MENTAL HEALTH LITERACY AMONG PRIMARY HEALTHCARE NURSES IN THE DR RUTH SEGOMOTSI MOMPATI DISTRICT

Submitted by

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Declaration

I, Mmatlou Gabriel Morifi, declare that the Master's Degree research dissertation that I herewith submit for the Master of Nursing (MNursing) at the University of the Free State, is my independent work, and that I have not previously submitted it for a qualification at another institution of higher education. I further cede copyright of this research in favour of the University of the Free State.

SIGNATURE: _____ DATE: 29/11/2023

i

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Abstract

Mental health literacy among primary healthcare nurses in the Dr Ruth Segomotsi Mompati district

Mental health literacy (MHL) is the ability to recognise, manage and prevent mental health disorders. Primary healthcare (PHC) nurses provide mental health services in the PHC facilities to all patients seeking help, even though many of them do not have adequate levels of MHL. The study aimed to describe and explore the MHL of PHC nurses in Dr Ruth Segomotsi Mompati (Dr RSM) district. Studies are done worldwide on MHL; few are found in South Africa (SA), while no study is in the Dr RSM district in the North West province of SA.

A quantitative research methodology, utilising cross-sectional and descriptive methods, was used for this study. Eighty-four participants participated by completing questionnaires. The PHC workers who participated in the study all worked at PHC facilities in the Dr RSM district, North West province. The PHC nurses who participated gave informed consent by signing a consent form before participating in the study. The language used for this study was English. MHL questionnaires were used for data collection from participants working at PHC facilities in Dr RSM. The collected data was captured in Excel.

Data analysis was done with the help of a biostatistician at the University of the Free State. The data analysis was done on the ability to recognise depression, suicidal thoughts, schizophrenia, anxiety disorders, and post-traumatic disorders using vignettes (scenarios). Most of the participants demonstrated good MHL by recognising these mental disorders, with an above-average percentage. They correctly identified suitable healthcare professionals for the management of mental disorders but also thought that clergy, ministers, or priests could assist. Psychotherapy and physical activities were believed to be helpful for the prevention of mental disorders, while some of the participants incorrectly indicated that alcohol would be helpful.

The recommendations include that all PHC nurses undergo the necessary mental health training to have an adequate MHL when providing mental health services. There should be six-month refresher courses for those with mental health nursing qualifications. PHC nurses interested in the field should be allowed to specialise in mental health. Mental health awareness campaigns should be mandatory at each PHC facility. There should also be collaboration with stakeholders outside of the healthcare sphere who are consulted for mental disorders.

Conceptual and operational definitions (or clarifications)

Mental health literacy

Mental health literacy (MHL) was initially defined as “individuals’ knowledge and beliefs about mental disorders that aid their recognition, management, and prevention" (Jorm, Korten, Jacomb, Christensen, Rodgers & Pollitt, 1997:182). Bjørnsen, Espnes, Eilertsen, Ringdal and Moksnes (2019:108) state that the latest explanation of MHL outlined four key components: “(1) understanding how to obtain and maintain good mental health, (2) understanding mental disorders and their treatments, (3) decreasing stigma related to mental disorders, and (4) enhancing help-seeking efficacy”. For this study, MHL refers to primary healthcare nurses’ awareness, knowledge and belief about mental disorders, prevention, recognition, and treatment of mental disorders. MHL will be assessed using a MHL questionnaire developed by Professor Jorm.

Primary healthcare nurse

The World Health Organization (WHO) (2019: online) states that primary healthcare (PHC) is centred on achieving the health needs of the public, including mental health needs. PHC includes promoting health, preventing illnesses, treating diseases and distributing medication (Clarke, 2014:2-3). The study will be done amongst groups of PHC nurses. In South Africa, there are three groups of nursing: the nursing assistant, the enrolled nurse, and a registered nurse (Maidment, 2018: online). The *Nursing Act 33 of 2005* states that PHC nurses in the PHC setting, such as clinics or community healthcare centres, provide PHC services. For the aim of this study, a PHC nurse will refer to all nurse categories working in the PHC settings of the Dr Ruth Segomotsi Mompati (Dr RSM) district in the North West province.

Table of Contents

List of Tables

List of Figures

List of abbreviations

Dr RSM	Dr Ruth Segomotsi Mompati
HSREC	Health Sciences Research Ethics Committee
LHE	Life Healthcare Esidimeni
MHCU	Mental Health Care User
MHF	Mental Health Foundation
MHL	Mental Health Literacy
MHNs	Mental Health Nurses
NGO	Non-Governmental Organisation
PHC	Primary Healthcare
PRPHC	Public rural primary healthcare
SANC	South African Nursing Council
WHO	World Health Organization

Chapter 1

Overview of the study

1.1 Introduction

Mental health literacy (MHL) is as critical as general health literacy in sustaining a mentally healthy community by acting on knowledge or awareness of a mental health disorder by primary healthcare nurses. The initial definition of MHL refers to recognising or identifying, managing, and preventing mental health disorders (Jorm, Korten, Jacomb, Christensen, Rodgers & Pollitt, 1997:182) timeously from people seeking help at primary healthcare facilities. This allows the community to identify mental disorders and consult primary healthcare facilities (Gilbert, 2019: online). According to Al-Yateem, Rossiter, Robb, Ahmad, Elhalik, Albloshi and Slewa-Younan (2017:2), this term also relates to healthcare professionals, including primary healthcare nurses, who "need adequate knowledge and understanding of the nature and treatment of mental health problems," demonstrating sufficient MHL.

As stated above, Bjørnsen *et al*. (2019:108) define four MHL components, namely (1) understanding how to obtain and maintain good mental health, (2) understanding mental disorders and their treatments, (3) decreasing stigma related to mental disorders, and (4) enhancing help-seeking efficacy. There is an indication that MHL may not only relieve the burden on mental health and social care services but may also decrease mental health inequalities (Goldie, Elliott, Regan, Bernal, & Makurah, 2016:8; Jacob & Coetzee, 2018:180). The assumption is that primary healthcare (PHC) nurses who are knowledgeable about mental health disorders could improve mental health service delivery, possibly reducing the mental health burden and ensuring a mentally healthy community. PHC nurses with adequate mental healthcare knowledge suggest that higher levels of MHL could impact mental healthcare effectively (Dube & Uys, 2016:124; Minty, Moosa & Jeenah, 2021:8).

There are about 450 million individuals worldwide who are affected by mental disorders, and 25% of the entire global population will be affected by mental disorders at an unspecified time in the future (Venkataraman, Patil & Balasundaram, 2019:2726). The World Health Organization (WHO) (WHO, 2022a: online) reports that "one in four people will be affected by a mental health disorder at some point in their lives" and that they seldom seek help from a health professional. Mental health disorders add about 13% to the global

burden of disease, and in South Africa, 16.5% of adults are affected by mental health disorders. Furthermore, due to staff shortages, most individuals are attended to by nurses without mental health training (Dube & Uys, 2015:1-2) working in PHC settings.

De Kock and Pillay (2016:4) report "a distressing shortage of Mental Health Nurses (MHNs) in South Africa's rural public areas. Only 62 (38.7%) of the 160 public facilities employ MHNs, totalling 116 MHNs. These MHNs serve an estimated population of more than 17 million people, suggesting that MHNs are employed at a rate of 0.68 per 100 000 populations in South Africa's public rural primary healthcare (PRPHC) areas". Due to the lack of qualified MHNs, the current PHC workforce, consisting of all nurse categories, has to treat patients with various conditions, including those with mental disorders (Dube & Uys, 2015:2; Ayano, Assefa, Haile, Chaka, Haile, Solomon, Yohannis, Awoke, & Jemal, 2017:2), but they do not regard mental health as their primary concern (Wakida, Obua, Rukundo, Mailing, Talib & Okello, 2018:6). Not all these nurse categories in South Africa have been adequately trained in mental healthcare. Still, they have to deliver mental health services to mental healthcare users (MHCUs) in the PHC facilities. There is a danger that they do not have sufficient MHL, which might lead MHCUs to believe that traditional healers may provide better care in some communities (Wakida *et al*., 2018:8), posing a risk for MHCUs that seek alternative interventions.

Studies conducted in Nigeria, China, India, and other countries mention the belief that mental illness is caused by evil spirits or other supernatural agents (Venkataraman *et al*., 2019:2726). Due to these perceptions, many MHCUs, particularly in developing countries, first consult with non-healthcare professionals service providers such as homoeopaths and religious or traditional healers (Aluh, Anyachebelu, Anosike & Anizoba, 2018:1; Suhail, 2005:167), implying that the public also has low MHL (Tesfaye, Agenagnew, Anand, Tucho, Birhanu, Ahmed, Getnet & Yitbarek, 2021:8). Hence, there is a need to improve the MHL of primary healthcare nurses through training, and also to educate the public (Wang, Jia, Shi, Sun, Zhu, Shen, Dayu & Chen, 2023:08; Hao, Wu, Luo, Chen, Qi, Long, Xiong, Liao & Liu, 2020:9; Li, Li & Wang, 2022:348; Mtshawuli, 2020:51).

More than 15 years ago, Ganasen, Parker, Hugo, Stein, Emsley and Seedat (2008:26) stated a need to improve MHL among communities and healthcare professionals. Ten years later, Venkataraman *et al.* (2019:2726), Tonsing (2018:44) and Raj (2022:80) still confirm the same need to raise awareness of mental disorders and MHL among the general population, as well as among various healthcare professions**.** The perception is that

awareness might increase MHL among the communities and primary healthcare nurses. Nurses with poor MHL could display attitudes of stigmatisation toward people with mental health disorders (Kigozi-Male, Heunis & Engelbrecht, 2023:6; Wainberg, Scorza, Shultz, Helpman, Mootz, Johnson, Neria, Bradford, Oquendo, & Arbuckle, 2017:3; Shahif, Idris, Lupat & Rahman, 2019:36), causing neglect of mental healthcare. Some healthcare professionals display arrogance towards mental healthcare users, causing users to think twice about consulting professionals and leading them to avoid adhering to treatment, resulting in possible hospitalisation, which again leads to increased expenses (Damane, 2018:6).

Various studies have been conducted on the MHL of healthcare professionals around the world, including in the United Arab Emirates (Al-Yateem, Rossiter, Robb, Ahmad, Elhalik, Albloshi, Slewa-Younan, 2018:6), China (Chen, Wu, Changi, Deng, Wang, He, Long, Xiong & Liu, 2017) and Australia (Reavley & Jorm, 2011:948). Little research is available on the MHL of healthcare professionals and nurses in Africa and South Africa. This researcher feels that this is very important due to the increasing number of MHCUs visiting PHC clinics and PHC nurses who are not adequately trained to treat these users in large numbers. The background for this study is described in the next section.

1.2 Background

Psychiatric facilities discharge mental healthcare users (MHCUs) to be absorbed by their communities and looked after in PHC facilities. MHCUs in communities increase the need for mental healthcare treatment and services in PHC facilities (Dube & Uys, 2015:1-2). PHC clinics serve communities in healthcare practices and are also responsible for mental healthcare due to its integration into primary services (Meyer, Matlala & Chigome, 2019:29; Maconick, Jenkins, Fisher, Petrie, Boon & Reuter, 2018:1). A lack of services and staff shortages delay the integration of mental health into primary healthcare (De Kock & Pillay, 2016:7-8; Baker & Naidu 2021:12), which is to the detriment of mental healthcare.

