

Table of contents

Acknowledgements	x
Preface	xi
Declaration from student	xii
CHAPTER ONE: BRIEF OVERVIEW OF THE STUDY	1
1.1 Introduction	1
1.2 Background	1
1.3 Problem statement	5
1.4 Research questions	6
1.5 Aim of the study	6
1.6 Objectives of the study	7
1.7 Significance of the study	7
1.8 Operational definition of key concepts	7
1.9 Chapter outline	9
1.10 Conclusion	10
CHAPTER TWO: LITERATURE REVIEW	11
2.1 Introduction	11
2.2 Prevalence of smoking among mental health care users	12
2.3 Nurses' knowledge about the smoking behaviours of mental health care users in psychiatric institutions	14

2.4 Attitude of nurses towards smoking among mental health care users in psychiatric institutions	16
2.5 Practices of nurses related to smoking of mental health care users in psychiatric institutions	17
2.6 Conclusion	19
CHAPTER THREE: METHODOLOGY	20
3.1 Introduction	20
3.2 Research approach	20
3.2.1 Research design	20
3.3 Setting	21
3.4 Population and sample	21
3.4.1 Population of the study	21
3.4.2 Sampling	22
3.4.3 Inclusion criteria	22
3.4.4 Exclusion criteria	22
3.5 Data collection	22
3.5.1 Data collection instrument	23
3.5.2 Validity	23
3.5.3 Reliability	24



3.5.4 Research process	24
3.6 Data analysis	25
3.7 Ethics	25
3.7.1 Principle of respect for persons	26
3.7.2 Principle of beneficence	26
3.7.3 Principle of justice:	27
3.8 Conclusion	27
CHAPTER FOUR: RESULTS	28
4.1 Introduction	28
4.2 Sample realisation	28
4.3 Demographics of the respondents	28
4.4 Smoking profile	30
4.5 Mental health nurses' knowledge of tobacco dependence among mental health care users	31
4.6 Measured knowledge of mental health nurses based on true/false statements	32
4.7 Attitudes of mental health nurses	34
4.8 Smoking prevention practices of mental health nurses	36



4.9 Conclusion	38
CHAPTER FIVE: DISCUSSION OF FINDINGS	39
5.1 Introduction	39
5.2 Knowledge of mental health nurses	39
5.3 Attitudes of mental health nurses	41
5.4 Practices of mental health nurses	43
5.5 Conclusion	44
CHAPTER SIX: CONCLUSION, SUMMARY OF FINDINGS AND RECOMMENDATIONS	45
6.1 Introduction	45
6.2 Limitations	45
6.3 Recommendation	45
6.3.1 Clinical practice	45
6.3.2 Nursing education	45
6.3.3 Research	46
6.4 Conclusion	46
REFERENCES	47
APPENDICES	56
Appendix A: Ethical approval certificate	56



Appendix B: Informed consent forms	57
Appendix C: Questionnaire	58



List of figures

Figure 4.1 Nursing category of the respondents	30
Figure 4.2: Ward allocation of the respondents	30

List of tables

Table 3.1: Content validity	24
Table 4.1: Age of the respondents	29
Table 4.2: Cigarettes per day and years of smoking among mental health nurses	31
Table 4.3: Self- perceived rated knowledge	32
Table 4.4: Measured knowledge	33
Table 4.5: Personal attitudes of mental health nurses	34
Table 4.6: Beliefs about smoking policy	36
Table 4.7: Smoking prevention practices of mental health nurses	37
Table 4.8: Ward practices of mental health nurses	37

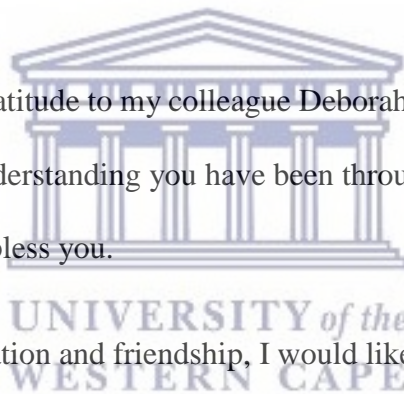
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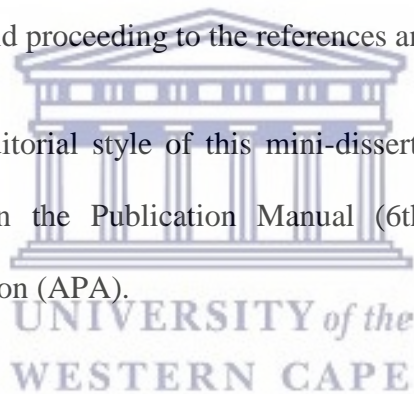
To my managers at work, thank you for the support and for allowing me to use your resources.

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Preface

- The paper comprises six chapters. Chapter one reflects on the contextualisation and motivation regarding the research topic with a description of the research process. An overview of the research topic is provided by means of a thorough literature review in chapter two. In chapter three, the research objectives and methods used to conduct this study are detailed. In chapters four and five the results are outlined and discussed. Chapter six presents a conclusion and critical reflection by the researcher on the current study.
- To present the mini-dissertation as a unit, the page numbering is consecutive, starting from the introduction and proceeding to the references and appendices.
- The referencing and editorial style of this mini-dissertation are consistent with the guidelines stipulated in the Publication Manual (6th edition) of the American Psychological Association (APA).



Declaration from student

I, Xolisa Sigenu, declare that this mini-dissertation, submitted by me in partial fulfilment of the requirements for the degree Magister Curationis in Nursing Education at the University of the Western Cape, is my own individual work, although I give credit to my supervisor for the contributions she has made.

My best efforts were made to acknowledge and cite the various materials and opinions from academia that were used in its preparation and to paraphrase these materials. Furthermore, I declare that this mini-dissertation has not been submitted previously for assessment at any other institution.



Mr Xolisa Sigenu

December 2020

CHAPTER ONE: BRIEF OVERVIEW OF THE STUDY

1.1 Introduction

In this chapter, an overview of the magnitude of the tobacco epidemic is provided and the link between tobacco use and mental illness is discussed. This provides the necessary background for the problem statement. The aim, research questions, and objectives are listed. The significance of the study is given and is followed by the operational definition of key concepts. Lastly, an outline of the chapters is provided.

1.2 Background

According to the World Health Organization (WHO) (2016), the tobacco epidemic is one of the biggest health threats worldwide. There are estimated to be 1.3 billion smokers globally, and approximately 6 million of these people die annually. More than 5 million of these deaths are the result of direct tobacco use, while more than 600 000 are the result of non-smokers being exposed to second-hand smoke (WHO, 2016). The primary risk factor of chronic obstructive pulmonary disease (COPD) is tobacco smoking, and it is estimated that by 2030 COPD will be classified as third among the leading causes of death globally (WHO, 2008). Research indicated that the majority of smokers worldwide live in low- and middle-income countries where the burden of tobacco-related illness and death is the heaviest (WHO, 2015).

According to the WHO Framework Convention on Tobacco Control (WHO FCTC), in South Africa there are an estimated 7 million smokers (WHO FCTC, 2019), which contributes to the economic burden of the health sector as more than 42 100 people die annually due to tobacco-related diseases (The Tobacco Atlas, n.d.). The economic cost of tobacco-related diseases is estimated to be R59 128 000 (The Tobacco Atlas, n.d.).

According to Ratschen, Britton, and McNeill (2011), there is a strong link between tobacco

smoking and mental illness. According to Connolly, Floyd, Forrest, and Marshall (2013), tobacco dependence is more prevalent in people with mental illness than in the general population. The tobacco use incidence rate for those with schizophrenia is 70% or higher for those with bipolar and depression disorders (Ratschen, Britton, Doody, Leonardi-Bee, & McNeill, 2009).

According to Lasser et al. (2000), individuals suffering from mental illness die an average of 25 years earlier than the rest of the population, and most of these deaths are due to tobacco smoking. In the United States, the leading cause of death and preventable diseases is smoking, and currently the overall prevalence of tobacco use is 15.3% among men and 20.5% among women (Singh et al., 2016). Ratschen et al. (2011) discovered that in the UK, those suffering from mental illness are two to three times more likely to suffer from tobacco smoking-related diseases such as cancer and cardiovascular disease. Bandiera, Anteneh, Le, Delucchi, and Guydish (2015) note that the association between mental disorders (schizophrenia and major depressive disorder) and tobacco use is well established. As an example, in the US, 36% of people who are diagnosed with mental health disorders are smokers, and in Australia, people with depression have a higher incidence of smoking than the general population (Ragg, Gordon, Ahmed, & Allan, 2013).

In South Africa, Du Plooy, Macharia, and Verster (2016) stated that there is also a high rate of smoking, 30% for bipolar and 70% for schizophrenia, with each person consuming a maximum of 20 cigarettes per day. In Britain, the rate of smoking is excessively high among people with mental illness: 70% for those with schizophrenia and 40% to 50% for those with anxiety disorders (Ratschen et al., 2011). In the US, there are numerous factors and differences in health behaviours that lead to the disparity in smoking incidence by socioeconomic status and gender (US Department of Health and Human Services, 2014). Women who smoke had a lower

incidence rate than men, although that gap has narrowed (US Department of Health and Human Services, 2014). The prevalence of tobacco use among people of low socioeconomic status is higher than among those of high socioeconomic status. Thus, necessary services such as substance abuse services, health insurance, and access to mental health are affected (Bandiera et al., 2015). The severity of mental illness is related to tobacco smoking prevalence (Singh et al., 2016).

Ratschen et al. (2009) describe the role of nurses as crucial in this context, but the attitudes of the nurses towards the smoke-free policies and cessation techniques have remained indecisive. However, Koukia, Stathopoulos, Gonis, and Kourakos (2016), reporting on their study conducted in Greece, indicated that nurses have the highest rate of smoking as compared to the general population and that their attitude contributed to MHCUs' smoking behaviour. These nurses felt responsible for helping MHCUs to quit smoking, but found it hard to do so because of barriers such as lack of time to implement smoking cessation, lack of confidence, and lack of training (Sharp & Blaakman, 2009). However, it has also been noted that smoking is accepted by nurses working with mentally ill persons, and they don't consider facilitating smoking cessation among MHCUs as their job (Moxham., 2001). Nurses apparently also believe that smoking is therapeutic for MHCUs (Stubbs, Haw & Garner, 2004).

