
Skills	**Type of occupation:** 95,5%, n=233) =no occupation, (95%, n=232) = unemployed **Educational level** (85%, n=207) secondary education, (1.6, n= 4)) no formal education, (11%, n=26). **Employment status** (95%, n=232) unemployed, (2%, n=5) self-employed	**Skill development team** *"On Saturday people from outside from local skills development organisation they come on Saturday and on Friday they are having a meeting, ,on Sunday there is a church sermon, you see it is so nice and full of activities"* **Counselling and skills development** *"the anger management, stress management, conflict management and leadership skills all of them, when attend those classes with social workers, they teach them, when a patient is focused know what he want they will sit back and reflect"* **Anger** *"..At times they were giving him food he threw it back to them, he just wanted to fight any of these little girls..."* **Disrespect** *"The challenges of working with them, at first is they do not have any respect and they just talk anyhow"* *"The morals are not quite good…"* **Treatment plan** *"These activities are meant to increase self-discipline and respect of the rules, thus lessening misbehaviour, frustration and anger."*
Support	**Staying with** (70.5 %, n=172) parents, (7.4%, n=18) friends, (4.1%, n=10) renting, (11.5%, n=28) not known, (0.8%, n=2) with friends, (0.4%, n=1 street, (0.4, n=1) partner or lover, (4.9, n=12) own houses	**Reasons for coming to the institution** *"you will find there is one that was brought here by court, you will find there is one that was brought here referred by school, you will find the Is one referred by work* **Involvement of parents** *"Relationships, Addresses impact of drugs on relationships focusing more on openness and trust and mending relationships (importance of apology and living to your promises"* *"Family open days* *This happens quarterly and provides families and opportunity to meet therapists and have the feel of what is contained in the treatment of their members."* *"The social workers even calling the parents for a family sessions…"* ***Exit plan*** *Preparation for life outside the institution, the therapist in collaboration with the referring agency link the service user with community-based support groups as part of after care services. The therapist assist the child to deal with stigmatization towards addiction and prepares for disengagement"* **Nurse** *"We tell them that there is no place where you can dump your child and say that he is a bad child, you just have to come over, and we inform them that we*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
		are together in this, so that we help him to be a better person…" confirm
Spiritual issues		
Religion	**Religion** (55.7%, n=136)= Christianising, (7%, n=17)= other religions which are non-Christianity (37.3%, n=91)=no religious affiliation.	**Pastor** *"on weekend they are very nice they behave they do not have problems, they are calm and collected and on Sunday there is a pastor coming here he gives a sermon for two hours and they like to go to church so much*" **SPIRITUAL PROGRAMME** *-The right to practice religion of their choice is respected, but religious practices that are found to be harmful to the service users' wellbeing are not promoted".* *-Time is allocated daily for service users to attend morning prayers (which are locally referred to as devotion) and this meetings provides the opportunity for all members of the team to announce the day's programme***.**
Multidisciplinary team		
Multi-disciplinary team		*Individual Development plan* *-The purpose of this facet is to assess strengths and weaknesses of the service users.* *-MDT together with the service user will then agree on a treatment plan.* **Climate meeting** *"Every morning 9 O'clock, we have a meeting here", with substance abusers and all staff members, we call it climate meeting, to vent out whatever, to hear maybe if there a problems, so we solve those problems accordingly*"
Psychiatrist	**Mental health:** (3%, n=6) had mental conditions (3%, N=6) receiving mental health treatment. (17%, N=42) had suicidal ideation **Psychiatric consultation:** (0.4%, n=1) =once, (0.4, n=1) = three times, (92.2%, n=240) did not consult the psychiatrist **Number of those who completed and these who did not complete detoxification:** (59.62%, n=144) did complete detoxification, (33.61%, n=82) did not complete detoxification **Readmission:** (16 %, n=40) =have been admitted before	**MENTAL HEALTH CARE** *"Mental state examination* *-Preliminary psychiatric diagnosis or revising current psychiatric diagnosis* *-Psychiatric services and intervention such as arranging consultations with psychiatrist and changing of treatment plans* *-Individual psychiatric interviews as to determine the effects of psychiatric medication* **Lack of multidisciplinary support** *-The programme consist of the following role player: Psychologist .Occupational therapist, Psychiatrist and medical practitioners. Each discipline attends to the service user according to her needs but the psychologist and Psychiatrist is more on referral"* *"I think the side which we are lacking is the psychiatric side because we do not have psychiatric doctor…"* *"Sessional psychiatric available on Thursdays only"* **Co-occurring of disease**