The perception is that primary healthcare nurses are not equipped to render adequate care due to a lack of knowledge, training and experience, indicating a low MHL. Primary healthcare nurses should be able to provide mental healthcare information to community members, identify mental disorders, and make referrals to relevant services (Al-Yateem *et al.,* 2017:2), but they often fail to do so. This researcher's observation related to mental

healthcare in primary healthcare settings is that there is a limited number of registered professional nurses with psychiatric or advanced mental health qualifications.

The Nursing Act 33 of 2005 states that the South African Nursing Council (SANC) regulates the nursing profession in South Africa. Four different categories of nurses in South Africa participated in this study: nurse assistants (one year of training), enrolled nurses (two years of training), registered nurses (four years of training) (Maidment, 2018: online), and nurse specialists (Nursing Act 33 of 2005). A nursing assistant is a person who is trained to provide simple nursing care, whereas an enrolled nurse is trained to perform fundamental nursing care, and a registered nurse is a highly qualified nurse trained to provide general, community, midwifery, and psychiatry nursing care (Nursing Act 33 of 2005). The Nursing Act 50 of 1978 defines nurses' scope of practice, which indicates that registered nurses perform their duties independently. It guides nursing assistants and enrolled nurses in performing their duties. A registered nurse is the only nurse trained to provide mental healthcare services. A mental health nurse (MHN) specialises in mental health by providing mental healthcare services and the management of mental health disorders (Nursing Act 33 of 2005). Enrolled nurses and nursing assistants did not receive training in mental health. The reality of the crisis in nursing shortages is that less qualified categories need to perform tasks outside of their scope (Rispel, 2015:96), although they lack mental health training.

Dube and Uys (2015:9) also identified examples of poor mental healthcare management. PHC nurses in a KwaZulu-Natal district in South Africa did not apply mental health guidelines or review MHCUs, full-body examinations were not done, and the PHC nurses did not offer continuity of care. This study confirmed the researcher’s opinion that there is limited MHL among healthcare professionals in South Africa. Another example of nurses’ and other healthcare workers’ apparent lack of MHL was the Life Healthcare Esidimeni (LHE) tragedy, indicating the need for knowledge regarding mental health. LHE is an example of what can happen when MHCUs are dependent on unqualified or inexperienced staff who have insufficient mental health training. In 2016, mental healthcare users were relocated from LHE to other facilities. Some of these facilities were not suitable for mental healthcare users, and the healthcare workers were not sufficiently trained, which led to the death of about 144 MHCUs (Makgoba, 2017:1-2).

As mentioned, primary healthcare nurses are expected to render mental healthcare services in communities (Dube & Uys, 2015:1-2). This is also the context of the Dr Ruth

Segomotsi Mompati (Dr RSM) district in the North West province, where a population of nearly 463,815 people (Frith, 2011: online) is served by about 368 primary healthcare nurses. Following Venkataraman *et al*. *(*2019:2726), around 115 953 (25%) could potentially present with mental health disorders, with a ratio of nurses per mental healthcare user of about 1:315.

Dr RSM is in a rural setting in the southern part of the North West province. Dr RSM has five sub-districts: Greater Taung, Naledi, Kagisano Molopo, Mamusa, and Lekwatemane. The researcher will focus on three sub-districts: Greater Taung, Naledi, and Kagisano Molopo. These subregions have a total of about 303 primary healthcare nurses. The dominant language in the district is Setswana. According to the mental health coordinator in one of the subdistricts, the most common mental health disorder is substance abuse disorder (Maje, 2013: online).

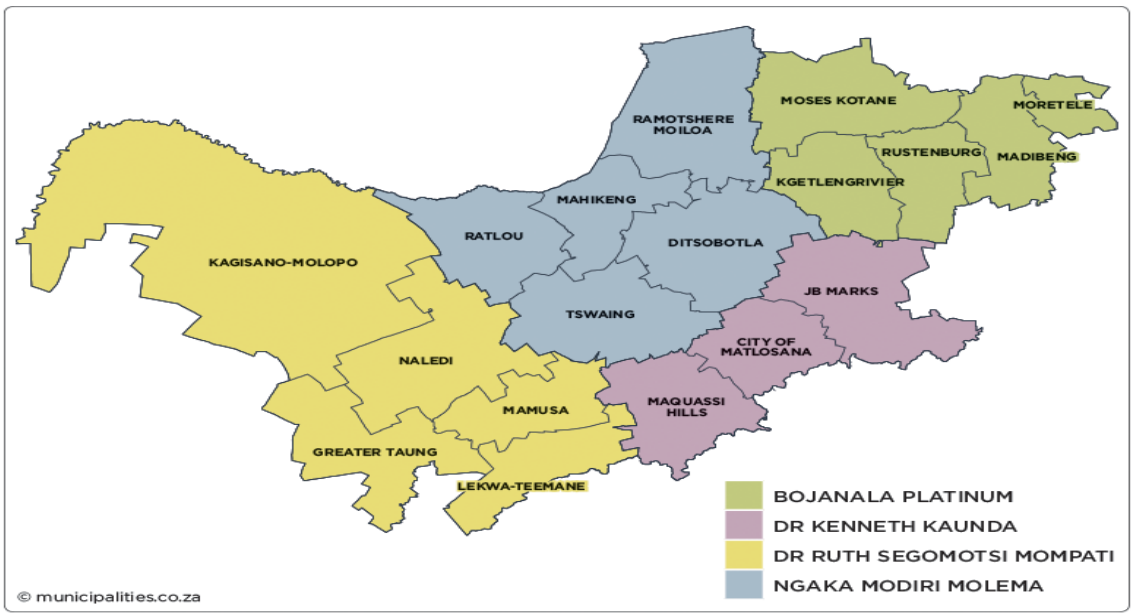

Figure 1.1: North west province map (Municipalities of South Africa, 2023: online)

In reflection, primary healthcare nurses are the first to see MHCUs who are suspected of having mental health disorders at PHC facilities. Those who display signs of relapse or have complications and need further management are transferred to nearby public hospitals within Dr RSM for further observation and management. PHC nurses monitor those who are diagnosed with mental health disorders monthly and are stable. This researcher, who has worked in a PHC setting for the last three years, observed that some of the PHC nurses providing mental health services lack knowledge about mental health

disorders. Because they did not receive the necessary training, the delivery of proper mental health services and treatment is inadequate. Due to these reasons, the researcher identified a need to identify and describe the MHL of PHC nurses in Dr RSM. The problem statement for the study is discussed in the next section.

1.3 Problem statement

Primary healthcare is regarded as the first level of care in a community, and nurses working in that sector are responsible for taking care of the MHCUs' healthcare issues (including mental health issues) (WHO, 2018:32). The WHO and the United Nations Children's Fund (UNICEF) envisioned that the PHC workforce should deliver comprehensive, competent, and quality healthcare in responding to all the needs of MHCUs (WHO, 2018:34). Delivering competent healthcare entails a variety of skills and expertise from the PHC workforce, with nurses playing a central role in PHC due to direct contact with the MHCUs (WHO, 2018:11; Maconick *et al.,* 2018:7). A number of studies concluded that many nurses in PHC are incompetent, inexperienced, and inadequate in providing care to mental healthcare users (Bjorkman, Andersson, Bergstrom & Salzmann-Erikson, 2018:1028; Al-Atram, 2018:776; Nilsson, Johanson & Bejerholm, 2023:2). One assumption is that a shortage of nurses with mental health training, implying a low MHL among most PHC nurses, might cause individuals with mental health disorders to seek help elsewhere, where they believe they will be assisted more effectively. Traditional healers are seen as a source of healthcare in many non-western communities (Venkataraman *et al*., 2019:2726; Nicholas, Joshua & Elizabeth, 2022:1; Delobelle, 2013:163). This is perhaps not the ideal situation and should be prevented.

Mental healthcare services in South Africa are often regarded as insufficient, and therefore, primary healthcare nurses are expected to fulfil this role (Dube & Uys, 2015:1-2). PHC nurses must demonstrate MHL by providing necessary services to MHCU (Al-Yateem *et al.,* 2017:2; Oztas & Aydoğan, 2021:203). This is a great responsibility, considering that approximately 25% of people in society are affected by mental health disorders (WHO, 2022a: online; Venkataraman *et al.,* 2019:2726). One should also consider staff shortages in PHC settings and the fact that staff often demonstrate limited mental health expertise.

In Dr RSM in the North West Province, where the researcher is working, primary healthcare nurses are responsible for the daily delivery of mental healthcare services. It has been this researcher's experience that PHC nurses lack adequate training. It is therefore relevant to

ask: “What is the MHL of primary healthcare nurses in Dr RSM?” The researcher, therefore, identified a need to describe the MHL of PHC nurses in Dr RSM. This study's research question and aims are described in the following sections.

1.4 Research question

The research question to be answered was: *What is the mental health literacy of primary healthcare nurses in Dr RSM, North West province?*

1.5 Aim

The aim was to describe the mental health literacy of primary healthcare nurses in Dr RSM, North West Province.

1.6 Objectives

In pursuit of the aim, the following objectives were stated:

- To determine mental health literacy among primary healthcare nurses in Dr RSM, North West Province.
- To describe primary healthcare nurses’ mental health literacy.

1.7 Conceptual framework

The conceptual framework for this study was compiled from the literature. According to Jorm (2000:396) and Fung, Lam, Chan and Lee (2021:5), the MHL of primary healthcare nurses and the community significantly impacts the community's mental health. The MHL of service providers (primary healthcare nurses) impacts the use of mental health services and the community's mental health (Jang *et al.,* 2016:2). The conceptual framework for this study is presented in **Figure 1.**

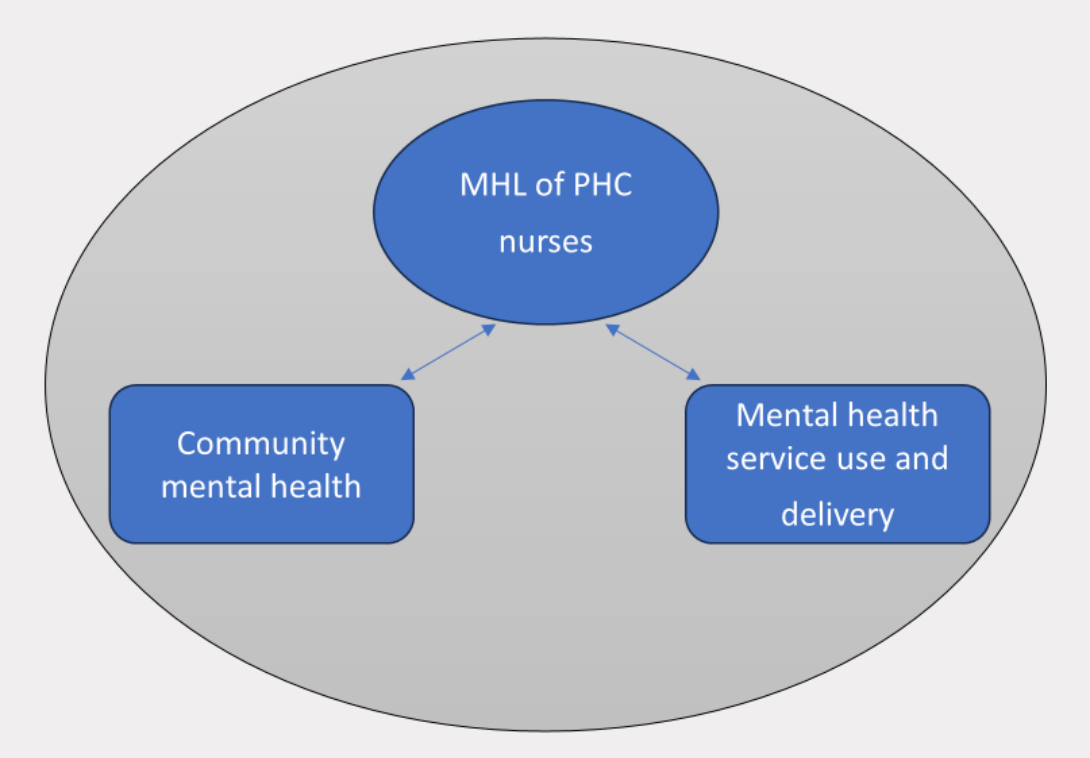

Figure 1.2: Conceptual framework for the study (Sources: Jorm (2000:396) and Jang et al., (2016:2).