Stubbs et al. (2004) also reported that nursing managers in forensic units believe that staff smoking with MHCUs had no value in creating therapeutic relationships. However, a study conducted in Israel reported that tobacco had been used to appease MHCUs by mental health nurses, but this practice is seen as unethical (Stubbs et al., 2004). Similarly, the UK study by Stubbs et al. (2004) indicated that smoking at hospitals should be banned; however, most of the nursing staff who were smokers did not support this recommendation because they believed that it would lead to a deterioration of the MHCUs' behaviour.

These researchers further state that non-smoking nurses were quite concerned about the effects of tobacco use on health and had a restrictive attitude towards smoking among MHCUs (Stubbs et al., 2004). However, the nurses who smoked were not keen on encouraging MHCUs to stop smoking, as they believed that allowing MHCUs to smoke with the staff created a therapeutic relationship (Stubbs et al., 2004). Dickens, Stubbs, and Haw (2004) concluded that nurses' attitudes towards tobacco use in psychiatric settings and their smoking behaviour might play a role in MHCUs' smoking behaviours. Furthermore, Meikeljohn et al. (2003, as cited by Dickens et al., 2004) concluded that it is very difficult for MHCUs to cease tobacco use because of the high prevalence of smoking among MHCUs and clinical staff in MHCU settings in the UK.

A study in England by Ratschen et al. (2009) revealed that enrolled nursing auxiliaries have the highest rate of smoking, but there is a lack of knowledge regarding links with treatment of mental health and smoking. In another study in the United Kingdom in 2009 on training psychiatrists and advanced nurse practitioners on tobacco dependence, the nurses who were found to be more involved in activities relating to tobacco dependence were more knowledgeable and showed some positive attitudes (Williams et al., 2009). According to Koukia, Stathopoulos, Gonis, and Kourakos (2016), nurses who are smokers currently lack knowledge compared to non-smokers and they try to normalise smoking by underestimating the risks and dangers related to smoking.

Smith, Mazure, and McKee (2014) note that persons with mental illness feel encouraged to smoke as they perceive it as useful to alleviate or self-medicate symptoms such as boredom, anxiety, depression, intellectual deficits and side effects of antipsychotic medication. Du Plooy et al. (2016) also state that smoking promoted friendship among patients and offered some sense of identity. Furthermore, according to Guo, Wang, and Shu (2015), in psychiatric

settings, people with mental illness need cigarettes to enhance the therapeutic nature of the environment, and when implementing behavioural therapy, cigarettes are used as a reward (Spears et al., 2013), whereas in a study conducted in New Zealand, some of the conditions that led to the high smoking rates among people with mental illness included: low socioeconomic status, boredom and fewer smoking cessation interventions/techniques (Johnson et al., 2009).

Research also reported that it is very challenging for MHCUs to quit smoking and the risk of relapsing after quitting is high (Fiore et al., 2000). However, tobacco dependence treatment is possible and potentially lifesaving for people with mental illness (Fiore et al., 2000). The delivery of tobacco dependence treatment by nurses is influenced by a variety of factors, including lack of knowledge and skills (In schools of nursing there is scarcity of skilled nurse researchers and partial knowledge of evidence-based tobacco cessation interventions), limited professional leadership (The Growth and development of nurse researchers is limited by the scarcity of tobacco cessation interventions in undergraduate and graduate nursing education), and smoking within the profession (Nurses who are smokers are likely to participate in tobacco control measures), (Wewers, Sarna, & Rice, 2006).

1.3 Problem statement

There is a strong link between mental illness and smoking-related diseases (Robson, Haddad, Gray, & Gournay, 2013), including cancer, respiratory diseases and heart diseases that are linked with depression (Guydish et al., 2016). There is a high incidence of cancer in people with bipolar mood disorder and schizophrenia due to smoking (Bandiera et al, 2015). In spite of this, smoking is regarded as part of the culture of psychiatric institutions (Kulkarni, Huddleston, Taylor, Sayal, & Ratschen, 2014) and tobacco is seen as “necessary self-medication for the mentally ill” (Prochaska, Das, & Young-Wolff, 2017). Historically, cigarettes have been used for behavioural reinforcement within the psychiatric setting

(Hitsman, Moss, Montoya, & George, 2009). According to Lawn and Condon (2006), mental health nurses have the highest rate of smoking behaviour, which is coupled with permissive attitudes towards smoking among MHCUs. It is also reported that nurses lack knowledge



regarding the interaction of tobacco dependence with treatment of mental disorders (Ratschen et al., 2009). Nurses are also regarded as role models for their MHCUs; therefore, nurses' beliefs and attitudes regarding the smoking behaviour of MHCUs have an influence on any smoking cessation interventions (Koukia et al., 2016).

The psychiatric institution where the researcher was employed had recently implemented a smoke-free policy in the wards. However, it was not known if the mental health nurses had the necessary knowledge related to tobacco dependence. Also unknown were their attitudes towards tobacco dependence among MHCUs and the practices they implemented to address tobacco dependence among MHCUs. Research on mental health nurses' knowledge, attitude and practices related to tobacco dependence among MHCUs in South Africa is limited. It was therefore important to determine if these factors would influence the implementation of the smoke-free policy at the ward level (Stubbs et al., 2004).

1.4 Research questions

From the background information provided and the problem statement, the following research questions were formulated for this study:

- 1.* What knowledge, attitudes and practices do mental health nurses possess regarding tobacco dependence among MHCUs?

1.5 Aim of the study

The aim of this study was to investigate the knowledge, attitude and practices of mental health nurses related to tobacco dependence among MHCUs in a psychiatric institution in the Western

Cape.

1.6 Objectives of the study

The objectives of this study are as follows:

1. To determine mental health nurses' knowledge of tobacco dependence among MHCUs in a selected psychiatric institution
2. To describe the mental health nurses' attitudes toward tobacco dependence among MHCUs at the selected psychiatric institution
3. To determine the practices mental health nurses use to address tobacco dependence among MHCUs in the selected psychiatric institution.

1.7 Significance of the study

The significance of the study provides information on how the study will impact health care and contribute to the research field. The researcher noted in the problem statement that research regarding mental health nurses' knowledge, attitude and practices related to tobacco dependence among MHCUs in South Africa is limited. Therefore, this research will contribute to the scientific body of knowledge in this field. This would presumably heighten the awareness of the mental health nurses as well as the management authority of the selected psychiatric institution regarding tobacco dependence and encourage them to implement a strategy to limit tobacco dependence among the MHCUs. In addition, recommendations will be given to the management of the selected psychiatric institution that may assist with the development of policies and procedures related to tobacco dependence among MHCUs. To future researchers, this study can provide baseline information on mental health nurses' knowledge, attitude and practices related to tobacco dependence among MHCUs in South Africa.

1.8 Operational definition of key concepts

The following concepts are central to the research:

www.efd.uwc.ac.za

- **Attitude** is the way a person views something or tends to behave towards it, often in an evaluative way (*British & World English Dictionary, 2016*). In this research, mental health nurses' attitude towards tobacco dependence among MHCUs was explored, for example, regarding whether a no-smoking policy should be applied to psychiatric patients in psychiatric hospitals.
- **Knowledge** refers to the facts, feelings or experiences known by a person or group of people (*British & World English Dictionary, 2016*). In this research, mental health nurses' knowledge of tobacco dependence, its treatment and its relation to mental illness among MHCUs was investigated.
- **Mental health nurses**, according to the Nursing Act 33 of 2005, are divided into the three categories defined below and include mental health care providers under the Mental Health Care Act 17 of 2002.
 1. **Professional nurse** is a person qualified and competent to independently practise comprehensive nursing care in the manner and to the level prescribed, and who is capable of assuming responsibility and accountability for such practice. In this research it refers to a nurse who has completed a nursing degree or a nursing diploma or a bridging course. It also includes nurses who specialised in mental health nursing, who are referred to as advanced professional nurses.
 2. **Enrolled nurse** (previously called staff nurse) is a person educated to practise basic nursing in the manner and to the level prescribed. In this research it refers to a nurse who has completed a two-year course from a nursing college.

3. **Enrolled nursing auxiliary** is a person educated to provide elementary nursing care in the manner and to the level prescribed. In this research it refers to a nurse who has completed a one-year course from a nursing college.
- **Mental health care users** are defined by the Mental Health Care Act 17 of 2002 as people with a mental illness who are receiving care, treatment and rehabilitation services for their disability or who are consuming a health service at a health establishment aimed at enhancing the mental health status of the user. In this research, the term refers to the patients who are admitted and receiving care, treatment and rehabilitation at the selected psychiatric institution.
 - **Practices** refers to repetition or exercise of an activity in order to achieve mastery and confidence (*British & World English Dictionary, 2016*). In this research, practices are the interventions that mental health nurses use to address tobacco dependence among MHCUs at the selected psychiatric institution.
 - **Tobacco dependence** is a chronic condition that often requires repeated intervention (Fiore et al., 2008). In this research it refers to any form of tobacco that MHCUs smoke and are dependent on.
 - **Psychiatric institution** is an institution that offers care, treatment and rehabilitation to MHCUs (Republic of South Africa, 2002). In this research it refers to the psychiatric institution selected by the researcher in the Western Cape.

1.9 Chapter outline

Chapter one provides the background to the study, the problem statement, the research questions, the aim objectives and significance of the study, definitions of key concepts, a chapter outline and a conclusion.

Chapter two discusses the literature on mental health nurses' knowledge, attitude and practices related to tobacco dependence among MHCUs in psychiatric hospitals.

Chapter three explains, in detail, the research design, methodology, recruitment of respondents, sampling, data collection and data analysis. Furthermore, the ethical considerations related to the study are discussed briefly.

Chapter four presents the findings of the study.

Chapter five presents a discussion of the findings.

Chapter six concludes the study, briefly discussing the limitations and the researcher's recommendations for practice.

1.10 Conclusion

In the first chapter of this mini-dissertation, the researcher provided a contextualisation of the research project and identified the anticipated contribution of this study. In addition, the motivation for conducting this study was outlined and an overview of the research topic was provided. The next chapter will focus on the literature review relevant to this study.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

A literature review is a critical summary of existing knowledge on a topic of interest, often prepared for the research problem to be placed in context (Polit & Beck, 2008, p. 757). The aim of this literature review is to conduct a systematic assessment of recent literature on the topic under study to determine what is already known (Brink, Van der Walt, & Van Rensburg, 2012).

This literature review will focus on the prevalence of smoking among MHCUs; mental health nurses' attitudes towards smoking in mental health; mental health care nurses' knowledge about smoking prevention; and mental health care nurses' practices to address tobacco use among MHCUs. In most cases, these studies were from the United Kingdom, China, Australia, and the United States, as there was limited literature about the topic in South Africa.