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
		"MENTAL HEALTH CARE" *Mental state examination* *Preliminary psychiatric diagnosis or revising current psychiatric diagnosis* *Psychiatric services and intervention such as arranging consultations with psychiatrist and changing of treatment plans* *Individual psychiatric interviews as to determine the effects of psychiatric medication*
Psychologist	**Psychological status** (17%, N=42) had suicidal ideation **Number of those who completed and these who did not complete detoxification.** (59.62%, n=144) did complete detoxification, (33.61%, n=82) did not complete detoxification **Number of consultations with psychologist:** 997.52%, n=238) =did not consult psychologist (2.48%, n=6) did consult once with psychologist	**Treatment programme** *"The programme consists of the following role player: Psychologist. Occupational therapist, Psychiatrist and medical practitioners. Each discipline attends to the service user according to her needs but the psychologist and Psychiatrist is more on referral"* *"The other area is psychologist, our patients have experienced a lot of rejection, trauma and are depressed, it would be better if they are seen by a psychologist"* **Treatment programme** *-SESSIONAL PSYCHIATRIC AVAILABLE ON THURSDAYS ONLY*
Nurses	**Period of using substances:** (30%, n=74) = of 7-10 years, (28%, n=69) = 4-6 years, (21%, n=52)=10 year plus, (14%,=33) =1-3 years **Types of substances used:** Heroin= (88.6% n= 217)), cannabis= (83.6%, n=204), Tobacco= (7.4, n=18), Rock cocaine = (5.3%, n=13), kat= (2.9, n=7) nyaope =(5.3%, n=13). **Number of bags used per day** (47.1%, n=115) =4-6. (18%, n=44)=7-8 bags, (17.28%, n=42)=1-3 bags, (8.2%, n=20),11-15 bags, (6.1%, n=15) used 16+ (1.6%, n=4) their number of bags was dependent on the availability of money **Number of substances used** (73.4%, n=179) = two substances, (20.1%, n=49) =one, (4.9%, n=12) = three and, (1.6%, n=4) =Four substances.	**Admissions** *"…when the social workers are done, they inform the professional nurse from there is where we take the patient from them and we do strip search this side…"* *"During admission day, care worker and nurse help each other searching the patient…"* **Nurses** *"because when they come in here we are doing the nursing part, there should be a registered nurse next to the social workers, to make sure that the social worker is admitting the right person, because at times they may, there are dual diagnoses, which we are not allowed to admit"* **Medical treatment/Detox** *"Then we give medication…" "And then the enrolled nurses give them the vitamin tablets…"* ***MEDICAL PROGRAMME*** *"All service users are assessed medically upon admission".* *"No service user is allowed to be in possession of any medication if he was on treatment prior admission, it shall be handed over to medical staff to administer".* *"Formation of nursing diagnosis and treatment of disease"* *"Medication administering, recordkeeping, monitoring of effects"*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
	Route of administration (66%, n=161) = smoked, (23.8%, n=58) =injected, and (9.8%, n=24) more than one route of administration.	**Sneaking drugs** ***Random Drug Tests*** ***MEDICAL PROGRAMME*** *"The team is also responsible for drug testing in the unit"* **Daily schedule** *"we inform them about everything, that we bath at what time, then time for breakfast, no sleeping wear at the breakfast, time to wake up, time to make bed and you make your own bed then go to the bathroom bath, change and go to the breakfast…"* **Referral for treatment of other conditions** *"Even in between the detoxification should we realise that there is a mental condition which is not suitable for our clinic, we take them to the hospital…" "We refer to the social workers if there is something that is not okay…" "Like those who are hypertensive we do follow them and make it a point that we send them to the clinic…"* **Psycho education** *"…we teach about hygiene, and we make them wash…" "…we get involved because of poor hygiene we encourage them to go and bath…" "The other nursing part of our work is health talk…"* **Management of chronic conditions** *"…they came with their clinic chronic cards; we do inform them to come with their chronic medication cards so that we can take them to the clinics and