The discrimination and stigma towards MHCUs, as mentioned in the problem statement, drives them to avoid seeking help from primary healthcare nurses (Tambling, Aniello & Russel, 2021:120; Panayiotopoulos, Pavlakis & Apostolou, 2012:31; Kigozi-Male *et al.,* 2023:6). Following Jang *et al*., (2016:2), the figure illustrates that the MHL of PHC nurses affects the mental health of the community, as well as the delivery of mental health services to the community. The MHL of PHC nurses influences the community's use of mental health services. If the PHC nurses can expand their greater MHL, the assumption is that the mental health service will be enhanced. People in the community will seek help at PHC facilities and will not face stigma and discrimination, as PHC nurses will be knowledgeable about mental health. A description of the research design that directed this study is discussed in the next section.

1.8 Research design

The research design is the steps followed by the researcher trying to answer the research question and is regarded as the foundation of a study (Polit & Beck, 2017:11; Botma, Greeff, Makhado & Mulaudzi, 2022:350). Quantitative research uses questionnaires, structured interviews, and observations (Leavy, 2023:114; Burns & Grove, 2009:24). The

researcher implemented a quantitative, descriptive, and cross-sectional design to collect data using a pre-existing mental health literacy questionnaire. This design permitted the researcher to quantify, analyse and describe the results. A detailed description of the methodology will be provided in Chapter 3.

1.9 Research method

The research method refers to the steps followed in research, including the tools utilised in the collection of data (Leavy, 2023:281). Questionnaires may be employed as a data collection tool (Leavy, 2023:114). A researcher could develop questionnaires (Mukherjee, 2020:77) or use existing questionnaires that have already been tested for validity and reliability. Questionnaires are usually thoughtfully designed, with either close-ended or open-ended questions that are completed either in paper or electronic format (Gray & Grove, 2020:1283-1284; Mukherjee, 2020:76). The MHL questionnaire (refer to Addendum D), developed by Reavley and Jorm (2011:948), was employed. The original questionnaire includes five vignettes of fictional characters who meet the DSM-IV diagnostic criteria for depressive disorder, suicidal thoughts, schizophrenic disorder, anxiety disorders, and posttraumatic stress disorder, respectively. Each vignette is followed by a standardised set of questions relating to the nature and treatment of the described disorder, which includes recognition, beliefs about the helpfulness of possible treatments, treatment providers, and possible prevention. The developer, Anthony Jorm from the University of Melbourne, was contacted via email, and he granted permission (refer to Addendum C) for the amendment and application of the questionnaire. The next section describes the population for the study in detail.

1.10 Population

The population is the entire group of individuals that share common characteristics (Polit & Beck, 2017:739; Leavy, 2023:88; Botma *et al*., 2022:351). The population for this study consisted of primary healthcare nurses working in clinics and Community Healthcare Centres (CHC) within three sub-districts (Taung, Kagisano Molopo, Naledi) in Dr. RSM, who volunteered to participate in the study. The next section describes the sampling for the study.

1.11 Sampling

Sampling is a process of selecting individuals to represent the entire population (Polit & Beck, 2017:743; Botma *et al.,* 2022:352). Sampling includes eligibility criteria and determining the target population (Leavy, 2023:88; Gray & Grove, 2020:1074). There are various sampling techniques to select the target population. The researcher selected purposive sampling, following a complete collection described by Cohen, Manion & Morrison (2018:220), allowing the entire population to participate in the study.

1.11.1 Inclusion and exclusion criteria

The inclusion criteria refer to individuals within the targeted population who share similar characteristics and are invited to participate in the study (Polit & Beck, 2017:250; Nikolopoulou, 2022a: online). Exclusion criteria are those who do not share these similar characteristics (Garg, 2016:642; Polit & Beck, 2017:728). All primary healthcare nurses working in the three selected subdistricts in the primary healthcare facilities in Dr RSM were included in this study. Nurses not working in the three subdistricts or those with whom this researcher has a close relationship were excluded. A total of 84 participants responded and completed the questionnaires. The pilot study is described in the next section.

1.12 Pilot study

A pilot study refers to testing a tool with a small number of participants before using it in the main study (Leavy, 2023:130; In, 2017:601; Botma *et al.,* 2022:353). A pilot study was done to test the adapted questionnaire's clarity and measure the time it took to complete it. Pilot studies are usually done with a population with features similar to those in the main study (Brink, Van Der Walt & Van Rensburg, 2018:161). Five primary healthcare nurses working at the Mamusa subdistrict in Dr RSM were approached to participate in the pilot study because they provided the same services and experienced similar challenges. They were asked to make recommendations for improving the questionnaire, if necessary. The pilot study indicated how long it would take to complete the questionnaire, which was helpful in the data collection process. The results of the pilot study were not included in the main study since the Mamusa subdistrict was excluded from the main study. The next section describes the data collection for the study.

1.13 Data collection

Data collection is defined as the procedures followed to gather information from the research participants (Leavy, 2023:106; Polit & Beck, 2017:725; Mukherjee, 2020:75). The researcher applied for the necessary authorisation from the Health Sciences Research Ethics Committee (HSREC) of the University of Free State (Addendum E) to conduct the research. The researcher also requested authorisation from the North West Department of Health (Addendum A) to conduct the research in the North West province. The authorisation was obtained from the Chief Director of the Dr RSM district, who gave verbal permission. The researcher arranged with the operational manager of each facility to approach the primary healthcare nurses and to negotiate a suitable time and date to collect data at their facilities. No fieldworkers assisted with data collection for this study.

The researcher approached the primary healthcare nurses to explain the study's aim and obtain their consent. The researcher visited each facility to meet with all the participants. A hard copy questionnaire was handed to each participant and informed consent was given. The questionnaires (refer to Addendum D) had five scenarios followed by a standardised set of questions that had to be completed. Participants were asked to complete all five scenarios of the MHL questionnaire after agreeing to participate. Completing a questionnaire took approximately 30 minutes for those who completed it on the same day, while others were asked to submit their questionnaires the following day. The questionnaires were anonymous, and participant codes were used to ensure confidentiality. Participants were asked to place completed questionnaires in sealed envelopes in a designated box in the manager’s office. Arrangements were made to accommodate those who requested more time. All completed questionnaires were stored safely in a lockable cupboard where the researcher resided during the study. The researcher distributed about 10 questionnaires per month, and data collection took about one year due to a shortage of funds for travel, a low response rate, and delays in returning questionnaires. More details on data collection will be described in Chapter 3. The next section discusses the data analysis.

1.14 Data analysis

Data analysis can be facilitated using computer software (e.g. an Excel spreadsheet) by capturing completed questionnaires (Polit & Beck, 2017:57; Botma *et al.,* 2022:355). Data

analysis was done by a biostatistician from the Department of Biostatistics at the University of the Free State (UFS). Descriptive statistics were calculated, including frequencies and percentages for categorical data, means and standard deviations, or medians and percentiles for continuous data. The following section briefly discusses research validity and reliability, which will be more detailed in Chapter 3.

1.15 Validity and reliability

Validity is defined as the “quality criterion referring to the degree to which inferences made in a study are accurate and well-founded”, and in measurement, to “the degree to which an instrument measures what it is intended to measure” (Polit & Beck, 2017:747). Mukherjee (2020:222) indicates that validity should relate to the research design, methods and data analysis. The validated MHL questionnaire (refer to Addendum D) ensured the study's validity. Reliability “relates to the consistency of a measure” (Leavy, 2023:127; Heale & Twycross, 2015:66). The participants completed the same questionnaire in the same language, ensuring the reliability of the study. The next section discusses the ethical considerations of the study in detail.

1.16 Ethical considerations

When humans participate in a study, measures should be taken to protect their rights and social well-being (Brink *et al.,* 2018:28; Polit & Beck, 2017:137; Botma *et al.,* 2022:353). Creswell (2014:92) adds that the researcher should promote research integrity, avoid misconduct, and deal with problems as they arise.

Before commencement, approval to conduct the study was obtained from the Health Sciences Research Ethics Committee (HSREC) of the University of the Free State. The approved proposal was submitted to the North West Department of Health (refer to Addendum A) to obtain permission to conduct the study in Dr RSM's primary healthcare facilities. The Belmont principles were adhered to in this study (Polit & Beck, 2017:139) - see Table 1.1 below for the Belmont principles.

Table 1.1: Belmont principles and application in the study

BELMONT PRINCIPLES	APPLICATION IN THIS STUDY
BENEFICENCE	
The right to freedom from harm and discomfort	- **In this study, there was no possible harm or injury to the participants since they anonymously completed questionnaires.** - **Participants were informed that participation was voluntary and anonymous.**
The right to protection from exploitation	- **Participants were informed that their answers would not be used against them and would not be disclosed to their employers.** - **The right to participate, withdraw or not participate in the study was respected.**
RESPECT FOR HUMAN DIGNITY	
The right to self-determination	- **Participants were told that participation was voluntary** - **Participants were allowed to ask questions for clarity**
The right to full disclosure	- **The aim of the study was clarified to the participants and included in the informed consent form.**
JUSTICE	
The right to fair treatment	- **All primary healthcare nurses in Dr RSM were invited to participate in the study and were treated the same.** - **The questionnaire was available in English, as this was the official language used by primary healthcare nurses.**
The right to privacy	- **The study adhered to privacy by not disclosing the participants' questionnaire responses.** - **Completed questionnaires were locked in a secure cupboard.** - **Questionnaires were only accessed during data analysis.**

The researcher adhered to the Belmont principles throughout the study to protect the rights of the participants. The Belmont principles were also highlighted in the consent form. The researcher explained this principle verbally to the participants. The next section discusses the conclusion of this chapter.

1.17 Conclusion

The first chapter **(Chapter 1)** gave an overview of the study's problem statement, aim, research question, conceptual framework, research design, population, sampling, pilot study, data collection, data analysis, validity, reliability, and ethical considerations. The study aims to answer the research question: “What is the mental health literacy of primary healthcare nurses in Dr RSM?” The next chapter **(Chapter 2)** will discuss the study's literature review in detail. **Chapter 3** will discuss the research methodology, while the study results will be discussed in **Chapter 4.** The last chapter **(Chapter 5)** will summarise the study and provide recommendations.

Chapter 2

Literature review

2.1 Introduction

This chapter will present a literature review on mental health literacy. The concepts of mental health and mental health disorders will be introduced. The global epidemiology of mental health disorders and their burden on mental health disorders will then be discussed. A perceived gap between the burden of mental health and care provision will be examined. The integration of mental healthcare into primary healthcare will be debated. Human resources will also be discussed, including the categories and qualifications of primary healthcare nurses in South Africa. The training of primary healthcare nurses and their knowledge, skills, and attitudes toward mental health will be discussed. Furthermore, mental health literacy, components of mental health literacy, and particular questionnaires measuring mental health literacy will be discussed.