Tobacco dependence is an addiction to tobacco products caused by nicotine, a drug that is difficult to discontinue using, even though it causes harm and produces physical and mood-altering effects (anger, irritability, depressed mood, frustration, difficulty concentrating, etc.) in the brain (Scotland, 2016). These effects lead an individual to continue with tobacco use leading to dependence. Discontinuing tobacco use causes withdrawal symptoms, including irritability and anxiety (Scotland, 2016). While it is the nicotine in tobacco that causes dependence, the toxic effects (cancer, stroke, lung diseases, diabetes, etc.) result from other substances in tobacco. Smokers have much higher rates of heart disease, stroke and cancer than non-smokers do (Scotland, 2016).

In a study conducted by Connolly et al, (2013) on mental health nurses' beliefs about smoking by mental health facility inpatients in England, it was revealed that intensity of smoking, the

highest level of nicotine dependence and smoking severity (the number of cigarettes per week) are closely associated with mental illness. That is, the rate of tobacco use is higher among people with mental illness than among the general population (Connolly et al., 2013).

Additionally, Zeidonis et al. (2008) revealed in their study that mental disorders and smoking share a link that is compound and solid. It was stated that this link leads to mortality, tobacco dependence, smoking-related diseases, and high smoking prevalence in individuals with mental illness as compared to the general population. This reality exacerbates existing health inequalities that are intensifying. Furthermore, Banham and Gilbody (2010) identified in their research that health inequalities are due to several factors, but illnesses that are related to smoking contribute extremely to morbidity and mortality. Likewise, it was established that, as compared to the general population, individuals with mental illness are at 1.5 times greater risk of dying, and their lifespan is 25 years shorter. However, in England, the lifespan of individuals with mental illness is 10 to 15 years shorter than that of the general population (Garg et al., 2009).

2.2 Prevalence of smoking among mental health care users

In a study conducted by Du Plooy et al. (2016) on cigarette smoking, nicotine dependence, and motivation to quit smoking among South African male psychiatric inpatients, it was highlighted that heavy smokers and those who are dependent are more likely to be individuals with mental illness relative to the general population. Ratschen et al. (2009), in their quantitative study on tobacco dependence, treatment and smoke-free policies (a survey of mental health professionals' knowledge and attitudes) in England, revealed that MHCUs are up to three times more likely to be smokers, with a consumption prevalence of 70% and above for those with schizophrenia and higher rates in those with bipolar disorder and depression. Moreover, in a quantitative study conducted by Ragg et al. (2013) on the impact of smoking cessation on

schizophrenia and major depression in Australia, it was discovered that an increase in chronic physical illness such as cardiovascular diseases and cancer are associated with mental illness. Ragg et al. (2013) also noted that smoking places a substantial financial burden on smokers, leading to social disadvantage in people with mental illness. Incidentally, this leads to people with psychotic illnesses being more prone to higher rates of risk factors that are preventable, such as the inability to engage in physical exercise and a poor diet (Morgan et al., 2011).

Furthermore, in a study conducted by Bandiera et al. (2015) on tobacco-related mortality among persons with mental health and substance abuse problems in the United States, it was established that premature mortality is common among MHCUs. Furthermore, Ratschen et al. (2011), in their research on the smoking culture in psychiatry in the United Kingdom, discovered that schizophrenia-related excess mortality is due to tobacco smoking and that tobacco is a contributing factor of mortality and morbidity in people with mental illness. A study conducted by Mendelsohn, Kirby and Castle (2015) on smoking and mental illness, it was discovered that people with mental illness, despite their psychiatric condition, are more likely to die from smoking consequences. In the United Kingdom, there is evidence that individuals with mental illness die 10 to 15 years earlier as compared to the general population (Mendelsohn et al., 2015). In a study conducted by Singh et al. (2016) on tobacco use among middle and high school students in the United States, it was revealed that the leading cause of death and preventable diseases is smoking, and currently the prevalence of tobacco use is 15.3% among men and 20.5% among women. Likewise, Ratschen et al. (2011), in their study on the smoking culture in psychiatry carried out in the United Kingdom, discovered that those suffering from mental illness are two to three times more likely to suffer from tobacco smoking-related diseases such as cancer and cardiovascular disease. The severity of mental illness is proportionate to the tobacco smoking prevalence (Singh et al., 2016). In the United States, approximately 50% to 70% of tobacco is smoked by individuals with psychiatric disorders

(Green & Hawranick, 2008).

In a study conducted in South Africa, tobacco smoking rates among individuals with severe mental illness are 70% for bipolar disorder and 30% for schizophrenia, and these individuals consume maximum of 20 cigarettes per day (Singh et al., 2016; Jochelson, 2006). Likewise, Diaz et al. (2009) conducted a comparative study in the United States, and they found that the prevalence of tobacco smoking was 69% among patients with bipolar disorder, 34% among those with major depression, and 23% among the general population.

2.3 Nurses' knowledge about the smoking behaviours of mental health care users in psychiatric institutions

According to the WHO (2008), the leading cause of diseases and preventable death is tobacco. Hashimoto et al. (2015) indicated that a high mortality rate from cancer and cardiovascular disease is found in smokers with schizophrenia, alcohol disorders, and major depression. In a Canadian study conducted by Hitsman et al. (2009), it was revealed that among people with mental illness, smoking contributes significantly to the increased risk of tobacco-related morbidity and excess mortality, and in people with schizophrenia, it has been found as one of the main reasons for premature death.

In a systematic review by Ye et al. (2018) on tobacco-nicotine education and training for health care professionals (including nurses) and students in the United States, health care professionals (especially nurses), through their daily interaction with patients, were found to be effective in tobacco control.

In a study conducted by Forman-Hoffman, Hedden, Glasheen, Davies, and Colpe (2016) on the role of mental illness in cigarette dependence and successful quitting in the United States, it was revealed that there were higher levels of tobacco dependence among people with mental illness, hence additional support might be required for them to quit. However, in a study

conducted by Sarna et al. (2015) on tobacco cessation practices and attitudes among nurses in the Czech Republic, the authors showed evidence that the promotion and delivery of tobacco interventions to patients may be hindered because of nurses' smoking behaviours.

Rogers, Gillespie, Smelson, and Sherman (2018), in their qualitative evaluation of mental health clinic staff's perceptions of barriers and facilitators to treating tobacco use in the United States, discovered that within the mental health setting there are systematic barriers that prevent patients from getting ideal smoking cessation support, and nurses lack skills and knowledge to address tobacco smoking. Treatment of tobacco dependence is lifesaving, possible and helpful for those with mental illness (Fiore et al., 2000). In a study conducted by Matten et al. (2011) evaluating tobacco cessation classes aimed at hospital staff nurses in the United States, it was revealed that nurses lacked the necessary knowledge related to tobacco cessation approaches. Similarly, in a study conducted by Kulkarni et al. (2014) on the knowledge, attitude and practices of mental health clinicians (including nurses) related to tobacco dependence among young people with mental disorders in the United Kingdom, it was revealed that nurses in mental health settings are not fully equipped to address the smoking behaviours of patients, and some stated that they lacked knowledge and awareness about tobacco dependence, its treatment and the way it interacts with mental disorders.

In a study conducted by Williams et al. (2009) on training psychiatrists and advanced nurse practitioners in the United Kingdom on tobacco dependence, the nurses were found to be more knowledgeable and more involved in activities relating to tobacco dependence, and they showed some positive attitudes. In another study conducted by Koukia et al. (2016) on psychiatric nurses' knowledge and practices related to patients' tobacco-related habits in mental health hospitals in Greece, it was found that nurses who are smokers currently lack knowledge compared to non-smokers, and they literally try to normalise smoking by

underestimating the risks and dangers related to smoking.

2.4 Attitude of nurses towards smoking among mental health care users in psychiatric institutions

In a study by Rice, Hartmann-Boyce, and Stead (2008) on nursing interventions for smoking cessation, it was found that nurses are significant role-players in controlling tobacco. Koukia et al. (2016) discovered that among various specialties in health, psychiatric nurses had the highest prevalence of smoking, which impacts the smoking behaviour of patients. In a study conducted by Johnson et al. (2009) on community mental health care providers' attitudes and practices related to smoking cessation interventions for people living with severe mental illness in England, it was revealed that 93% of staff were certain that if smoking bans were introduced their patients would deteriorate, whereas 54% stated that it is therapeutic to smoke with patients and 60% concluded that due to the above factors they should smoke with their patients.

Choi and Kim (2016) conducted a quantitative study examining factors affecting nurses' intention to implement smoking interventions in Korea, which found that nurses had a positive attitude towards providing smoking cessation interventions to their patients. Garg et al. (2009), in their qualitative survey conducted in the United States, revealed that the staff's attitude determines the effectiveness of smoking policies as they are the ones who are at the forefront and can easily implement these on a daily basis. Furthermore, in a study conducted by Sharp and Blaakman (2009) reviewing research by nurses regarding tobacco dependence and mental health in Greece, it was found that nurses felt responsible for helping MHCUs to quit smoking but found it difficult to do so because of barriers such as lack of time to implement smoking cessation and a lack of confidence and training. Surprisingly, Guo et al. (2015), in their exploratory study on psychiatric nurses' self-efficacy in providing smoking cessation services in central and southern Taiwan, reveal that patients did not have confidence in those nurses

who smoked and felt that they lacked the capability to help them with cessation techniques? In a study conducted by Taylor et al. (2014) on change in mental health after smoking cessation in the United Kingdom, it was revealed that some of the clinical staff considered it important to address tobacco smoking in the mental health setting, but there were those who had an indecisive attitude.

However, another study conducted in Taiwan reported that psychiatric nurses used tobacco to enhance the behavioural therapy of patients (Lu, 2013). In 2008, smoke-free policies were introduced in all inpatient mental health settings in England to safeguard the staff and patients from the harmful environmental effects of tobacco smoke (Garg et al., 2009).

In a study conducted by Hehir, Indig, Prosser, and Archer (2013) on the implementation of a smoke-free policy in a high-security mental health inpatient facility in Australia, it was discovered that support of the smoking bans only comes from the non-smoking nurses. This might be explained by the finding of Guo et al. (2015) that those who smoke tend to overlook the risks and harmful effects of tobacco use on the human body.

In a study conducted by Stubbs et al. (2004) on staff's attitude (including that of nurses) to smoking in a large psychiatric hospital in the United States, it was discovered that non-smoking nurses were quite concerned about tobacco's effects on health and had a restrictive attitude towards smoking by MHCUs. However, the nurses who smoked were not keen on encouraging MHCUs to stop smoking as they believed that the MHCUs should be allowed to smoke with the staff to create therapeutic relationship (Stubbs et al., 2004).