we are able to give them…"* **Unscreened patients** *"The right procedure they should start from their social worker and the psychosocial report is compiled even if when we are approving we know the kind of person whom we are expecting like he is a known TB patient, or he is a difficult or whatever, but those who are coming buy a bus they are risk to our health, so you are not free when nursing them because you're in the sickbay and you can never control them, those once when it comes to morals they are worse…"* ***Primary health care*** *-Wellbeing clinics twice a day* *-Formation of nursing diagnosis and treatment of disease* *-Medication administering, recordkeeping, monitoring of effects* **Emotional attachment** ***"****Us nurses and patients, we become family at the end of the day, you find that one of us connect with*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
		the patients, at the same time with their parents…" *"…you always have that mother instinct, you know…"* *"When patients are discharge, it feels like now my brother or my son is going, I will never see him again…"* **Material support** *"…that they come with no cloths, you will look at home your children's cloths and bring them, and you help them with bread…"* **HIV/AIDS related training** *"Nurses to have training for HIV courses, we can be more advanced""* **Working without guidance** *afternoon I once spoke to them management about unsigned standing order and suggested that we have to write protocols and doctor sign, but it was not done, with us, anything can happen, we are not covered* **Lack of relevant training** *"Like myself I haven't got any qualification, only that I I learned them when I came here and get used to that, I think we have only one professional nurse who is psychiatric trained"* *"We do not have dispensing course"* **Lack of support** *"The nurses and care workers we do not have any programme like group sessions, to help us"* *"I do debriefing by myself, at my home "* **Under pressure** *"We work in a skeleton staff, on top of that the politicians bring abnormal number to work with…"* **Information of different substance and treatment** *"Currently there is no one of us who has receive substance addiction training. I mean if you look at our society now the drugs are taking over, so why can't we start training with use who has experience, because we have been working with substance patients for a long time, if there is a course somewhere, where is done for drug people"* "*There must be an advanced training for nurses, with that I am able to go somewhere and say that this is the certificate of my training"* *"Like myself I haven't got any qualification, only that I I learned them when I came here and get used to*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
		that, I think we have only one professional nurse who is psychiatric trained" **Depression** *"You know it does affect us; at times you find yourself depressed"* **Anger** *"Sometimes you feel angry because he is an adult when you are talking with him nicely and he does not respond nicely to you or what you are asking him, he would say you are at work and you get payed because of me"* **Fear** *"Sometimes you become so nervous because at some other point we are not aware if they did check the mental status or not, because others they look like they are mental ill, they are giving us trouble even when it happens during the night especially during the night"* **Taking rescue** *"But you, you just tell yourself, calm down, I usually take rescue to calm yourself down we have got it here"* **Prayer** *"I cope by prayer; you know prayer works…"*
Medical doctors	**Presence of medical history:** (27%, N=65) had medical history 65 (24.2%, n=59) had physiological medical conditions. On admission blood pressure, (71%, n=172) normal, (7%, n=3) abnormal (22%, =65) blood pressure not recorded. **Mental health:** (3%, n=6) suffered from mental conditions (3%, N=6) are receiving mental health treatment. (17%, N=42) had suicidal ideation	**Doctors** "We have a general doctor…" *"…They are seen by the doctor once for the period of admission, unless there is something that needs the doctor in between then we refer them to the doctor, but he only comes once a week"* • *SESSIONAL DOCTOR AVAILABLE ON TUESDAYS AND THURDAYS ONLY* **Multidisciplinary team** *"The programme consists of the following role player: Psychologist, Occupational therapist, Psychiatrist and medical practitioners. Each discipline attends to the service user according to her needs, but the psychologist and Psychiatrist is more on referral"* **Co-occurring disorders** ***"MEDICAL PROGRAMME*** *All service users are assessed medically upon admission* **Medical treatment/Detox** *"Then we give medication."* *"Symptomatically we use buscopen, brufen,*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