2.2 Introduction to mental health and mental health disorders.

The American Psychological Association (APA) defines mental health as "a state of mind characterized by emotional well-being, good behavioural adjustment, relatively free from anxiety and other disabling symptoms, and the capacity to establish constructive relationships and cope with life's ordinary demands and stresses" (2015: online). Mental health implies socialisation, controlling emotions, and adapting to stressful life events (Galderisi, Heinz, Kastrup, Beezhold & Sartorius, 2015:232). Mental health involves our emotional, psychological, and social existence and influences our thoughts, actions, and adaptation to stress (CDC, 2023: online). Mental health is further regarded as the absence of mental disease and the ability to fully function physically, psychologically, and socially (Boyd, 2000:12; WHO, 2013:7). Mental health is related to well-being. Well-being is the “state of feeling healthy and happy” (Cambridge dictionary, 2022: online). Well-being is also defined as a state of being happy, having the ability to function fully and work towards achieving goals, flourishing, not worrying, and contributing to the community (Simons & Baldwin, 2021:990; Keyes, 2006:7; Galderisi *et al*., 2015:231). The opposite of well-being is the inability to cope with daily activities, worrying, and being sick, which may result in a mental health disorder such as depression (Harrison *et al*., 2018:22; Iyer & Khan, 2012:81, WHO, 2023a: online).

Mental health disorders or mental health conditions, mental illness, psychiatric disorders, and psychological disorders are often used interchangeably. A mental health disorder, the term that this study will use, is defined as "a major disturbance in an individual's thinking, feelings, or behaviour that reflects a problem in mental function" (APA, 2015:1). The concept of mental health disorder is defined by the World Health Organization (WHO) as a fluctuation in behaviour, thinking, and control of emotions, and may even include the possibility of injury to the self and others (DSM Library, 2023: online; WHO, 2022a: online). Claiborn, Yudofsky, Gibbons, Shepphird, Andrews & Sims (2023: online) define a mental health disorder as "any illness with significant psychological or behavioural manifestations associated with either a painful or distressing symptom or an impairment in one or more important areas of functioning."

According to Uher and Zwiker (2017:123), mental health disorders are hereditary and are caused by biological factors and exposure to specific environmental conditions. Other causes of mental health disorders include social and psychological factors such as personality (low self-esteem or working towards perfection) (APA, 2015:21; Slewa-Younan, Krstanoska-Blazeska, Blignault, Li, Reavley & Renzaho, 2020:2). Additionally, Boland and Verduin (2008:10) as well as Harrison, Cowen, Burns and Fazel (2018:89) state that there are three main causes of mental health disorders, namely biological, psychological, and social.

In African countries, mental health disorders are often perceived to be caused by evil spirits and witchcraft (Venkataraman *et al*., 2019:2726), substance abuse, poverty, natural disasters, post-traumatic stress, and cultural beliefs (Amuyunzu-Nyamongo, 2013:61). Nicholas *et al*., (2022:1) support the notion that there is a perception that mental health disorders are due to sociocultural beliefs. In South Africa, many mental health disorders are caused by traumatic life events, substance abuse, depressive incidents, motorcar accidents, criminal behaviour, pregnancy and post-delivery, and the abuse of substances (SACAP, 2019: online).

The aetiology of mental health disorders can assist in classifying and diagnosing such disorders. Treatment would be in accordance with specific symptoms and behaviour (Pritchard, 2015:9). Mental health disorders are classified and diagnosed according to the latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), published by the American Psychological Association (DSM Library, 2023; Regier, Kuhl & Kupfer, 2013:92). The major categories of mental health disorders are neurodevelopmental

disorders, schizophrenia spectrum, and other psychotic disorders, bipolar and related disorders, depressive disorders, anxiety disorders, obsessive-compulsive and related disorders, trauma and stress-related disorders, dissociative disorders, somatic symptom, and related disorders, feeding and eating disorders, elimination disorders, sleep-wake disorders, sexual dysfunctions, gender dysphoria, disruptive, impulse-control, and conduct disorders, substance-related and addictive disorders, neurocognitive disorders, personality disorders, paraphilic disorders, and other mental disorders (DSM Library, 2023: online).

The International Classification of Disease (ICD) is used internationally and uses codes to classify different diseases, ways of diagnosing diseases, treatment options, and causes of death (WHO, 2023b: online). The ICD explains the nature of death and the possible causes of death, including the types of injury (CDC, 2023: online). The WHO developed the ICD to assist in describing the main clinical and related characteristics of any disease or disorder, together with diagnostic guidelines designed to assist healthcare workers during diagnosis (International Advisory Group for the Revision of ICD-10 Mental and Behavioral Disorders, 2011:86). The ICD is used to compare different statistics on the mortality and morbidity of diseases, especially for cases treated at health facilities, to assist with health service planning, budgeting, and research (Harrison, Weber, Jakob & Chute, 2021:1*)*. The ICD is used in primary, secondary and tertiary levels of care for analyzing health statistics, research purposes, and decision making (WHO, 2023b: online). The ICD can be used in a primary healthcare setting for describing, listing, and specifying diseases, including mental health disorders and behavioural and neurodevelopmental disorders, and may be essential for assessment (Reed, First, Kogan, Hyman, Gureje, Gaebel, Maj, Stein, Maercker, Tyrer, Claudino, Garralda, Salvador-Carulla, Ray, Saunders, Dua, Poznyak, Medina-Mora, Pike, Ayuso-Mateos, Kanba, Keeley, Khoury, Krasnov, Kulygina, Lovell, Maria de Jesus, Maruta, Matsumoto, Rebello, Roberts, Robles, Sharan, Zhao, Jablensky, Udomratn, Rahimi-Movaghar, Rydelius, Bährer-Kohler, Watts & Saxena, 2019:6).

Various screening tools are used for the assessment of mental health disorders in different countries. The importance of screening for mental health disorders is to aid early identification, especially at primary healthcare facilities (Ali, Ryan & De Silva, 2016:3). The Adult Primary Care (APC) guideline is a prescribed guideline in SA used in primary healthcare settings for screening, assessment and management of diseases (DoH, 2023:2). The APC guideline is however not utilised optimally in primary healthcare due to shortage of staff and time constraints. Another tool for assessment is the Mental Health Gap Action Programme (MHGaP), which is a guide for mental health recommended by the WHO to be

used by healthcare professionals (WHO, 2015:1). Currently, the MHGaP is not utilised in South African primary healthcare facilities.

Competent healthcare workers should do an assessment. If healthcare workers are not familiar, competent, or knowledgeable about the terminology used in mental health, it may influence the assessment of such a patient. In that case, it can influence the diagnosis and subsequent management of a patient (Marangu, Mansouri, Sands, Ndetei, Murithi, Wynter, & Rawson, 2021:8). Adequate knowledge and skills are needed to utilise the available assessment tools correctly. Wakida, Talib, Akena, Okello, Kinengyere, Mindra and Obua (2018:8) state that nurses are not always adequately trained to provide mental health services. They, therefore, lack the knowledge and skills to do mental health assessments correctly. Disease assessment, specifically mental health assessment, is the first step in nursing. Suppose a healthcare worker is not skilled or knowledgeable in screening for mental health. In that case, it may be misdiagnosed and consequently not treated or treated incorrectly, impacting the global statistics of mental health disorders. A screening tool is used to identify mental health disorders in patients and refer those who may need further assessment to confirm the diagnosis (Harrison *et al*. 2018:54).

2.3 Global epidemiology of mental health disorders

The WHO (2022: online) contends that approximately 970 million people globally are affected by mental health disorders, while Rehm and Shield (2019:5) state that this figure is closer to 1 billion. According to Raj (2022:73), one in five individuals suffers from mental health disorders, while the WHO (2022: online) states that one in eight people worldwide is affected by mental health disorders. One in four people in the United States is diagnosed with mental health disorders annually (Modern Psychiatry and Wellness, LLC, 2021: online). A study in England states that one in six people had mental health disorders at some point in their lives (Baker, 2020:3). In South Africa, about one in six people are affected by mental health disorders, and about 27% of them are being treated (Pillay, 2019:403). Sankobe (2019: online) argues that in South Africa, one in three people suffer from a mental health disorder, and only 16% of these are being treated. The statistics on mental health disorders might be much higher due to the use of different assessment tools (Rogers, Hartigan & Sanders, 2021:891) and healthcare workers failing to recognize mental health disorders. Failure to diagnose correctly leads to untreated mental health disorders, resulting in a high burden of mental health disorders.

2.4 Burden of mental health disorders

A burden is "a duty or responsibility that is hard to bear" (Cambridge Dictionary, 2022: online). The burden of a disease is defined as its total morbidity and mortality (Roser, Ritchie & Spooner, 2021: online). Hessel (2008:94) defines the disease burden as the total number of diseases and the harm they cause in society. Non-communicable diseases are the major contributors to the burden of disease worldwide (Stein, Benjet, Gureje, Lund, Scott, Poznyak & Van Ommeren, 2019:13; Laurant, Biezen, Wijers, Watananirun, Kontopantelis, & Vught, 2018:20; Charalampous, Pallari, Tyrovolas, Middleton, Economou, Devleesschauwer & Haagsma, 2021:10), and mental health disorders form part of this disease classification (Scott *et al*., 2016:157). Non-communicable diseases adversely affect about 41 million people globally annually (WHO, 2022a: online). Mental health disorders contribute about 7% to the global burden of disease (Rehm & Shield, 2019:5). Opara, Weissinger, Lardier, Lanier, Carter and Brawner (2021:100) agree that there is a global mental health burden, including middle-income and low-income countries (Rehm & Shield, 2019:1; Burns, 2010:665). Begum, Lewison, Wolbert, Brigham, Darlington, Durand-Zaleski and Sullivan (2020: 15) state that there is a substantial rise in the burden of mental health disorders, while Jacob and Coetzee (2018:180) indicate that mental health disorders contribute to the health burden in South Africa. Meyer, Matlala & Chigome (2019:26) emphasize the heavy burden of mental health disorders in South Africa.

The Armed Forces Health Surveillance Division (2021:2) indicates that it is vital to address the mental health burden and other challenges related to mental health disorders. Challenges contributing to the burden of mental health include the shortages of mental health services and mental healthcare providers. In contrast, pandemic diseases, poverty, cultural beliefs, and natural disasters also contribute to the mental health burden (Søvold, Naslund, Kousoulis, Saxena, Qoronfleh, Grobler & Münter, 2021:9; Alloh, Regmi, Onche, Van Teijlingen & Trenoweth, 2018:14; Rathod, Pinninti, Irfan, Gorczynski, Rathod, Gega & Naeem, 2017:1). Such shortages mean that healthcare workers without any training in mental health need to provide services outside of their scope (Rispel, 2015:96). This results in poor mental healthcare management, which adds to the mental health burden (Dube & Uys 2016:9). An increased burden is further impacted by staff shortages and limited resources, which influence the provision of care. Sustainable development goals ensure the provision of quality health services intending to achieve universal health coverage (WHO, 2018: online)

2.5 Gap between burden and provision of care

The mental health burden and limited mental health services due to staff, resource, and infrastructure shortages result in a treatment gap in the provision of care in primary healthcare (Søvold *et al*., 2021:9; WHO, 2022a: online). A lack of training among healthcare providers on mental health may contribute to the mental health burden and lack of mental health services (Docrat, Besada, Cleary, Daviaud & Lund, 2019:13). The burden is exacerbated by stigma leading to poor provision of mental health services (Tambling *et al*., 2021:120)

Globally, there is insufficient funding for mental health services (Rathod *et al*., 2017:3; Burns, 2010:665). The limited funds are not enough (Baker & Naidu, 2021:1). In Africa, there is a rise in mental health challenges, including the poor provision of care, causing a limited number of people to receive mental health services (Sankoh, Sevalie & Weston, 2018:954). There is a global trend to neglect the budget for mental health services (Nguse & Wassenaar, 2021:305). Wainberg *et al*. (2017:10) state that insufficient funding for mental health services leads to poor mental health services. In South Africa, a smaller budget is allocated to mental health services, resulting in limited services, limited infrastructure and limited staff trained to provide mental health services at the primary care level (Baker & Naidu, 2021:1). Freeman (2022:6) supports that there should be sufficient budg*et al*located for mental health.