2.5 Practices of nurses related to smoking of mental health care users in psychiatric institutions

In a study conducted by Lê Cook et al. (2014) on trends in smoking among adults with mental illness and the association between mental health treatment and smoking cessation in the

United States, it was revealed that tobacco smoking is part of the culture of patients and staff in mental health services. Furthermore, in a study conducted by Gilbody et al. (2019) on smoking cessation among people with severe mental illness in the United Kingdom, it was revealed that because of the smoking culture in mental health services the development and delivery of smoking cessation treatments for patients has not yet improved.

Koukia et al. (2016) state that, in the context of mental illness, consequences of tobacco smoking are extensive, and the majority of the daily workload is carried out by nurses; however, among various specialties, nurses remained with the highest prevalence rate of continuing to smoke at hospitals (Koukia et al., 2016; Vagropoulos et al., 2005).

According to Cooper et al. (2012), tobacco reduction efforts and smoking cessation practices are not common in the field of mental health, and the reasons for their limited uptake are complex. Warner (2009) states that in mental health inpatient settings there are controversies and difficulties that often surround these policies to implement a smoke-free environment. An example of these is the cases of nurses are smokers in Taiwan, where the nurse-patient relationship, interpersonal communication and social skills were promoted by allowing nurses to smoke with patients (Prochaska, 2011). In the UK, staff had their own opinions and false impressions around patients' ability to quit smoking (Gilbody et al., 2019).

According to Kulkarni et al. (2014), there is clear evidence that clinicians (nurses) who work with mental health patients lack the appropriate level of awareness and are not fully equipped to effectively discourage addictive behaviour by MHCUs. Krauth and Apollonio (2015), in their study on state policies requiring smoking cessation therapy in psychiatric hospitals and drug abuse treatment centres in the United States, revealed that some nurses think the risk of relapse among MHCUs is reduced by smoking.

2.6 Conclusion

The main aim of this chapter was to provide a detailed discussion of the literature, legislative framework, theories and empirical studies on the phenomenon being investigated. The main issues discussed in this chapter were the prevalence of tobacco dependence, the knowledge of mental health nurses regarding tobacco dependence among MHCUs, the attitudes of mental health nurses towards strategies and treatment to combat tobacco dependence, and the practices adopted by mental health nurses in treating MHCUs. There is limited knowledge on the impacts or effects of tobacco among healthcare professionals in South Africa outside of their workplace. While studies might have been done on the effects and the long-term overall implications of tobacco use among healthcare professions, this study questions if mental illness, cancer and other supposed tobacco induced illnesses are absolutely caused by tobacco. This is so because in a country that has so many social inequalities and other social pressing issues, mental illnesses might be caused by other factors outside of tobacco. More so, hospitals and clinics are a sensitive area where people die, serious and other gruesome injuries get treated, surely anyone witnessing and attending to such sensitive issues are bound to have serious mental challenges. The chapter concludes by highlighting that there is a knowledge gap related to the effectiveness of the coping strategies adopted by hospitals in South Africa regarding tobacco use.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

This chapter describes the methodology that the researcher followed in the study to answer the research questions and attain the objectives. Grove et al. (2012) define methodology in research as a plan or process for conducting the detailed steps of the study. This chapter will cover the research approach, research design, setting, population of the study, sampling and sample size of the study, inclusion criteria, exclusion criteria, data collection instrument, validity of the instrument, reliability of the instrument, research process, data analysis and ethics.

3.2 Research approach

In this study the researcher employed a quantitative research approach. Polit and Beck (2008) describe a quantitative research approach as an examination of the phenomena that are best conveyed through accurate measurement and/ quantification, often involving a demanding and controlled design. It is used to outline variables, determine origin and interaction among variables and to scrutinise relationships amid variables (Grove, Burns, & Gray, 2012, p. 214). The researcher used questionnaires to collect data and used the SPSS Statistics software version 24 package to analyse the data.

3.2.1 Research design

Research design is defined as a “blueprint for conducting a research study that maximises control over factors that could interfere with the validity of the findings” (Grove et al., 2012, p. 43). Descriptive study design denotes a diversity of designs developed to elicit more information about features within a precise field of study and to provide a picture of circumstances as they happen (Grove et al., 2012. p. 43).

The researcher used a descriptive survey design in this study. According to Wagner, Mendez,

Felderer, Graziotin, and Kalinowski (2020), a survey study is an application of interviews or questionnaires to comparatively large groups of individuals. In this study, information about the characteristics of the knowledge, attitude and practices of mental health nurses related to smoking among MHCUs was provided by the respondents, who replied to questionnaires with the objective of taking a broad view of the findings.

3.3 Setting

Brink et al. (2012) describe a research setting as a specific place or places where data of a specific study is collected. This study was carried out at a selected psychiatric government-funded tertiary hospital in the Western Cape, South Africa. institution where the researcher was employed, the hospital had recently implemented a smoke-free policy in the wards. However, it was not known if the mental health nurses had the necessary knowledge related to tobacco dependence. Also unknown were their attitudes towards tobacco dependence among MHCUs and the practices they implemented to address tobacco dependence among MHCUs) government-funded tertiary psychiatric hospital in the Western Cape, South Africa. The institution consists of 15 wards, which include a variety of specialised units such as forensics, maximum security, acute admissions, general inpatient and outpatient psychiatric services. At the time of data collection, the hospital comprises 370 beds, of which 165 are dedicated to the acute psychiatric service, 145 to forensic psychiatric services and 60 to long-term wards.

3.4 Population and sample

The population, sampling and sample size, inclusion criteria and exclusion criteria are described below.

3.4.1 Population of the study

According to Brink, Van der Walt, and Van Rensburg (2006, p. 123), a population is the entire group of persons or objects that are of interest to the researcher—in other words, those who meet the criteria that the researcher is interested in studying.

In this study, the target population was all mental health nurses, i.e. professional nurses,

enrolled nurses and enrolled nursing auxiliaries working at a selected government-funded tertiary psychiatric hospital in the Western Cape, South Africa. The population number was 169 mental health nurses.



3.4.2 Sampling

According to Brink et al. (2012, p. 132), “refers to the researchers process of selecting the sample from a population in order to obtain information regarding a Phenomenon in a way that represents the population of interest”. In this study the researcher decided to use an all-inclusive sampling technique because of the convenience and not to miss any important admissions because of errors due to size as the number of nurses in the facility was not high in all the wards.

3.4.3 Inclusion criteria

According to Grove, Burns and Gray (2012, p. 353), “inclusion criteria are characteristics that a subject or element must possess to be part of the target population”. In this study, the individuals that were included were all the mental health care nurses that were permanently employed at the selected psychiatric hospital: professional nurses, enrolled nurses, enrolled nursing auxiliaries.

3.4.4 Exclusion criteria

Grove, Burns, and Gray (2012, p. 353) define exclusion criteria as “characteristics that can cause a person or element to be excluded from a large population”. In this study, the head of nursing, area managers and operational managers were excluded because they are not in direct contact with MHCUs. Agency nurses and nursing students were also excluded because they were not permanently employed at the selected psychiatric hospital.

3.5 Data collection

According to Burns et al. (2012), data collection is the organised, accurate collecting of information significant to the research question, specific objectives, or the research purpose of the study.

3.5.1 Data collection instrument

Brink et al. (2012) describe an instrument as a device that is used in a research study to collect data. A self-administered questionnaire (see appendix A) was used to collect the data using a questionnaire adapted from Koukia et al. (2016). The name of the instrument was not specified by its authors. A questionnaire is a self-report form designed to elicit information that can be obtained through written responses from the subject (Grove et al., 2012). The questionnaire used for this study consists of four sections (see Appendix C):

- Section A: Demographic information
- Section B: Practices to address tobacco dependence of MHCUs
- Section C: Knowledge of tobacco dependence, its treatment and its relation to mental illness
- Section D: Attitudes towards tobacco dependence among MHCUs

Section A was answered by completing the following demographic variables: gender, age, race, rank, experience, area and smoking status. Section B was answered by choosing an appropriate answer from a Likert scale, which ranged from 1 to 5, where 1 = strongly agree, 2 = disagree, 3 = uncertain, 4 = agree and 5 = strongly agree. The Likert scale items are assigned a value, ranging from 1 as the most negative response to 5 as the most positive response (Grove et al., 2012). Section C was answered in two different ways: by choosing whether the statement was true or false, or answering the question posed with yes or no. Section D was answered by choosing one of the following responses: yes, no or sometimes.

3.5.2 Validity

Validity is concerned with the accuracy and truthfulness of scientific findings. The **face validity** of the adapted instrument was ensured because the input of the research supervisor

was sought regarding the suitability of the questions (Brink et al., 2012). Where any changes were proposed, the instrument was refined during the pre-testing of the instrument.

Content validity describes the evaluation of how well the tool used portrays all the elements being measured (Brink et al., 2012). The content validity of the instrument used in this study is reflected in the table below.

Table 3.1: Content validity

OBJECTIVES	QUESTIONS
To determine the mental health nurses' practices to address tobacco dependence among MHCUs.	9–14 section B
To measure the mental health nurses' reported knowledge of tobacco dependence, its treatment, and its relation to mental illness.	15–20 section C(a), 21–27 section C(b)
To describe the mental health nurses' attitudes towards tobacco use by MHCUs.	28–37 section D

3.5.3 Reliability

Reliability is concerned with the consistency, stability and repeatability of the informants, as well as the researcher's ability to collect and record information accurately (Brink et al., 2012).

The adapted questionnaire was pretested for internal consistency using the Cronbach's alpha coefficient, which is the statistical procedure used for calculating internal consistency for interval and ratio level data (Grove et al., 2012). The Cronbach's alpha coefficient was 0.79 and the content validity index was 0.91 (Koukia et al., 2016, p. 2).

3.5.4 Research process

The researcher commenced with data collection after the permission was granted from the 1st Higher Degrees Committee. The researcher enquired from the area managers about the next

training meeting of all nursing staff after they were informed about this study. Permission to recruit respondents was requested from the area managers. The recruitment took place during a scheduled nurse training session of the psychiatric hospital, as planned in August 2017. The researcher commenced with the data collection after the training. The aim, objectives, significance of the study, potential benefits and risks, time commitment, anonymity and confidentiality assurances, offer to answer questions and option to withdraw from the study were explained to the potential respondents. Consenting respondents were given the information sheet (Appendix A), consent form (Appendix B) and questionnaires (Appendix C). The researcher allowed the respondents to choose a day on which they would be available and have enough time to complete the consent forms and the questionnaire. The respondents in both shifts chose to complete the documents over a weekend, during lunch time, in the nursing boardroom. After the consent forms and the questionnaires were completed, they were collected and placed in a sealed box to ensure safety and confidentiality.