		Panado, we have medication that helps them with pain" *"All service users are assessed medically upon admission".* *"Medication is issued daily during the specified times informed by the assessment process".* **Working without guidance** *"The very doctor who works with us he is a General practitioner, but there are those standing orders that are not signed of which they are not covering us afternoon I once spoke to them management about unsigned standing order and suggested that we have to write protocols and doctor sign, but it was not done, with us, anything can happen, we are not covered"* **Lack of multidisciplinary support** *"…our doctor no, we are not happy about him, he is a General Practitioner from outside, so he comes only on sessions"* *"we have a general doctor and he doesn't have a broader picture, he will be treating these children like he is treating minor ailments, he is not going to think out of the box that okay these person is a substance user and he is complaining about these, how or can I help them with these treatment or can I help them with something else, he doesn't have that , our Doctor he is treating everybody the same"*
Occupational therapist	**Educational level** (85%, n=207) secondary education, (1.6, n= 4)) no formal education, (11%, n=26) primary education (1.6%, n=4)post-secondary education (1.2, n=3) nothing is known **Employment status** (95%, n=232) unemployed, (2%, n=5) self-employed **Occupation** (95,5%, n=233) no specific occupation, (2.0%, n=5) have professionals' occupation (3%, n=6) has none-professional occupation. **Period of using substances:** (30%, n=74) = of 7-10 years, (28%, n=69) = 4-6 years, (21%, n=52) =10 year plus, (14%,=33) =1-3 years	**Treatment programme** *"The programme consists of the following role player…" Occupational therapist.., Each discipline attends to the service user according to her needs"* **Skills development** *VIDEO: ATTRIBUTES OF A SUCCESSFUL PERSON* *Goal- setting and Time Management (Homework)* *Feedback on goals* **Daily schedule** **Nutritional status** *"When they smoke nyaope they do not eat…"* **Hygiene** *"Most of our clients has got poor hygiene…" "The hygiene not even good"* **Reason for coming to the institution** *you will find there is one that was brought here referred by school, you will find the Is one referred by work…"*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
	Types of substances used: Heroin= (88.6% n= 217)), cannabis= (83.6%, n=204), Tobacco= (7.4, n=18), Rock cocaine = (5.3%, n=13), kat= (2.9, n=7) nyaope = (5.3%, n=13). **Number of bags used per day** (47.1%, n=115) =4-6. (18%, n=44) =7-8 bags, (17.28%, n=42) =1-3 bags, (8.2%, n=20),11-15 bags, (6.1%, n=15) used 16+ (1.6%, n=4) their number of bags was dependent on the availability of money **Number of substances used** (73.4%, n=179) = two substances, (20.1%, n=49) =one, (4.9%, n=12) = three and, (1.6%, n=4) =Four substances.	**Homelessness** *"Others they are from street, because of them coming from streets…"* **Treatment programme** ***Personal hygiene*** *Personal and environmental hygiene* *My health is my responsibility"* *Mouth care and teeth* ***WEEKLY PROGRAMME FOR USERS*** ***MONDAY*** ***6:00 Wake-up + Bath & Bed making*** **Skills development** *VIDEO: ATTRIBUTES OF A SUCCESSFUL PERSON* *Goal- setting and Time Management (Homework)* *Feedback on goals* **Daily schedule** **Involvement in sporting activities** *Wake up and sleep time, to ensure that service users reintegrate routines and structure in their lives* *Physical exercise, to increase their level of fitness, physical health and a sense of wellbeing are established through physical exercise. Exercise includes swimming (the swimming pool is out of order currently). These activities are meant to increase self-discipline and respect of the rules, thus lessening misbehaviour, frustration and anger."*
Social workers	**Reasons for starting substances** (19. 7, n=48) = peer pressure, (6.6%, n= 16) =social reasons, (4.9%, n=12) =bereavement, (4.1%, n=10) =trauma in their lives, (0.8%, n=2) =multiple reasons, (16.4%, n-40) =Unemployment, loss of job= (16.4%, n-40).	**Social workers** *"Because there are social workers who are doing the admissions, and whatever related to social aspects of their life"* "*The therapist that is the social worker is the driver of the therapeutic programme, which includes individual therapy and life skills groups"* *"The social workers are doing a great job because now they are the once who are doing anger management deal with that and deal with all those things, the behaviour part of it is done by social workers"* *"And at 10 o'clock they go to classes; they have a classes with social worker or auxiliary social workers' groups. The professional social workers are the once who deal with the problem, they call the parents trying to get the collateral regarding problems, to find out on what went wrong…"* *We refer to the social workers if there is something that is not okay, to speak to the social workers and they intervene, and they are the once who attend to*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