Alloh *et al*. (2018:14) mention a staff shortage, stating that psychiatrists treat patients at a ratio of 1:100000. The WHO (2020: online) mentions shortages at a rate of 9:100000, while Sankoh *et al*. (2018:954) indicate that 1.4 mental healthcare providers assist about 100000 service beneficiaries. Globally, mental healthcare services are scarce due to a shortage of mental healthcare providers.

Mental health services should be offered as an essential component of the primary healthcare package. Primary healthcare packages include comprehensive, integrated care available to all individuals. They should include mental health care, acute care, chronic care, rehabilitation services, preventive care, mother-child and women's health, and emergency services. Primary healthcare is located within the community as the entry point for individuals seeking healthcare (Department of Health, 2018:9).

2.6 Primary healthcare

Primary healthcare (PHC) is the first level of care. It should be affordable, based on the community and its working environment, to fulfil the community's health needs through prevention, treatment, and management of diseases, including rehabilitation (WHO, 2018: online). Globally, primary healthcare is defined as healthcare services that provide quality services that are easily accessible and affordable to the community (Liao, Liu, Peng & Feng, 2021:1). In South Africa, primary healthcare consists of three streams of PHC re-engineering, namely ward-based PHC outreach teams, school health services, and district-based specialist teams (Pillay & Barron, 2012:3). Primary healthcare nurses guide and work closely with ward-based PHC outreach teams (community healthcare workers) who work closely with the community and families by providing healthcare services in the community and visiting those in need of healthcare services in their homes. They can also refer patients to primary healthcare nurses when needed (Department of Health, 2018:7-9).

School health services are delivered by professional nurses who visit schools to provide health education and campaigns, immunize and screen learners for diseases, and refer them to nearby PHC facilities if needed (Pillay & Barron, 2012:4; NDoH, 2018:9). District-based teams consist of specialized doctors and specialized nurses. They supervise PHC staff, provide prevention and treatment of diseases, ensure the availability of equipment, provide guidelines for the management of diseases (including mental health disorders), do training and have review meetings for mortality rates and to identify gaps, make recommendations and implement any action plans or changes (Pillay & Barron, 2012:5; Department of Health, 2023:61). In South Africa the National Mental Health Policy Framework ensures that there are adequate funds, sufficient staff for mental healthcare, equity in distributing resources, the integration of mental health services into primary healthcare, improving mental healthcare facilities, and the prevention of mental health disorders through awareness (Department of Health, 2023:14). The reality is that the funds are limited as the budget is too small, which leads to limited healthcare providers and limited mental healthcare services (Baker & Naidu, 2021:1; Burns, 2010:665).

Primary healthcare is provided by nurses, community healthcare workers, doctors, and allied healthcare workers at PHC facilities, and they can make referrals to relevant services if needed (Laurant *et al.,* 2018:20; Al-Yateem *et al.,* 2017:2; Pillay & Barron, 2012:3). The community health workers and school health-based teams refer patients who need treatment and care to the nurses at the PHC facilities. If patients need further management,

the nurses will refer them to the hospital to be managed by specialized healthcare providers. Most PHC facilities are within 5 km of their communities through clinics and community health centres (Alliance for Health Policy and Systems Research, 2017:3).

Mash (2016:2) states that for primary healthcare services to be effectively delivered, primary healthcare providers should provide services in response to the needs of individuals and the treatment of patients in totality. Dookie and Singh (2012:4) state that quality primary healthcare includes community participation, competent leadership at the district level, ensuring a supply of resources, and training healthcare workers and those delivering home-based care. The training of healthcare providers could lead to the successful integration of mental health into primary healthcare *(*Maconick *et al.,* 2018:7). Such integration aims to implement a holistic approach by meeting all the patients' needs.

2.7 Integration of MH into primary healthcare

Integration means to combine two or more things (Cambridge Dictionary, 2022: online). Integrating mental health into primary healthcare involves integrating mental health services with primary healthcare. Mental health integration into primary healthcare is identified to be a vital goal worldwide (Maconick *et al*., 2018:1). The integration of mental health into primary healthcare has advantages for the community, as it brings mental health services closer to the community by focusing on the prevention, management, and treatment of mental health disorders *(*Stein *et al*., 2019:15). Funk*,* Saraceno, Drew and Faydi (2008:5-6) support the advantages of integrating mental healthcare into primary healthcare, including easy access to mental healthcare services and earlier diagnoses and treatment of mental health disorders. Further advantages include a reduction in the cost of treatment and the successful management of mental health disorders (Department of Health, 2023:23). Peterson, Fairall, Bhana, Kathree, Selohilwe, Brooke-Sumner, Faris, Breuer, Sibanyoni, Lund & Patel, (2016:33) agree that the integration of mental health has advantages that include treating patients in totality while minimizing stigmatization.

Wakida *et al*. (2018:5) and Baker and Naidu (2021:12) state that there are challenges to such integration due to a lack of funds and a shortage of knowledgeable staff about mental health. Wainberg *et al*. (2017:3) state that integration is often unsuccessful due to staff shortages, a lack of education, and negative attitudes toward those with mental disorders. Esponda, Hartman, Qureshi, Sadler, Cohen and Kakuma (2020:89) and Mtshengu (2020:63) support that the integration of PHC often fails due to a lack of trained mental healthcare providers in middle-income and low-income countries. De Kock and Pillay

(2016:4) emphasize a severe staff shortage responsible for mental health integration in South Africa. In South Africa, the integration of mental health into primary health care is implemented through the training of healthcare workers, in other words, nurses and community healthcare workers (Maconick *et al.,* 2018:7). The registered nurses attend to all mental health issues in primary health and refer patients to mental health specialists when there is a need (WHO, 2008:5). The nurse is the primary provider of primary healthcare services while working with doctors who do occasional visits (Kordom, Daniels & Chipps, 2023:1) contributing to their workload burden.

2.8 Human resources (staff)

A lack of knowledge and resources, staff shortages, and unskilled staff rendering mental health services contribute towards the unsuccessful integration of mental health into primary care (Hlongwa & Sibiya, 2019:7). Doctors, psychologists, psychiatrists, and nurses provide mental health services. There is a shortage of mental health staff worldwide at 1.18 million (Endale, Qureshi, Ryan, Esponda, Verhey, Eaton, De Silva, & Murphy, 2020:2). In Africa, there is a severe shortage, and one psychiatrist assists about 500000 individuals (WHO, 2022b: online). Sankoh *et al*. (2018:954) support the notion that mental healthcare providers are scarce in Africa by stating that 1.4 mental healthcare providers treat about 100000 patients due to a lack of mental health services and providers. Alloh *et al*. (2018:14) mention staff shortage at the rate of one psychiatrist treating 100000 patients in low- and middle-income countries. For example, Nigeria has four psychiatric nurses per 100000 patients and one psychiatrist per million population. The lack of mental health treatment is due to a shortage of staff trained in mental health (Docrat *et al*., 2019:13).

Most nurses do not receive adequate mental health training, causing shortages of nurses qualified in mental health in South Africa (Dube & Uys, 2016:124; Alloh *et al*., 2018:14) as well as globally (Endale *et al*., 2020:2). Due to severe staff shortages, all nurse categories must provide mental health care even though some are not trained or qualified to do so. In South Africa, nurses render primary healthcare while doctors visit to support them (Christoffels & Mash, 2018:2).

2.9 Nurses deliver primary healthcare.

Nurses provide primary healthcare services (Laurant *et al.,* 2018:20). The role of nurses in rendering primary healthcare services is to prevent, treat, and manage diseases, including

rehabilitation services (Nursing Act 33 of 2005). Patients presenting with diseases, including mental health issues, are assisted by nurses, who render primary healthcare services together with doctors who do occasional site visits (Kordom *et al*., 2023:1). There is a shortage of registered nurses rendering primary healthcare *(*Hlongwa & Sibiya, 2019:7), resulting in the poor delivery of healthcare services, as nurses spend too little time during consultations with patients to do complete assessments (Dube & Uys, 2015:9). Minimal time spent on comprehensive mental assessments because they focus on medical conditions causes nurses to miss or misdiagnose mental health disorders *(*Rogers et al., *2021:883).* This misdiagnosis by non-psychiatric healthcare professionals is also seen in other countries (AlSalem, AlHarbi, Badeghiesh & Tourian, 2020:5).

Liu, Hebert, Douglas, Neely, Sulc, Reddy, Sales, & Wong (2020:187) state that nurses provide quality mental healthcare in primary care in the United States, while nurses in South Africa demonstrate a positive attitude but lack mental health knowledge (Dube & Uys, 2016:12). This indicates a need for training primary healthcare nurses on mental health.

2.10 Training and education of PHC nurses

Training is acquiring new skills to perform a particular task (Oxford English Dictionary, 2023: online). Different nurse categories in a healthcare system receive different training. In South Africa, nursing assistants, also called auxiliary nurses, are trained to provide simple nursing tasks and do not receive training on mental health (Nursing Act 33 of 2005). Enrolled nurses, also called general nurses, hold a diploma in nursing and are trained to perform essential nursing care. They can perform specific procedures under supervision (Nursing Act 33 of 2005). Professional nurses are usually trained at a university and hold bachelor's degrees. They do receive training in mental health or psychiatric nursing care (SANC, 2021: online) (See 2.11.1 for clarity). A professional nurse who receives a graduate diploma in primary healthcare qualifies as a primary care nurse specialist (Nursing Act 33 of 2005). A mental health nurse (MHN) is a professional who received post-graduate training in mental health to specialise in mental health nursing, providing mental healthcare services and managing mental health disorders (Nursing Act 33 of 2005). Worldwide, there is a shortage of nurses who receive training on mental health (Endale *et al*., 2020:2).

Nurses who have been adequately trained have greater confidence when providing mental health services (Slaven *et al*., 2021:4). Mental health training of primary healthcare nurses supports the rendering of quality mental health services (Kauye, Jenkins & Rahman,

2014:665). Sibeko *et al*. (2018:9) support the idea that education and training can help improve mental health literacy. Poor mental health literacy is associated with a lack of training and education. Enrolled and assistant nurses do not receive training on mental health (SANC, 2021: online). The categories of nurses in South Africa and their qualification profiles will be discussed next.