3.6 Data analysis

The most powerful tool available to the researcher in analysing quantitative data is statistics; without the aid of statistics, the quantitative data would simply be a chaotic mass of numbers (Brink et al., 2012). Data was entered into Microsoft Excel, and it was validated before entry to minimise errors. Errors in data entry were prevented by checking manually during data collection. Double entry of data was done to further prevent data entry errors. The cleaned data was analysed in SPSS Statistics version 24. The categorised data collected was presented in a frequency table so that the outcome of the investigation could be seen categorically.

3.7 Ethics

This study was approved by the Senate Research Committee of the University of the Western Cape (UWC) higher degrees. A letter of approval was given to the researcher by the UWC

Ethics Committee, reference number (BM/17/4/2) Appendix A. The researcher handed in the letter to the Department of Health (DoH) of the Western Cape to seek permission to collect data at the specific hospital, and to the hospital research committee. Permission was granted by the DoH and the hospital for the researcher to continue with the study.

The data will be stored where the researcher is working in his office, locked cupboards. It will be stored for a period of 5 years and will be destroyed by the researcher after 5 years.

According to Babbie & Mouton (2001, p. 518, as cited by Brink et al., 2012), the researcher has the right to search for the truth in the most rigorous way, but never at the expense of the rights of the individuals and communities.

3.7.1 Principle of respect for persons

Individuals are autonomous; that is, they have the right to self-determination (Brink et al., 2012). Respondents had the right to decide whether to participate or not without being forced or threatened, and they also had the right to withdraw. Respondents' right to self-determination was honoured in that they were not coerced to participate. They were informed that participation in the study is voluntary. They also had the right not to answer any questions that caused discomfort, nor did they need to disclose personal information. They were encouraged to ask for clarification about anything that might be unclear to them. Respondents were asked to voluntarily sign a consent form after the researcher had given them the necessary information about the proposed study. They were informed that they could withdraw from the study at any time, should they wish to do so, without sanction or any form of punitive consequences.

3.7.2 Principle of beneficence

Respondents have the right to protection from discomfort and harm, be it emotional, physical, spiritual, psychological, social or legal (Brink et al., 2012).

In this study, the researcher ensured that no discomfort, harm or exploitation would result from

participation in the study. There was a minimal possibility of risk, and respondents were encouraged to inform the researcher about any harm or discomfort if it manifested. Counselling at the University of the Western Cape was offered and available to any respondents who needed it



3.7.3 Principle of justice:

Respondents have the right to fair selection and treatment. The researcher selected respondents fairly, based on the research problem, not because they were readily available or could be easily manipulated (Brink et al., 2012).

3.8 Conclusion

This chapter discussed the research approach, research design, setting, population and sample, inclusion criteria, exclusion criteria, sampling and sample size of the study, data collection, validity, reliability, data analysis and ethics related to the study.



CHAPTER FOUR: RESULTS

4.1 Introduction

The previous chapter provided a detailed explanation of the research methodology and various methods used in the data collection process. This chapter will conduct a detailed analysis of the findings that emerged from the data collection process. The analysis will be conducted in line with quantitative research methods of descriptive statistics (Measures of central tendency).

The findings of the study are presented in this chapter according to the objectives listed below:

1. To determine mental health nurses' knowledge of tobacco dependence among MHCUs.
2. To define mental health nurses' attitude about tobacco dependence among MHCUs.
3. To determine the practices mental health nurses' use to address tobacco dependence among MHCUs.

However, the sample realisation, demographics, and smoking profile are presented first.

4.2 Sample realisation

The total number of mental health nurses working at a selected psychiatric institution was 169. All-inclusive sampling was employed as this number represented the population of mental health nurses working at the selected psychiatric institution. A total of 169 questionnaires were given to the mental health nurses, and a total of 135 mental health nurses completed and returned the questionnaires. Therefore, the response rate was 80%. The 135 submitted questionnaires were checked and had no errors.

4.3 Demographics of the respondents

Demographic information was collected in respect of gender, age, race, nursing category, ward allocation, and years of experience as a nurse.

In the study, n=92 (68%) were women and n=43 (32%) were men. The age range was from 24 to 62 years, and the mean age was 40.53 years (± 10.9) (Table 4.1).

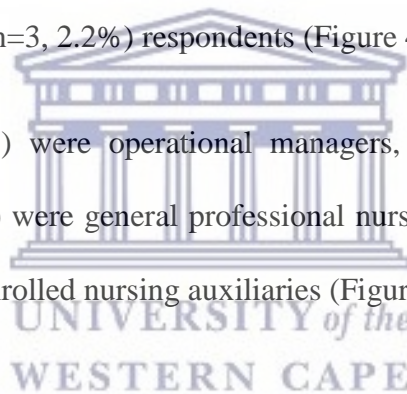
Table 4.1: Age of the respondents

	N	Minimum	Maximum	Mean	Standard deviation
Age in years	135	24	62	40.53	10.92

Gender of respondents

Most of the respondents were black Africans (n=88, 65%), followed by coloured (n=41, 31%), Indian (n=3, 2.2%) and white (n=3, 2.2%) respondents (Figure 4.2).

Of the respondents, n=3 (2%) were operational managers, n=20 (15%) were advanced psychiatric nurses, n=44 (33%) were general professional nurses, n=22 (16%) were enrolled nurses and n=46 (34%) were enrolled nursing auxiliaries (Figure 4.1).



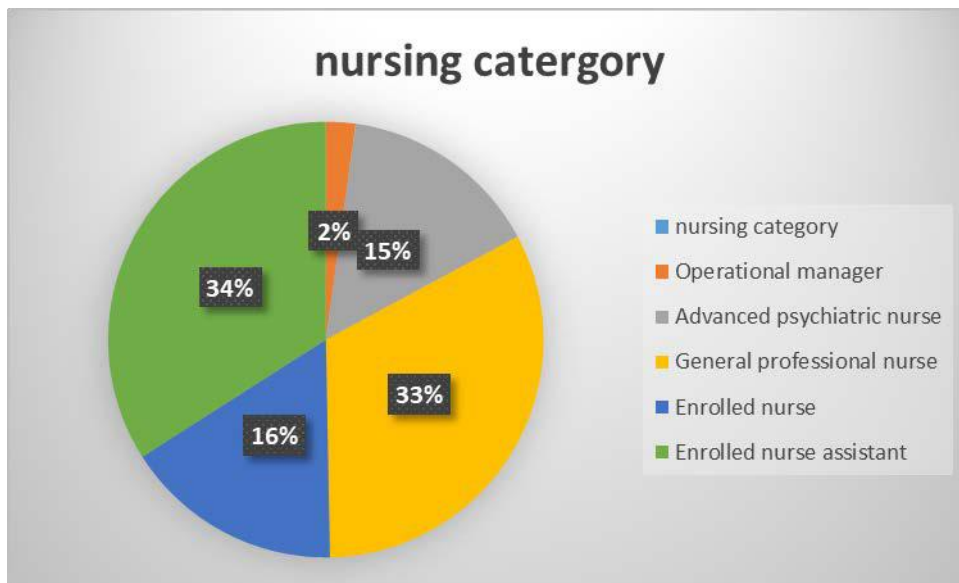


Figure 4.1: Nursing category of the respondents

The minimum number of years of experience is one year and the maximum 38 years, with a mean of 12.08 (± 11.083) years.

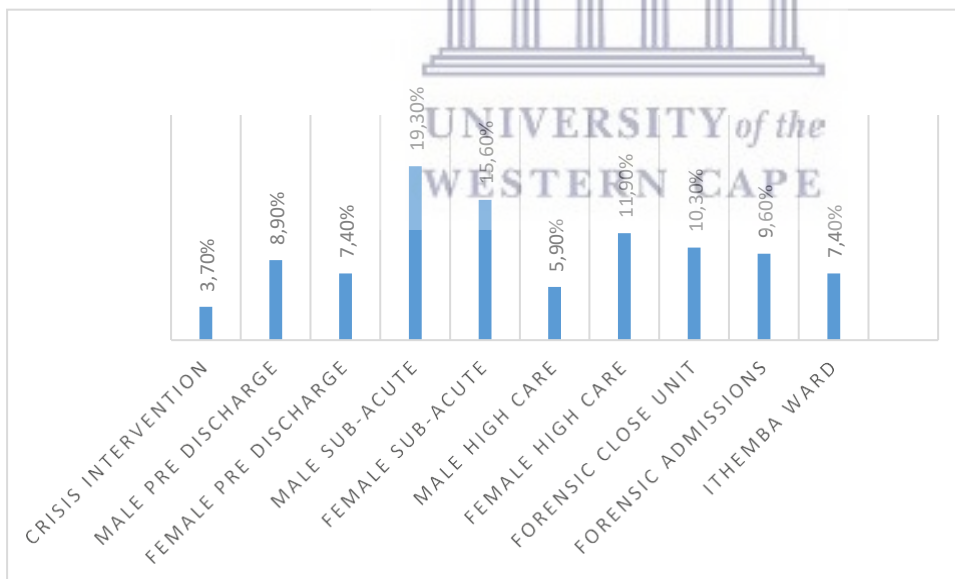


Figure 4.2: Ward allocation of the respondents

4.4 Smoking profile

The respondents' smoking profile includes whether they smoke, the number of cigarettes per day and years of smoking. Of the respondents, $n=25$ (18.5%) admitted they are smokers and

n=110 (81.5%) are non-smokers. The 25 smokers reported smoking between 0 and 20 cigarettes per day, with a mean of 12.1 (± 11.1). The minimum and maximum number of years smoking was less than a year and 30 years respectively, with a mean of 3.04 (± 7.1) of years of smoking.

Table 4.2: Cigarettes per day and years of smoking among mental health nurses

	Smoker m (sd) (n=25)	Non-smoker m (sd) (n=110)	m (sd) (n=135)
Age	44.6 (± 13.1)	39.6 (± 10.2)	40.53 (± 10.9)
Years as a nurse	19.9 (± 13.9)	10.3 (± 9.5)	12.1 (± 11.1)
Number of cigarettes per day	9.2 (± 5.3)	0	1.84 (± 4.3)
Number of years smoking	15.8 (± 8.3)	0	3.04 (± 7.1)

When asked whether they smoked at work, 16 of the 25 answered “yes” and eight answered “sometimes”. The 16 who indicated that they smoked at work stated that there was a smoking room for nurses at work. Of the total number of respondents, 36 (26.7%) also indicated that there was a smoking room for patients to smoke.