		those social problems" **Admission** "*…even though there are social workers there…"* *"…the social workers, to make sure that the social worker is admitting the right person…"* ***Co-occurring disease*** ***Assessment interview*** *Aim is to establish a rapport with the service users and gather as much as possible information about them.* *This process will then be followed by individual sessions informed by the assessment"* ***Rejection*** *Relationships, Addresses impact of drugs on relationships focusing more on openness and trust and mending relationships (importance of apology and living to your promises"* *"Family open days"* *This happens quarterly and provides families and opportunity to meet therapists and have the feel of what is contained in the treatment of their members."*
Care workers	**Staying with** (70.5 %, n=172) parents, (7.4%, n=18) friends, (4.1%, n=10) renting, (11.5%, n=28) not known, (0.8%, n=2) with friends, (0.4%, n=1 street, (0.4, n=1) partner or lover, (4.9, n=12) own houses ,	**Admission** *"During admission day, care worker and nurse help each other searching the patient, when the patient is undressing the care worker is searching the patient's bags maybe to look for drugs…"* **Treatment programme** ***17: 15 – 18:00 – Relaxation and TV (Change of shift by care section)*** ***22H00 – Lights off, NB Care Workers regular rounds in the rooms*** **Involvement in sporting activities** *Wake up and sleep time, to ensure that service users reintegrate routines and structure in their lives. Care workers are responsible for this activity.*
Pastors	**Religion** (55.7%, n=136) Christians, (7%, n=17) non-Christianity and (37.3%, n=91) no religious affiliation	***Pastors*** *"on weekend they are very nice they behave they do not have problems, they are calm and collected and on Sunday there is a pastor coming here he gives a sermon for two hours and they like to go to church so much*" *"SPIRITUAL PROGRAMME* *The right to practice religion of their choice is respected, but religious practices that are found to be harmful to the service users' wellbeing are not promoted".* *Time is allocated daily for service users to attend morning prayers (which are locally referred to as devotion) and this meeting provides the opportunity for all members of the team to announce the day's*

Major topic (Variables)	Quantitative results Findings per relevant variables	Qualitative findings: Corresponding qualitative subcategories
		programme. **Treatment programme** *CHURCH SERVICES RENDERED BY VOLUNTEERS ON SUNDAY*
Non-governmental organisations	**Readmission:** About (16 %, n=40) =have been admitted before	**Skills** *"On Saturday people from outside from local skills development organisation they come on Saturday and on Friday they are having a meeting, ,on Sunday there is a church sermon, you see it is so nice and full of activities"* ***Exit plan*** *"Preparation for life outside the institution, the therapist in collaboration with the referring agency link the service user with community-based support groups as part of after care services. The therapist assists the child to deal with stigmatization towards addiction and prepares for disengagement"* **Treatment programme** *NARCOTIC ANONYMOUS GROUP MEETINGS AVAILABLE BIWEEKLY ON SATURDAYS ONLY*
Dieticians	**Presence of medical history:** (27%, N=65) had medical history 65 (24.2%, n=59) had physiological medical conditions. On admission blood pressure, (71%, n=172) normal, (7%, n=3) abnormal **Period of using substances:** (30%, n=74) = of 7-10 years, (28%, n=69) = 4-6 years, (21%, n=52)=10 year plus, (14%,=33) =1-3 years **Types of substances used:** Heroin= (88.6% n= 217)), cannabis= (83.6%, n=204), Tobacco= (7.4, n=18), Rock cocaine = (5.3%, n=13), kat= (2.9, n=7) nyaope = (5.3%, n=13). **Number of bags used per day** (47.1%, n=115) =4-6. (18%, n=44)=7-8 bags, (17.28%, n=42)=1-3 bags, (8.2%, n=20),11-15 bags, (6.1%, n=15) used 16+ (1.6%, n=4) their number of bags was dependent on the availability of money number and period of substance addiction	**Nutritional status** *"When they smoke nyaope they do not eat they only eat this creamers snacks and a take 5 juice when you give them food they only eat a corner of sly of bread, they do not have appetite, is like nyaope takes away their appetite, they say food is tasteless…"* **MEDICAL PROGRAMME** *-medical lectures and the **following topics as covered:*** *Benefits of exercise, sleep and nutrition"* *Health Education is also given at the clinic* *Nutrition*