2.11 Nurse categories and qualifications

There are three different categories of nurses in South Africa: nurse assistant (one year of training), enrolled nurse (two years of training), registered nurse (three to four years of training), and nurse specialist (Maidment, 2018: online; Nursing Act 33 of 2005). The curriculum in South Africa delivers nurses with a higher certificate in nursing (auxiliary nurse), a diploma in nursing (enrolled nurse), a Bachelor of Nursing (professional nurse), and an advanced diploma in midwifery (SANC, 2021: online). The registration code for the legacy curriculum is R425; for the current curriculum, they are R171 and R174, respectively. This will be expanded on in the next section.

2.11.1 Registered nurse (professional nurse)

Currently, in South Africa, a registered nurse, also known as a professional nurse, is a person holding a Bachelor's in Nursing Science or a Diploma (four years) (R425) and is qualified as a professional registered nurse (general, community, psychiatry) and midwife (SANC, 2021: online). The new Bachelor's in Nursing (R174) qualification trains and qualifies a person as a professional nurse and midwife. The R171 qualification trains a person for three years for a diploma and qualifies that person as a general nurse and midwife (SANC, 2021: online). The legacy program (R425) will be phased out during 2023/2024. It is envisaged that this will cause a lack of trained psychiatry nurses, as previously, they were registered in psychiatric nursing. The new Bachelor of Nursing (R174) only qualifies nurses in general nursing and midwifery and does not qualify nurses in psychiatric and community nursing.

The Nursing Act 33 of 2005 defines the scope of practice of nurses. The act indicates that professional nurses perform their duties independently, and it guides nursing assistants and enrolled nurses in performing their duties. A professional nurse is the only category of nurse in South Africa trained to provide mental healthcare services. A professional nurse can acquire a speciality in midwifery, primary healthcare, or psychiatric nursing (mental health). A mental health nurse (MHN) is a professional nurse who received post-graduate training in

mental health to specialize in mental health nursing to provide mental healthcare services and manage mental health disorders (Nursing Act 33 of 2005).

2.11.2 Enrolled nurse

An enrolled nurse, also called a staff or general nurse, is trained to perform fundamental nursing care and can perform specific procedures under the supervision of professional nurses (Nursing Act 33 of 2005). An enrolled nurse is a nurse who holds a diploma, according to the new curriculum (SANC, 2021: online). An enrolled nurse does not receive mental health/psychiatric, community or midwifery training. They assist, manage, and treat minor ailments, render other services such as reproductive health and rehabilitation services, and provide medication at the primary healthcare level (Nursing Act 33 of 2005).

2.11.3 Nurse assistant (auxiliary)

A nursing assistant, also known as an auxiliary nurse, is trained to perform simple nursing tasks (Nursing Act 33 of 2005). Nursing assistants do not receive mental health/psychiatric, community, or midwifery training; they are only trained for one year. According to the new curriculum, they hold higher nursing certificates (SANC, 2021: online). Their role in primary healthcare is to provide basic care to patients, assist during emergency care, support mental health services, and assist during the provision of all other health services (Nursing Act 33 of 2005). All nurse categories should have knowledge and skills working with patients who have mental health disorders, especially in the PHC setting, where the patient burden is high.

2.12 Lack of knowledge, skills, attitude

Mental health literacy (MHL) was initially defined as "individuals' knowledge and beliefs about mental health disorders that aid their recognition, management, and prevention" (Jorm *et al*., 1997:182). Mental health literacy evolved from health literacy, which means knowing health (Jorm, 2000:396; Kutcher, Wei & Coniglio, 2016:4; Liu *et al*., 2020:1; Sørensen, Van den Broucke, Fullam, Doyle, Pelikan, Slonska & Brand, 2012:3). Good mental health literacy is having adequate knowledge of mental health, a positive attitude toward mental health care users (MHCUs), and adequate skills in the management and treatment of mental health disorders (Tay, Tay & Klainin-Yobas, 2018:758; Tambling *et al*., 2021:120). Healthcare providers lack adequate knowledge skills about mental health (Al-Atram, 2018:776)

2.12.1 Knowledge

Knowledge is the "awareness or familiarity gained by experience of a fact or situation" (Oxford English Dictionary, 2023: online), while knowledge about mental health is understanding mental health disorders and an awareness of their causes, different treatments, and management (Jorm, 2000:396). Generally, knowledge about mental health disorders among the public is insufficient (Tesfaye *et al*., 2021:8) and this is seen in several countries (Al-Atram, 2018:777). Furthermore, Dube and Uys (2016:124) and Kigozi-Male *et al.* (2023:4) report that the knowledge of primary healthcare nurses about mental health disorders is inadequate in South Africa. Inadequate knowledge and low MHL of the healthcare provider are associated with influencing help-seeking behaviour by those requiring mental healthcare services (Fung *et al*., 2021:5). Poor MHL indicates a need for education among healthcare providers about mental health disorders to ensure adequate knowledge about mental health disorders (Tesfaye *et al*., 2021:8). Adequate knowledge about mental health indicates a high MHL with the necessary skills for assessment, diagnosis, and treatment (Tay *et al*., 2018:758).

Minty *et al*. (2021:8) and Kelly, Jorm and Wright (2007:29) also indicate a need for healthcare providers to have adequate knowledge to educate and give patients information about mental health regarding the importance of the correct treatment. Mtshawuli (2020:51) states that primary healthcare nurses are responsible for educating the community. There is a need for training among primary healthcare nurses providing mental healthcare services to address mental health challenges and improve their own knowledge of mental health (McInnes, Halcomb, Ashley, Kean, Moxham & Patterson, 2022:547). Knowledge about mental health may assist in deciding whether to diagnose a patient with a mental health disorder or not, subsequently influencing the treatment plan. Improved knowledge may develop healthcare workers' skills in working with patients with mental health disorders. Kigozi-Male *et al.* (2023:6) indicate that improved knowledge increases confidence and skills in rendering mental healthcare services.

2.12.2 Skills

Skills are the capability to excel in a specific task (Oxford English Dictionary, 2023: online). Different types of skills, such as interpersonal and practical skills, are all critical in the nursing field. Interpersonal skills include physical touch and the skill to attend to mental health disorders and to provide counselling. In contrast, practical skills include helping the MHCU to be self-dependent and live in the community (Rydon, 2005:82). Björkman and Salzmann-

Erikson (2019:5) indicate a need for healthcare workers to have the skills to build trust, to be careful when choosing of words during counselling, and to avoid mistakes that could negatively influence counselling. Counselling skills include listening, good communication, and a good appearance (Hough, 2014:44).

A lack of skills in mental health disorders might result in the stigmatization of and discrimination towards MHCUs (Meyer *et al*., 2019:26). Mclnnes *et al*. (2022:547) states a need for adequate skills on mental health disorders among the staff working in the primary healthcare sector, as there is an indication of high volumes of mental health disorders such as depression, anxiety, and post-traumatic disorders (PTSD). Primary healthcare nurses are expected to have the skills to screen and assess individuals for mental health disorders (Andersson, Carlsson, Karlsson & Holmberg, 2020:163). Cheung, Chan and Cheng (2023:12) suggest training to improve nurses' skills to provide better mental health services to their communities. Skills can be improved and acquired through mental health training, such as campaigns which can assist in reducing negative attitudes towards mental health disorders (Raj, 2022:80). Training of healthcare providers on mental health issues could assist in bringing about adequate skills and positive attitudes towards mental health disorders (Minty *et al*., 2021:11). Better skills and more knowledge may result in more positive attitudes towards mental healthcare.

2.12.3 Attitude

Attitude is a settled way of thinking or feeling about something (Oxford English Dictionary, 2023: online). Idoko, Udo and Idoko (2021:188) found that people in Africa generally have negative attitudes toward MHCUs, while Sahile, Yitayih, Yeshanew, Ayelegne and Mihiretu (2019:7) also identified negative attitudes towards MHCUs in Ethiopia. Nóbrega, Fernandes, Zerbetto, Sampaio, Carvalho and Chaves (2021:8) identified negative attitudes among nurses in Brazil. Kigozi-Male et al. (2023:6) also stated that primary healthcare nurses have negative attitudes towards MHCUs in South Africa, regardless of their experience. Hendricks (2018:55) argues that nurses with enough experience, regardless of their category or type of training, had better attitudes toward MHCUs. Al-Atram (2018:776) identified negative attitudes among healthcare practitioners, including nurses and PHC doctors rendering services in Saudi Arabia (Salazar *et al*., 2022:998), while Meng, Huang, Wang, and Wang (2022:7) identified negative attitudes toward mental healthcare users among nursing and medical students in China.

A need for training to address negative attitudes towards mental health and to improve mental health literacy was identified (Gammage & Nolte 2020:773; Chaves, Arnáez, Castilla, Roncero & Garcia-Soriano, 2022:7). In addition, mental health training for healthcare professionals was perceived to increase knowledge about mental health disorders and reduce negative attitudes towards MHCUs (Crawford, Burns, Chih, Hunt, Tilley, Hallet, Coleman & Smith, 2015:3). A positive attitude towards mental health was identified amongst healthcare providers who received training on mental health (Minty *et al*., 2021:11). A negative attitude is associated with stigma and a lack of knowledge and skills, highlighting the fact that low levels of mental health literacy result in poor management of mental health disorders (Tambling *et al*., 2021:120). MHL is defined as beliefs about mental disorders, which include the ability to identify and manage such disorders (Jorm *et al*., 1997:182).

2.13 Mental health literacy (MHL)

Health literacy is the understanding of health systems and being knowledgeable about health (Liu, Wang, Liu, Jiang, Wang, Chen, Ju & Zhang, 2020:1; Sørensen *et al*., 2012:3, Jorm, 2000:396). Mental health literacy evolved from health literacy (Kutcher *et al*., 2016:1; Jorm *et al*., 1997:182). Mental health literacy (MHL) was initially defined as "individuals' knowledge and beliefs about mental health disorders that aid their recognition, management, and prevention" (Jorm *et al*., 1997:182). MHL can be assessed using specific measuring instruments to indicate MHL levels among individuals (Campos, Dias, Costa, Rabin Miles, Lestari, Feraihan, Pant, Sriwichai, Boonchieng & Yu, 2022:2).

MHL includes the prevention of mental health disorders, the knowledge about different types of mental disorders, and the specific treatment required for each disorder (O'Connor & Casey, 2015:511). A high level of MHL amongst individuals has a positive impact on mental health, while low levels of MHL increase the burden of mental health. MHL levels can be improved through training (Oztas & Aydoğan, 2021:200, 203; Kauye *et al*., 2014:665; Maconick *et al*., 2018:7; Sibeko *et al*., 2018:9). Tay *et al*. (2018:758) elaborate that it is of paramount importance for individuals to have high levels of MHL, including understanding different types of mental disorders, their causes, and management. Marangu *et al.* (2021:8) emphasize the need for high levels of MHL to address the burden related to mental health disorders.

Globally, MHL seems to be low (Wu, Luo, Chen, Qi, Long, Xiong, Liao, & Liu, 2017:11; Tonsing, 2018:44). Low levels of mental health literacy were identified in the Arab states (Elyamani, Naja, Al-Dahshan, Hamoud, Bougmiza, & Alkubaisi, 2021:15). At the same time,

MHL was also identified to be low in many African countries (Marangu et al., 2021:8). High levels of MHL were identified among British individuals (Loo, Wong & Furnham, 2012:112) and primary healthcare nurses in Washington (Liu et al., 2020:187). In contrast, moderate levels of MHL were found among PHC nurses in Zambia and South Africa (Korhonen, Axelin, Stein, Seedat, Mwape, Jansen, Groen, Grobler, Jorns-Presentati, Katajisto, & Lahti, 2022:9). In South Africa, MHL was found to be low amongst primary healthcare nurses and other healthcare providers (Dube & Uys 2016:124). A low level of mental health literacy among individuals is associated with increased levels of mental health disorders due to a lack of knowledge and associated help-seeking behaviour (Tambling *et al*., 2021:12).