4.5 Mental health nurses’ knowledge of tobacco dependence among mental health care users

The knowledge of tobacco dependence among MHCUs was measured using six knowledge questions and three self-perceived rated questions (tables 4.5 and 4.6). Overall, the respondents felt that they had high levels of knowledge about smoking in mental health. Almost all the respondents (n=131, 97%) responded with “yes” to the question, “Do you know the dangers of smoking?” while n=124 (91.9%) responded with “yes” to the question, “Do you know the

dangers of passive smoking?” In response to the question, “Are you aware of the risks of smoking in mental health?”, n=123 (91.1%) responded with “yes”. The findings of the study reflect that mental health nurses were well aware of the dangers of smoking, the dangers of passive smoking and the risks related to smoking within mental health.

Table 4.3: Self- perceived rated knowledge

	YES n (%)	NO n (%)	Total (%)
Do you know the dangers of passive smoking?	124 (91.9%)	11 (8.1%)	135 (100)
Do you know the dangers of smoking?	131 (97.0%)	4 (2.9 %)	135 (100)
Are you aware of the risks of smoking in mental health?	123 (91.1%)	12 (8.9%)	135 (100)

4.6 Measured knowledge of mental health nurses based on true/false statements

The statement with the most correct responses was “Nicotine replacement therapy can be used as an aid for smokers who want to reduce their tobacco consumption”, with almost all (n=116, 85.9%) of respondents responding correctly. The statement to which the highest proportion of respondents responded incorrectly was “Patients who smoke require higher doses of certain psychotropic medication”, with more than three quarters (n=104, 77%) responding incorrectly.

Table 4.4: Measured knowledge

	Correct (%)	Incorrect (%)	Total
Nicotine replacement therapy can be used as an aid for smokers who want to reduce their tobacco consumption.	116 (85.9%)	19 (14.1%)	135
Nicotine replacement therapy can interfere with psychotropic medication.	33 (24.4%)	102 (75.6%)	135
Addiction to nicotine replacement therapy is common.	56 (41.5%)	79 (58.5%)	135
Patients who smoke require higher doses of certain psychotropic medication.	31 (22.9%)	104 (77%)	135
If patients stop smoking, serum levels of psychotropic medication can rise.	36 (26.7%)	99 (73.3%)	135
The recording of patients' smoking status is compulsory.	48 (35.6%)	87 (64.4%)	135

Findings displayed in table 4.4 reflect that 85.9% (n=116) of the respondents believed it was correct that nicotine replacement therapy can be used as an aid for smokers who want to reduce their tobacco consumption, while 14.1% (n=19) stated it was incorrect. In addition, 24.4% (n=33) indicated that it was correct that nicotine therapy can interfere with psychotropic medication, whereas 75.6% (n=102), asserted that it was incorrect.

Furthermore, 41.5% (n=33) indicated that it was correct that addiction to nicotine replacement therapy is common, and 58.5% (n=79) indicated that it was incorrect. In response to the assertion that patients who smoke require higher doses of certain psychotropic medication, 22.9% (n=31) indicated that it was correct and 77% (n=104) indicated that it was incorrect. In response to the statement indicating that, if patients stop smoking, serum levels of psychotropic medication can rise, 26.7% (n=33) indicated that it was correct and 73.3% indicated that it was incorrect (n=99). Finally, 35.6% (n=48) indicated that it was correct that the recording of patients' smoking status is compulsory, while 64.4% (n=87) asserted that it was incorrect

4.7 Attitudes of mental health nurses

The attitudes of mental health nurses were assessed with 11 statements about smoking policy.

A majority of the respondents reported positive attitudes about smoking in mental health. To the question, “Are you worried about the effects of smoking on non-smoking staff and patients?”, nearly all respondents (n=116, 85.9%) responded with “yes”.

Table 4.5: Personal attitudes of mental health nurses

	Yes (%)	No (%)	Total
Are you worried about the effects of smoking on non-smoking staff and patients?	116 (85.9%)	19 (14.0%)	135
Do you believe that smoking or passive smoking may shorten your life?	126 (93.3%)	9 (6.6%)	135
Do you think that protecting staff and patients from second-hand smoke is an important aim?	126 (93.3%)	9 (6.6%)	135
Do patients become agitated if they cannot have cigarettes?	127 (94.1%)	8 (5.9%)	135

Overall, the respondents personally had a positive attitude about smoking in mental health. A vast majority of the respondents answered “yes” to the questions, “Are you worried about the effects of smoking on non-smoking staff and patients” (n=116, 85.9%), “Do you believe that smoking or passive smoking may shorten your life?” (n=126, 93.3%), “Do you think that protecting staff and patients from second-hand smoke is an important aim?” (n=126, 93.3%), and “Do patients become agitated if they cannot have cigarettes?” (n=127, 94.1%).

Mental health nurses’ beliefs were measured with seven questions. The highest level of agreement among respondents was with the question, “Do you think that managing nicotine dependence should be part of the therapeutic programme?”, with more than three quarters of respondents responding with “yes” (n=102, 75.5%), about an eighth (n=17, 12.5%) responding

with “no” and only n=16 (11.8%) responding with “sometimes”. The lowest level of agreement was with the question, “Should the no smoking policy be applied to patients in psychiatric hospitals?”, with just over a third (n=50, 37.0%) of respondents responding with “yes”, n=12 (8.8%) responding with “sometimes”, and a majority (n=73, 54.0%) responding with “no”.

As reflected by table 4.6, 75.5% (n=102) of the respondents agreed that managing nicotine dependence should be part of the therapeutic programme, while 11.8% (n=16) answered “sometimes” and 12.5% (n=17) gave a “no” response. In addition, 75.5% (n=102) reacted with a “yes” response to the question of whether a smoking room for patients should exist, while 17.7% (n=24) answered “sometimes” and 21.4% (n=29) answered “no”. Nearly two thirds (65.1%, n=88) also answered “yes” to the question of whether nurses should have a smoking room for themselves; 2.9% (n=4) answered “sometimes” and 31.8% (n=43) answered “no”. In response to the question, “Should the no smoking policy be applied to mental health nurses working in psychiatric hospitals, 49.6% (n=67) answered “yes”, 2.9% (n=4) answered “sometimes”, and 47.4% (n=64) answered “no”. Regarding the no-smoking policy in psychiatric hospitals, 40.1% (n=55) agreed, 5.9% (n=8) said “sometimes”, and 53.3% (n=72) disagreed. Just over a third (37.0%, n=50) agreed that the no-smoking policy should be applied to patients in psychiatric hospitals, 8.8% answered “sometimes” (n=12) and 54.0% (n=73) answered “no”. Finally, 42.9% (n=58) agreed that the no-smoking policy should be applied to psychiatric patients in psychiatric hospitals 5.1% (n=7) answered “sometimes” and 51.8% (n=70) answered “no”.

Table 4.6: Beliefs about smoking policy

Items	Yes	Sometimes	No	Total
Do you think that managing nicotine dependence should be part of the therapeutic programme?	102 (75.5%)	16 (11.8%)	17 (12.5%)	135 100%
Do you believe that a smoking room for patients should exist?	102 (75.5%)	24 (17.7%)	29 (21.4%)	
Do you believe that a smoking room for nurses should exist?	88 (65.1%)	4 (2.9%)	43 (31.8%)	
Should the no-smoking policy be applied to mental health nurses working in psychiatric hospitals?	67 (49.6%)	4 (2.9%)	64 (47.4%)	
Do you agree with the no-smoking policy in psychiatric hospitals?	55 (40.1%)	8 (5.9%)	72 (53.3%)	
Should the no-smoking policy be applied to patients in Psychiatric hospitals?	50 (37.0%)	12 (8.8%)	73 (54.0%)	
Should the no-smoking policy be applied to psychiatric patients in psychiatric hospitals?	58 (42.9%)	7 (5.1%)	70 (51.8%)	

4.8 Smoking prevention practices of mental health nurses

This section included questions to determine both individual and ward practices to prevent smoking among MHCUs.

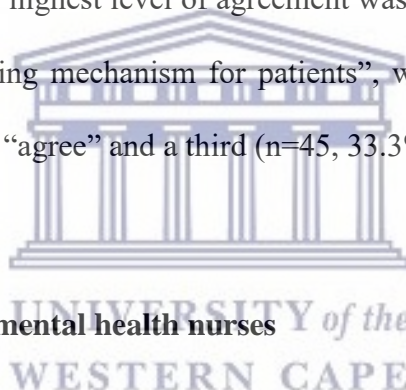
Smoking prevention practices of mental health nurses

The highest level of agreement was with the statement, “I feel it lies within the scope of my responsibility as a mental health practitioner to address patients’ smoking habits”, with almost two thirds of respondents (n=85, 63.0%) responding with “agree” and just over a third (n=50, 37.0%) responding with “disagree” (Table 4.8).

Table 4.7: Smoking prevention practices of mental health nurses

Items	Agree n (%)	Disagree
I routinely assess patients' smoking status.	72 (53.3%)	63 (46.7%)
I routinely ask patients about their motivation to quit smoking.	76 (56.3%)	58 (43.0%)
I feel it lies within the scope of my responsibility as a mental health practitioner to address patients' smoking habits.	85 (63.0%)	50 (37.0%)
Addressing patients' tobacco smoking would not have an adverse effect on the therapeutic relationship.	70 (51.9%)	65 (48.1%)

Considering ward practices, the highest level of agreement was with the statement, "Smoking is viewed as an important coping mechanism for patients", with two thirds of respondents (n=90, 66.7%) responding with "agree" and a third (n=45, 33.3%) responding with "disagree" (Table 4.9).

**Table 4.8: Ward practices of mental health nurses**

Items	Agree n (%)	Disagree n (%)
Smoking is viewed as an important coping mechanism for patients.	90 (66.7%)	45 (33.3%)
Access to treatment to stop smoking and support are readily available in my ward (e.g., nicotine patches or gum).	71 (52.6%)	64 (47.4%)
Is there a smoking room for nurses to smoke?	16 (11.9%)	119 (88.1%)
Is there a smoking room for patients to smoke?	36 (26.7%)	99 (73.3%)

The findings of the study reveal that there are different smoking prevention practices adopted by nurses. These prevention practices include routine checks on mental health patients, routinely assessing patients' smoking status, routinely asking patients about their motivation to

quit smoking, taking responsibility as a mental health practitioner to address patients' smoking habits, and understanding that addressing patients' tobacco smoking would not have an adverse effect on the therapeutic relationship. In addition, 54% (n=72) agreed that they routinely assess patients' smoking status, while 46% (n=63) disagreed.

In addition, 56,3% (n=76) stated that they routinely ask patients about their motivation to quit and 43,0% (n=58) disagreed. In addition, about 63% (n=85) feel that it was part of their responsibility as mental health practitioner to address smoking habits among patients, while 37% (n=50) disagreed. Lastly 51,9% noted that they understood that addressing patients' tobacco smoking would not have impact on the therapeutic relationship. In addition, with regard to ward practices of mental health nurses. 66,7% (n=90) perceived smoking as an essential coping mechanism for patients, while 33,3% (n=45) disagreed.

In response so the statement, "Access to treatment to stop smoking and support are readily available in my ward", 52% (n=71) agreed, while 47.4% (n=64) disagreed. Furthermore, only 11.9% (n=16) agreed that there is a smoking room for nurses to smoke, while 88.1% (n=119) disagreed. Lastly, 26.7% (n=36) agreed that there is a smoking room for patients to smoke, while 73.3% (n=99) disagreed. As explained earlier, mental health nurses play a crucial role in addressing smoking and tobacco addiction among mental health patients. They do so through various smoking prevention practices.

4.9 Conclusion

The main aim of this chapter was to present the findings of the study. The data for the study was collected through a survey questionnaire, which is one of the most common methods for collecting within quantitative research. In addition, the data for this study has been presented in a descriptive manner and inferences were drawn from the observations. The following chapter will provide a detailed discussion of the research findings.

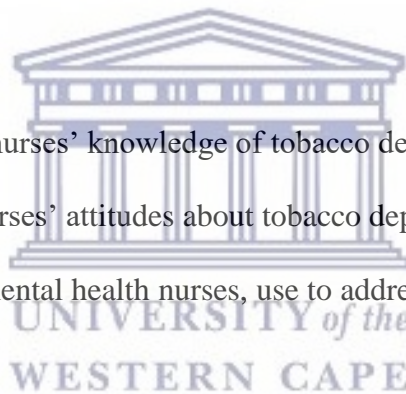
CHAPTER FIVE: DISCUSSION OF FINDINGS

5.1 Introduction

The previous chapter provided an analysis of the data that was collected through a survey questionnaire. This chapter aims to provide a discussion of the findings. The findings of the study reflect that mental health nurses play a crucial role in addressing smoking habits among MHCUs and patients. However, as reflected within the literature and the findings, this is mainly influenced by their knowledge of, and attitudes towards well-established practices and strategies for smoking cessation in mental health patients.

The discussion of the findings is presented in this chapter according to the objectives listed below:

1. To determine mental health nurses' knowledge of tobacco dependence among MHCUs.
2. To describe mental health nurses' attitudes about tobacco dependence among MHCUs.
3. To determine the practices mental health nurses, use to address tobacco dependence among MHCUs.



5.2 Knowledge of mental health nurses

Determining mental health nurses' knowledge of tobacco dependence among MHCUs is essential. The findings of the study revealed that, overall, the respondents felt they had high levels of knowledge about smoking in mental health. Almost all the respondents (n=131, 97%) responded with "yes" to the question, "Do you know the dangers of smoking?" Almost all the respondents (n=124, 91.9%) indicated that they know the dangers of smoking. In relation to being aware of the risks of smoking in mental health, almost all respondents (n=123, 91.1%) responded with "yes". These findings reveal that mental health nurses are aware of the dangers of smoking to MHCUs.

Other studies have shown similar findings, including one by Koukia et al. (2016), who revealed that mental health nurses had knowledge about tobacco dependence among mental health patients (96%) and that they felt it was their responsibility to assist patients to quit smoking (34%). Another study with similar findings was one by Al-Juboori and Abbas (2017), who evaluated nurses' knowledge about substance abuse at psychiatric teaching hospitals in Baghdad City and revealed that 57% of the respondents had a good level of knowledge about smoking, 41% had a good level of knowledge about alcohol, and 42% had a weak level of knowledge about drugs.

Other studies have adopted qualitative research approaches and have findings consistent with this study. For example, a qualitative study by Banu (2018) examined nurses' attitudes and self-efficacy in smoking cessation care among mental health patients. Respondents noted that knowledge of smoking prevention practices is crucial to curb tobacco addiction among mental health patients. Their findings reveal that this knowledge is influenced by smoking prevention-related training.

There have also been studies with findings inconsistent with the main findings of this study in relation to the knowledge of mental health nurses on the dangers of smoking on MHCUs. These include a study by Ratschen et al. (2009), who examined mental health professionals' knowledge and attitudes on a smoke-free policy and revealed that 41% of doctors were unaware that smoking can reduce blood levels of antipsychotic medications, and 36% were unaware that stopping smoking could decrease the dose needed. Staff overestimated the prevalence of smoking in the general. The findings of a study by Kulkarni et al. (2014) are also inconsistent with those of the current study. They reveal differences in general awareness among clinicians employed in specialist child and adolescent mental health services in England regarding nicotine dependency, its treatment and its connection to mental illness.

The findings of this study also reveal that less than half (48.3%) of respondents believed that addressing smoking was part of their responsibility, and half (50%) asserted that they are confident in supporting patients in a cessation attempt. Misconceptions relating to smoking were present across all staff groups: e.g., only 40% of respondents were aware of potential interactions between smoking and antipsychotic medications, although psychiatrists were more knowledgeable than non-medical clinicians (91.6% vs 27.1%; OR 3.4, $p < .001$) meaning to say there is a significantly positive relationship between smoking and antipsychotic medications. Self-reported attendance at smoking-related training was significantly associated with more proactive clinical practice. Another with findings inconsistent with those of this study is one by Williams et al. (2015), who examined the effect of increasing tobacco dependence treatment through consistent education training for mental health professionals, and revealed that without some form of training, mental health nurses' knowledge of tobacco dependence among MHCUs is poor. Their findings reveal that mental health nurses do not score better than non-medical behaviour health professionals (about 50% correct) on questions about evidence-based pharmacotherapy for tobacco dependence. The findings also reveal improvement in mental health nurses' knowledge about tobacco dependence among mental health patients. Most (89%, $n=16$) endorsed the notion that smoking is a chronic, relapsing disorder; however, some acknowledged they did not know that use of nicotine replacement medication increases success in quitting (17%, $n=3$) and is cost-effective (44%, $n=8$).

5.3 Attitudes of mental health nurses

The findings of the study reveal positive attitudes about the need to combat the impact of smoking. Almost all respondents ($n=116$, 85.9%) responded with "yes" to the question

of whether they are worried about the effects of smoking on non-smoking staff and patients, and almost all (n=126, 93.3%) responded with “yes” to that on believing that smoking or passive smoking may shorten your life. Furthermore, almost all respondents (n=126, 93.3%) responded with “yes” to the question on whether protecting staff and patients from second-hand smoke is an important aim, and almost all (n=127, 94.1%) responded with “yes” to that on whether patients become agitated if they cannot have cigarettes.

Most studies conducted on the attitudes of mental health nurses towards smoking have findings that are inconsistent with those of this study. For instance, the study by Koukia et al. (2016) revealed that half of psychiatric nurse’s smoke in their work environment (yes: p=37.4% indicating the percentage of nurses and sometimes: p=10.1% indicating a lower percentage but would also likely mean depending on the situation. The percentage rather highlights the fluctuation number dependent on the situation obtaining) and are against the application of the anti-smoking law in psychiatric hospitals (p=42.4%) highlights those against the anti-smoking being enforced in psychiatric hospitals. The respondents also believed that psychiatric patients should be handled different from other patients, even though they are aware of the dangers of smoking (p=56.6%).

Another study with inconsistent findings is one by Sheals, Tombor, McNeill, and Shahab (2016), who conducted a mixed-method systematic review and meta-analysis of mental health professionals' attitudes toward smoking and smoking cessation among people with mental illnesses. Their findings revealed negative attitudes towards smoking cessation, with 45.0% (95%, CI=31.9–58.4) of respondents holding permissive attitudes towards smoking. They also noted the commonly held beliefs that patients are not interested in quitting (51.4%, 95%, CI=33.4–69.2) and that quitting smoking is too much for patients to take on (38%, 95%, CI=16.4–62.6).

Qualitative findings were similar to quantitative results, revealing a culture of smoking as “the norm” and a perception of cigarettes as a useful tool for patients and staff. The findings of a study by Connolly et al. (2013), who examined mental health nurses’ beliefs about smoking by mental health facility inpatients, were inconsistent with those of this study. They revealed that mental health nurses have permissive attitudes towards smoking, such as the belief that smoking with patients can help build a therapeutic relationship and that allowing patients to smoke ensures smoother running of wards in inpatient settings.

Yet another study whose findings are consistent with those of this study is one by Sharma, Meurk, Bell, Ford and Gartner (2017), who examined attitudes towards encouraging smoking cessation and tobacco harm reduction for mental health patients in Australia, and revealed that many practitioners (77.5%) questioned their clients about smoking and offered health education (66.7%), but fewer (31.1%–39.7%) offered direct assistance. Their findings also revealed that most respondents claimed that tobacco harm reduction measures were successful in minimising the risks associated with smoking (88.45%) and that abstinence from all nicotine should not be the only priority addressed with smokers who have severe mental illness (77.9%). Many respondents were sceptical about the safety (56.9%) and effectiveness (39.3%) of e- cigarettes.

5.4 Practices of mental health nurses

Psychiatric settings. Their study revealed the following evidence-based treatments for tobacco dependence: clinician advice, which doubles the likelihood of smokers quitting; individual counselling; telephonic counselling; group programmes; and pharmacotherapy (nicotine replacement therapy (NRT), bupropion, varenicline, etc.). All available forms of NRT have proved to be effective and to increase the rate of quitting by 50% to 70%, regardless of setting and largely independent of the intensity of additional support provided. The findings of this study reveal that there are various

smoking prevention practices adopted by nurses. These include routine checks on mental health patients, routinely assessing patients' smoking status, routinely asking patients about their motivation to quit smoking, taking responsibility for addressing patients' smoking habits, and understanding that addressing patients' tobacco smoking would not have an adverse effect on the therapeutic relationship. In terms of the prevalence of these practices, 54% (n=72) agreed that they routinely assess patients smoking status, while 46% (n=63) disagreed; 56.3% (n=76) agreed that they routinely ask patients about their motivation to quit and 43.0% (n=58) disagreed; 63% (n=85) felt that it was part of their responsibility as mental health practitioners to address smoking habits among patients, while 37% (n=50) disagreed; and 51.9% noted that they understood that addressing patients' tobacco smoking would not have impact on the therapeutic relationship. Regarding the ward practices of mental health nurses, 66.7% (n=90) perceived smoking as an essential coping mechanism for patients, while 33.3% (n=45) disagreed.