Different instruments exist to measure a person's level of mental health literacy. The MHL instrument developed by Jorm examines individuals' knowledge, prevention, and treatment of mental health disorders (Jorm *et al*., 1997:182). O'Connor and Casey (2015:515) developed an MHL instrument to examine all characteristics of MHL, including the prevention of mental health disorders, knowledge about mental disorders, treatment, and psychometric evaluation. MHL literacy instruments have different components, measuring different aspects.

2.14 Components of mental health literacy

Bjørnsen *et al*. (2019:108) outlined four key components of MHL. These are "(1) understanding how to obtain and maintain good mental health, (2) understanding mental health disorders and their treatments, (3) decreasing stigma related to mental health disorders, and (4) enhancing help-seeking efficacy". The Bjørnsen instrument uses questionnaires and focus group interviews to assess MHL (Bjørnsen *et al*., 2019:108). According to Jorm (Jorm *et al*., 1997:182; Bahrami, Bahrami & Chaman-Ara, 2019:2), mental health literacy has seven components: "(1) the ability to recognize specific disorders; (2) knowledge of how to seek mental health information; (3) knowledge of the risk factors of mental illness; knowledge of causes of mental illness; (5) knowledge of self-treatments; (6) knowledge of professional help available; and (7) attitudes that promote recognition and appropriate help-seeking." Jorm's instrument uses vignettes to assess MHL (Jorm; 2000:396), while O'Connor and Casey's (2015:515) components examine all characteristics of mental health literacy and assess these in three stages: development, pilot testing, and psychometrics. Their instrument also assesses all attributes of MHL. The researcher will use Jorm's mental health literacy instrument for this study.

2.15 Mental health literacy instrument by Jorm

Reavley and Jorm developed this MHL instrument. Anthony Jorm is a psychologist and an Australian professor at the University of Melbourne. His research usually focuses on mental health prevention and diagnoses. Jorm developed an instrument to assess the ability of healthcare workers to identify mental health disorders, seek help regarding mental health, recognise the danger signs of mental health disorders, information regarding the aetiology of mental health disorders, self-management information, information regarding consultation from a trained healthcare professional; and knowledge about proper mental healthcare (Jorm *et al*., 1997:182). The questionnaire includes five vignettes of fictional characters who meet the DSM-IV diagnostic criteria for post-traumatic stress disorder, a depressive disorder, schizophrenia, suicidal thoughts, and a psychotic disorder, respectively (DSM Library, 2023: online). Each vignette is followed by a standardised set of questions relating to the nature and treatment options of the described disorder, which include recognition, beliefs about the helpfulness of possible treatments, and treatment providers. It also asks participants to indicate their preferred service provider for addressing their mental health condition, such as a healthcare practitioner or a priest.

This study uses the Jorm questionnaire as the researcher believes it will assist him in answering the research question. The questionnaire also relates to the researcher's working environment. The vignettes use the name John for a patient suffering from different types of mental health conditions. John is relevant to South Africa since the name is familiar to participants. No amendments were made to the questionnaire, while additional information for biographic data was added, including working experience, nurse categories, and additional space, should the participants wish to add any comments. The vignettes are relevant to the South African context; therefore, the researcher used the original questionnaire.

2.16 Chapter Summary

The literature chapter described MHL and the MHL levels of primary healthcare nurses. The chapter further described the integration of mental health into primary healthcare and the challenges faced during integration. The impact of MHL training on primary healthcare nurses was discussed, and it was mentioned that there is a global shortage of mental healthcare nurses. The next chapter will discuss the research methodology utilised in this study.

Chapter 3

Research Methodology

3.1 Introduction

Chapter 2 presented the literature review related to the research aim of this study. This chapter will elaborate on the selected research design and chosen research methodology. This study is embedded in a quantitative, descriptive, and cross-sectional research design. An MHL questionnaire developed by Jorm *et al*. (1997:182). was used on a selected target population with comprehensive sampling. This chapter further reports on how the pilot study was performed, its relevance to the data collection plan and the validity and reliability of the questionnaire. The data collection plan further outlines how the researcher adhered to ethical considerations. This chapter will end with a description of the data analysis.

3.2 Research paradigm

A paradigm is the assumptions about a situation that could assist scientific discovery (Polit & Beck, 2017:9; Park *et al*., 2020:690). This includes researchers' various views to explain things (Leavy, 2002:276; Botma *et al.,* 2022:362). Furthermore, a research paradigm is the values or beliefs guiding the research process (Botma *et al.,* 2022:362). Regarding selecting a research paradigm for this study, positivism was considered the most suitable. Positivism is stated to be influential when utilising quantitative research methods (Yong, Husin & Kamarudin, 2021:5859; Omodan, 2022:277). Positivism contends that science is the reliable foundation of knowledge (Chilisa & Kawulich, 2012:7) that can be determined via scientific research methods (Leavy, 2022:104; Yong *et al.,* 2021:5857). This study assumes that primary healthcare nurses' MHL is generally low. The positivist approach supports an objective ontology and a dyadic epistemology. Therefore, this view holds that the world is real and completely understandable and that the researcher can research it without affecting or being persuaded by it (Kivunja & Kuyini, 2017:30-31).

3.2.1 Methodology

Methodology indicates how the information is collected (Polit & Beck, 2017:10; Botma *et al.,* 2022:363). Positivist methodology involves quantitative methods, including controlling variables and manipulating the research setting (Park *et al.,* 2020:692; Botma *et al.,* 2022:363). The positivist methodology helps to determine the best suitable methods and designs for a particular study (Yong *et al.,* 2021:5858) by applying scientific principles and

measures (Leavy, 2022:104). The positivist paradigm explains the researcher's worldview in research, including known research methods for a scientific study (Kivunja & Kuyini, 2017:30). A quantitative research design implementing questionnaires was deemed suitable to gain knowledge about the research aim. The following section describes the research design.

3.2.2 Ontology

Ontology refers to what is real and how we view the world (Polit & Beck, 2017:9; Botma *et al.,* 2022:363). The positivist paradigm includes perceiving an existing reality (Park *et al*., 2020:691). A researcher is independent of the study and objectively measures perspectives (Leavy, 2022:104). This researcher's perception is that primary healthcare nurses have a low mental health literacy and have experienced this while working in the same field.

3.2.3 Epistemology

Epistemology refers to what is known, our knowledge, and the researcher's relationship with the study participants. Actual knowledge is obtained through real-life experiences based on observation and facts (Polit & Beck, 2017:10; Park *et al.,* 2020:691; Botma *et al.,* 2022:363). The researcher's knowledge is based on his observation working with colleagues in the PHC setting, and he wanted to investigate his perception.

3.3 Research design

Research design is regarded to be the engine of the study (Botma *et al.,* 2022:350; Leavy, 2022:9) and can be described as the plan for the steps followed in a study to answer the aim and objectives of the study (Polit & Beck, 2017:743; Brink *et al.,* 2018:81, De Vos, Strydom, Fouché & Delport, 2011:41). It helps the researcher to answer the research question and adequately understand the study (Botma *et al.,* 2022:362). The research design also helps the researcher with the correct research methods, population size, and data collection that are relevant to the study (Botma *et al.,* 2022:350; De Vos *et al.,* 2011:41). A quantitative, descriptive, and cross-sectional design was utilised for the study to help describe the MHL among primary healthcare nurses in Dr. RSM. The following section discusses quantitative research design in detail.

3.3.1 Quantitative design

The quantitative research method is defined as a research method that uses numbers and quantity to answer a research question. It is a controlled design that avoids bias (Polit &

Beck, 2017:47; Kabir, 2016:203). Quantitative research uses questionnaires and observations to explain relationships between variables (Leavy, 2022:9,114; Botma *et al*., 2010:133) and descriptions, graphs, or tables to visualise the collected data. The quantitative design is usually utilised for measurable and quantifiable data in numbers (Leavy, 2022:117; Botma *et al.,* 2010:83). Choosing a research design may be influenced by its strengths and limitations.

3.3.1.1 Strength and Limitations of Quantitative Design

a. Strengths

Each type of research design has both strengths and limitations. A quantitative research design also has specific strengths: it brings new ideas, has a larger population, and is a controlled study (Polit & Beck, 2017:11; Brink, Van der Walt & Van Rensburg, 2012:101; Botma *et al.,* 2010:82-83). The strengths of a quantitative research design are discussed below.

- Doing quantitative research implementing scientific methods could bring new ideas and knowledge to mental health nursing. This evidence may assist in developing nursing practice, management, and education (Botma *et al.,* 2010:82). The results of this study could bring new ideas and assist in improving nursing practices in the mental health field.

- In a quantitative study, the results can be generalised to a larger population, and quantitative research prevents bias (Polit & Beck, 2017:11; Botma *et al.,* 2010:83). The results of this study may be generalised to other facilities providing similar services within the Dr RSM District.

- It is a cost-effective method, as data collection can be done in a larger population within a short period and during a single opportunity (Brink *et al*., 2012:101). The researcher collected data from several participants on the same day in one facility.

- The researcher does not actively participate in the study but distributes the instrument to the participants to collect data (Botma *et al.,* 2010:83). The researcher did not actively participate in the study during data collection and only distributed the questionnaires.

- A quantitative study is a controlled study, with the same method applied to all participants, minimising bias, and the researcher does not share the interpretation (Polit & Beck, 2017:11). The same questionnaire was utilised with all the participants.

b. Limitations of quantitative studies

The limitations of a quantitative study will be discussed below. One challenge faced during quantitative research is that the researcher or fieldworker is not always present when data is collected. Data analysis may be complex due to statistics being used; the researcher may focus on fewer concepts or a larger sample size may be required (Brink *et al.,* 2012:179; Botma *et al.,* 2010:82,135; Denscombe, 2010:269).

- Data analysis during quantitative research can be confusing and complicated, as statistical analysis is used to analyse data (Brink *et al.,* 2012:179). For this study, data analysis was not challenging as the data was analysed with the help of a biostatistician.

- The researcher did not form part of the study during data collection (Botma *et al.,* 2010:82). The MHL questionnaire was used to collect data, and the researcher could not engage with the participants in cases where responses were unclear on the completed questionnaires.

- It focuses on fewer concepts or is limited by specific questions asked in the questionnaires and cannot address a phenomenon in its entirety (Botma *et al.,* 2010:82). The participants are not allowed to elaborate (Botma *et al.,* 2010:135; Carr 1994:717) on what is asked or requested via surveys or questionnaires. The MHL of primary healthcare nurses in Dr RSM was researched for this study. The participants responded to the questionnaire but did not get an opportunity to elaborate in detail.

- Quantitative research involves a larger population, as a smaller population may result in unreliable findings (Denscombe, 2010:269). A population of 84 respondents participated in the current study.

-Quantitative studies are known to have low response rates.

In planning a study, the researcher should anticipate the strengths and limitations of the chosen design both before (selecting the research design) and during the study process (implementation). The strengths discussed above for the quantitative research method convinced the researcher to select this method. A descriptive research design will be explored below.