However, it should be noted that the Tobacco Products Control Act of 1993 remains the principal tobacco control law in South Africa. The act bans most tobacco advertising, but there are exemptions. For example, tobacco products are allowed to be visible at point of sale, but customers are prohibited from handling tobacco products prior to sale. Designated smoking areas in indoor workplaces, public places, and public transport are allowed. For workplaces and other specified public spaces, up to 25 percent of floor space may be set aside as a permitted smoking area. Legislation requires that 15 percent of the front of a cigarette package and 25 percent of the back, display text-only health warnings. Misleading packaging and labelling are prohibited.

Established through the Tobacco Products of 1993 amended in 2008, South Africa has a ban on tobacco advertisements and smoking in public places. Amended in 2008, the act increased the age of sale from 16 to 18 years old and banned tobacco sales at health and educational establishments. Smokeless tobacco and heat-not-burn products are regulated as tobacco products, but e-cigarettes are not specifically prohibited by legislation and are subject to medical regulations. However, in practice,

this is not strongly regulated, and vaping products are widely available.

5.5 Conclusion

The main aim of this chapter was to provide a detailed discussion of the research findings, which was done through integration of empirical studies on the attitudes that mental health nurses have towards smoking cessation among MHCUs and patients. The discussion reflects that these attitudes affect how mental health nurses regard essential practices and strategies for addressing tobacco addiction among mental health patients. Whether they perceive these practices as effective or not depends on their attitudes.



CHAPTER SIX: CONCLUSION, SUMMARY OF FINDINGS AND RECOMMENDATIONS

6.1 Introduction

The previous chapter provided a discussion of the main findings from the data collection. This chapter will conclude the research and present recommendations. Significantly, the chapter will also reflect on the issues that should be explored in future research.

6.2 Limitations

The research study was limited to one institution because of time and financial constraints. For this reason and because of the small sample size, the findings cannot be generalised.

6.3 Recommendation

6.3.1 Clinical practice

- A no-smoking zone of 100 metres from and within the vicinity of mental health facilities should be adopted.
- Mental health prevention practices should be aligned with smoking policies to create harmony.
- Mental health facilities (clinics, psychiatry centres and hospitals) should have occasional workshops where issues are always reviewed so that they are streamlined in line with what employees prefer.

6.3.2 Nursing education

It is important to adopt and implement educational programmes which ensure that mental health nurses are aware of their role in smoking prevention. This will generate positive attitudes towards smoking prevention practices. Mental health nurses should be educated about their essential role in preventing tobacco dependence among MHCUs.



6.3.3 Research

Research on the role of mental health nurses in smoking prevention practices should adopt other research strategies, like mixed methods and qualitative research, to explore in depth the attitudes of mental health nurses towards smoking prevention practices.

6.4 Conclusion

The aim of this study was to investigate mental health nurses' knowledge, attitude and practices related to tobacco dependence among MHCUs at a psychiatric institution in the Western Cape. The findings of the study reveal mental health nurses had good knowledge on tobacco dependence among MHCUs and that they had positive attitudes regarding the need to combat tobacco dependence among MHCUs.

This is revealed through their knowledge on the dangers of smoking to MHCUs. The quality of training influences knowledge, which in turn cultivates a positive attitude regarding the need to combat tobacco and smoking addiction among MHCUs. There is also difference between the attitudes of non-smokers and those of smokers regarding the treatment of nicotine and tobacco dependence in MHCUs. However, there seems to be a contradiction on the approach that should be adopted in combating tobacco dependents with nurses that smoke favouring a more lenient approach, and those that do not smoke wanting to adopt a more radical approach. Those who do not smoke tend to perceive combating nicotine dependence as essential. A recommendation is that some form of training for mental health nurses is needed to cultivate positive attitudes towards strategies meant to curb smoking addiction.

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APPENDICES

APPENDIX A: ETHICAL APPROVAL CERTIFICATE

25 May 2017

Mr X Sigenu

School of Nursing

Faculty of Community and Health Sciences

Ethics Reference Number: BM/17/4/2

Project Title: Mental health nurses' knowledge, attitude and practices related to tobacco dependence among mental health care users in a psychiatric institution in the Western Cape.

Approval Period: 19 May 2017 – 19 May 2018

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



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

Please remember to submit a progress report in good time for annual renewal.

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

A handwritten signature in black ink, appearing to read "Patricia Josias".

Ms Patricia Josias

Research Ethics Committee Officer University of the Western Cape

PROVISIONAL REC NUMBER -130416-050

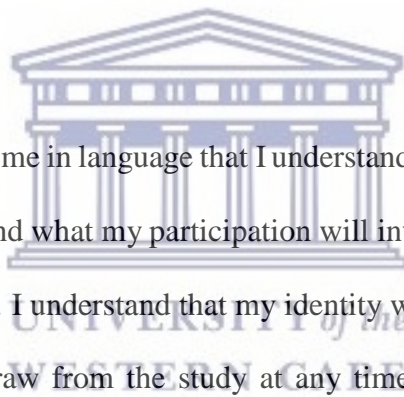
www.etd.uwc.ac.za

APPENDIX B: INFORMED CONSENT FORMS

CONSENT FORM

Title of Research Project

Mental health nurses' knowledge, attitude and practices related to tobacco dependence among mental health care users in a psychiatric institution in the Western Cape.



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

Participant's name.....

Participant's signature.....

Date.....

APPENDIX C: QUESTIONNAIRE

QUESTIONNAIRE: Mental health nurses' knowledge, attitude and practices related to tobacco dependence among mental health care users

Thank you for taking the time to complete the questionnaire. Once you have completed all the questions, please seal the questionnaire with the consent form in the self-addressed envelope and keep it until the researcher returns to collect it from you.

It will take about 20 minutes to complete.

Please place a tick \surd in the box that best represents your agreement or disagreement with each statement.

SECTION A: Demographic Data



Participant Number

1. Date

2. Gender

Male	Female
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3. Age in years

4. Race

Black	Coloured	Indian	White	Other
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5. Specify whether you are:

Advance Psychiatric Nurse	General Professional Nurse	Enrolled Nurse Assistant	Enrolled Nurse	Operational Manager

6. How long have you been working as a nurse (in years)? _____

7. Do you smoke? Yes No

a. If **yes**, write *how many cigarettes* do you per day _____

b. Fill in the number of years you haven been smoking cigarette _____

8. Please tick the box that describes the department you presently are working in

Ward	
1-Crisic intervention	
2-Male Pre-discharge	
3-female Pre-discharge	
4-Male Sub-Acute	
5-Female-Sub- Acute	
6-Male -Sub- Acute	
7-Male Sub-Acute	
8-Female-Sub-Acute	
9-Male High Care -Acute	
10-Female High Care-Acute	
11A-Forensic-Close Ward	
11B Forensic -close ward	
12-Forensic-Close Ward	
13-Forensic Admissions	

Section B: Practices to address tobacco dependence of mental health care users

Please indicate how much you agree or disagree with each of the following statements.

The position of the number you choose to encircle will depend on how strongly you feel about the statement. The more you agree with the statement the closer your number choice will be to the strongly agree statement. On the other hand, the more you disagree with the statements the closer your number choice will be to the strongly disagree.

(1) Strongly Disagree (2) Disagree (3) Uncertain (4) Agree (5) Strongly Agree

9. I routinely assess patients smoking status	1	2	3	4	5
10. I routinely ask patients about their motivation to quit smoking	1	2	3	4	5
11. Smoking is an important coping mechanism for patients.	1	2	3	4	5
12. Access to treatment to stop smoking and support are readily available in my ward e.g. nicotine patches or gums	1	2	3	4	5
13. I feel it lies within the scope of my responsibility as a mental health professional to address patients smoking habits	1	2	3	4	5
14. Addressing patients smoking would not have an adverse effect on the therapeutic relationship	1	2	3	4	5

Section C: knowledge of tobacco dependence, its treatment, and its relation to mental illness.

Please indicate whether the following statements (22-27) are true or false

	<u>TRUE</u>	<u>FALSE</u>
15. Nicotine Replacement Therapy can be used as an aid for smokers who want to reduce their tobacco consumption		
16. Nicotine Replacement Therapy can interfere with psychotropic medication		
17. Addiction to Nicotine Replacement Therapy is common		
18. Patients who smoke require higher doses of certain psychotropic medication		
19. If patients stop smoking, serum levels of psychotropic medication can rise		
20. The recording of patients smoking status is compulsory		

	<u>YES</u>	<u>NO</u>
Please indicate if you agree with the following statements by choosing either the 'yes' or 'no' response.		
21. Do you know the dangers of passive smoking?		
22. Are you aware of the risks of smoking in mental health?		
23. Do you know the dangers of smoking?		
24. Are you worried about the effects of passive smoking on non-smoking staff and patients?		
25. Do you believe that smoking or passive smoking may shorten your life?		
26. Do you think that protecting patients and staff from second-hand smoke is an important aim?		
27. Do patients become agitated if they cannot have cigarettes?		

Section D: Nurses attitudes toward tobacco use by mental health care users.			
Please indicate whether you agree with the following statements by choosing a response from 'yes', 'no' or 'sometimes'.	<u>Yes</u>	<u>No</u>	<u>Sometimes</u>
28. Do you think that managing nicotine dependence should be part of the therapeutic programme?			
29. Do you smoke at work?			
30. Is there a smoking room for nurses to smoke?			
31. Is there a smoking room for patients to smoke?			
32. Do you believe that a smoking room for patients should exist?			
33. Do you believe that a smoking room for nurses should exist?			
34. Should the no smoking policy be applied to mental health nurses working in psychiatric hospitals?			

35. Do you agree with the no-smoking policy in psychiatric hospitals?			
36. Should the no-smoking policy be applied to psychiatric patients in psychiatric hospitals?			
37. Should the no-smoking policy be applied to mental health nurses in psychiatric hospitals?			



Thank you for taking the time to complete this questionnaire.

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