3.3.2 Descriptive research design

Descriptive design is a nonexperimental design used if the researcher wants to describe the variable of interest as it occurs naturally (Polit & Beck, 2017:206; Drummond & Reyes, 2018:171; Botma *et al.,* 2010:110). The descriptive design helps describe a research

problem or phenomenon, focusing on what, when, where, and how questions can be asked through surveys or observation (Gray & Grove, 2021:248; Voxco, 2021: online). The descriptive design aims to describe and/or observe characteristics of one or more variables (Aggarwal & Ranganathan, 2019:34; Drummond & Reyes, 2018:171). Descriptive design can be used to determine the research question (Botma *et al.,* 2010:110) and is used mainly when there is little information or limited research about the area of study (Grove, Burns & Gray, 2013:87). The advantages of descriptive design include that it is cost-effective and does not consume a lot of time. One disadvantage is that it cannot be used to study the relationship between two variables (Botma *et al.,* 2010:110). Due to the limited information on the topic, a descriptive design was selected because the researcher wanted to describe the MHL of PHC nurses in the specific province.

3.3.3 Cross-sectional design

Cross-sectional design involves the collection of data at one point in time between one or more variables (Polit & Beck, 2017:168; Drummond & Reyes, 2018:171; Aggarwal and Ranganathan, 2019:35). A cross-sectional design is simple, inexpensive, and effective in the description of relationships and may help the researcher to identify the problem and draw a conclusion (Botma *et al*., 2010:110; Grove *et al*., 2013:43; Polit & Beck, 2017:168; Aggarwal & Ranganathan, 2019:35).

It is cost-effective, as study participants can complete questionnaires and submit them immediately without further visits to collect them. The researcher also does not have to be present during completion (Polit & Beck, 2017:170; Botma *et al.,* 2010:113). Questionnaires were used to collect data suitable for the study and the researcher's situation. The quantitative, cross-sectional design was practical and could be used to answer the research question. The research technique utilised in the study will be explained in the next section.

3.4 Research technique.

Research technique refers to the process, procedures, and instruments used in data collection (Botma *et al.,* 2010:133; Brink *et al.,* 2012:149; Leavy, 2023:201). The researcher should use an instrument that will assist in answering the research question. If the research question is about the researcher determining knowledge and observing attitudes or beliefs, this could be achieved by asking questions to the participants (Polit & Beck, 2017:243; Brink *et al.,* 2012:152). The type of method or instrument used to collect data during the study, whether questionnaires or interviews, does not affect the research results (Gray & Grove,

2021:500; Grove *et al.,* 2013:425). This study will use a questionnaire to explore the MHL of primary healthcare nurses in Dr RSM.

A questionnaire is a printed document with questions that study participants should complete in writing. Alternatively, online-based questionnaires can be completed electronically (Polit & Beck, 2017:243; Gray & Grove, 2021:500; Leavy, 2022:114). Questionnaires are used to measure and analyse the relationships between variables (Romm, 2013:653) and are suitable for use in studies with larger populations (Gray & Grove, 2021:501). The advantages and disadvantages of a questionnaire will be discussed in the next section.

3.4.1 Advantages and disadvantages of a questionnaire

a. Advantages

Using a questionnaire has several advantages. It is not expensive, data can be gathered from a large population, and it ensures anonymity (Polit & Beck, 2017:243; Botma *et al.,* 2010:134-135). The advantages of using a questionnaire during research will be discussed below.

- Questionnaires are not expensive, and completed questionnaires can be collected on the same day without the need to return later. Electronic questionnaires save on printing, paper, and distribution costs (Polit & Beck, 2017:243). For this study, questionnaires were printed and distributed to participants, and many participants returned their completed questionnaires on the same day.

- Questionnaires allow a researcher to quickly gather a large amount of data (Botma *et al.,* 2010:135). At some of the facilities where this research was conducted, data were collected from a large population in one day, as many participants completed and returned the questionnaires on the same day.

- The guarantee of anonymity during the research process encourages participants to respond truthfully (Botma *et al.,* 2010:135). The completed questionnaires did not mention the actual names of the participants and were labelled using anonymized codes.

- Close-ended questions facilitate the data analysis process for researchers (Romm, 2013:654; Botma *et al.,* 2010:134). The questionnaire in this study contained closed- and a few open-ended questions, but the researcher had no difficulty during data analysis. The advantages of a questionnaire are described in this section, and the disadvantages will be discussed next.

b. Disadvantages

The disadvantages of a questionnaire include the lack of participation in a study, poor responses by participants, a limitation in cases where participants cannot read and write fluently, such as children and people with disabilities, the need for questions to be read by a third party, and non-interaction with participants by the researcher (Botma *et al.,* 2010:135; Polit & Beck, 2017:243).

- Participants often take a questionnaire but then decide not to participate. They then return the questionnaires without completing them (Botma *et al.,* 2010:135; Gray & Grove, 2021:508). Some of the participants in this study withdrew from participating and returned questionnaires which had not been completed.

- Participants often return questionnaires or surveys without answering all the questions (Botma *et al.,* 2010:135). For this study, several participants returned incomplete questionnaires.

- Often, participants cannot complete questionnaires as they struggle with reading and writing, for example, children and people with disabilities (Polit & Beck, 2017:243). This situation was not relevant to this study.

- In some cases, participants need another person to ask the questions to elicit a better response (Leavy, 2022:115). This was not the case, as the participants completed the questionnaires independently.

- The researcher does not interact with participants as they respond to the questionnaires (Botma *et al.,* 2010:135). This researcher had limited interaction with the participants during the study and only met with the participants when distributing and collecting the questionnaires. Participants were left to complete the questionnaires on their own.

- There is no opportunity to enquire if participants need clarity on a specific issue (Botma *et al.,* 2010:135). The participants in this study had no opportunity to seek clarity on any of the questions and were not on hand to do this. The researcher's contact number appeared on the questionnaires and could be contacted if something was unclear.

- Developing a questionnaire is difficult, and one of the challenges is to ensure that its completion does not take too long (Gray & Grove, 2021:501; Brink *et al.,* 2018:138; Mukherjee, 2020:77). The researcher did not develop the questionnaire used in this study. Instead, the MHL questionnaire developed by Jorm was utilised for this study. The time to

complete the questionnaire and issues around the clarity of the questions were tested during a pilot study.

3.4.2 Questionnaire development

A mental health literacy questionnaire was used in the study for data collection. Mental health literacy (MHL) was first defined as "individuals' knowledge and beliefs about mental health disorders that aid their recognition, management, and prevention" (Jorm *et al.,* 1997:182). These aspects of the definition of MHL by Jorm will also guide the discussion of the results in Chapter 4. MHL is assessed using a questionnaire (Campos *et al*., 2022:2).

The MHL questionnaire developed by Reavley and Jorm (2011:948) was used in this study. The original questionnaire contains five vignettes (scenarios) of fictional characters who meet the DSM-IV diagnostic criteria for a depressive disorder (depression), posttraumatic stress disorder, suicidal thoughts (depression), a psychotic disorder, and schizophrenia disorder, respectively (APA:1994). Participants read the vignettes and should be able to name the disorder presented by each vignette. Each vignette is followed by a standardised set of questions relating to the nature and treatment of the described disorder, including recognition, beliefs about the helpfulness of possible treatments, and treatment providers. The participants in this study responded to the standardised questions by ticking the relevant boxes, which they believed would be helpful and suitable treatment for each identified disorder. The developer, Professor Anthony Jorm from the University of Melbourne, was contacted via email, and he granted permission for the use of the questionnaire (refer to Addendum C). No amendments were made to the original questionnaire, and questions related to biographic data were added. Table 3.1 presents the vignettes (scenarios) used in the questionnaire.

Table 3.1: The vignettes and their mental health diagnoses

Vignettes	Mental health diagnosis.
1. John is 30 years old. He has been feeling unusually sad and miserable for the last few weeks. Even though he is tired all the time, he has trouble sleeping nearly every night. John doesn't feel like eating and has lost weight. He can't keep his mind on his work and puts off making decisions. Even day-to-day tasks seem too much for him. This has come to the attention of his boss, who is concerned about John's lowered productivity.	*Depression*
2. John is 30 years old. He has been feeling unusually sad and miserable for the last few weeks. Even though he is tired all the time, he has trouble sleeping nearly every night. John doesn't feel like eating and has lost weight. He can't keep his mind on his work and puts off making any decisions. Even day-to-day tasks seem too much for him. This has come to the attention of John's boss who is concerned about his lowered productivity. John feels he will never be happy again and believes his family would be better off without him. John has been so desperate, he has been thinking of ways to end his life.	*Suicidal thoughts*
3. John is 44 years old. He is living in a boarding house in an industrial area. He has not worked for years. He wears the same clothes in all weathers and has left his hair to grow long and untidy. He is always on his own and is often seen sitting in the park talking to himself. At times he stands and moves his hands as if to communicate to someone in nearby trees. He rarely drinks alcohol. He speaks carefully using uncommon and sometimes made-up words. He is polite but avoids talking with other people. At times he accuses shopkeepers of giving information about him to other people. He has asked his landlord to put extra locks on his door and to remove the television set from his room. He says spies are trying to keep him under observation because he has secret information	*Schizophrenia*

about international computer systems which control people through television transmitters. His landlord complains that he will not let him clean the room which is increasingly dirty and filled with glass objects. John says he is using these "to receive messages from space".	
4. John is a 30-year old who lives alone. Since moving to a new town last year he has become even more shy than usual and has made only one friend. He would really like to make more friends but is scared that he'll do or say something embarrassing when he's around others. Although John's work is OK he rarely says a word in meetings and becomes incredibly nervous, trembles, blushes and seems like he might vomit if he has to answer a question or speak in front of his workmates. John is quite talkative with his close relatives, but becomes quiet if anyone he doesn't know well is present. He never answers the phone and he refuses to attend social gatherings. He knows his fears are unreasonable but he can't seem to control them and this really upsets him.	*Anxiety disorder*
5. John is a 30-year-old who lives with his wife. Recently his sleep has been disturbed and he has been having vivid nightmares. He has been increasingly irritable, and can't understand why. He has also been jumpy, on edge and tending to avoid going out, even to see friends. Previously he had been highly sociable. These things started happening around two months ago. John owns a newsagent shop with his wife and has found work difficult since a man armed with a knife attempted to rob the cash register while he was working four months ago. He sees the intruder's face clearly in his nightmares. He refuses to talk about what happened and his wife says she feels that he is shutting her out.	*Post-traumatic stress disorder*

These questions are asked about each vignette:

1. *From the information given, what, if anything, is wrong with John?*
2. *If John were to seek help from any of the following people, is it likely to be helpful, harmful, or neither for him? (Tick on response for each line).*
3. *If John were to take one of the following medicines, is it likely to be helpful, harmful, or neither for him? (Tick one response for each other line).*
4. *If John were to undertake any of the following, is it likely to be helpful, harmful, or neither for him? (Tick one response for each other line).*
5. *What would be the likely result if John had the sort of professional help you think is most appropriate? (Tick one box only).*
6. *What would be the likely result if John did not have any professional help? (Tick one box only).*
7. *Do you think that John would be discriminated against by others in the community if they knew about the problems he had? (Yes or no).*
8. *Please indicate how strongly you personally agree or disagree with each statement: _____ (Tick one response for each other line) (strongly agree, agree, neither agree nor disagree, disagree, strongly disagree).*
9. *Please indicate how strongly you agree or disagree with each statement: _____(Tick one response for each other line) (strongly agree, agree, neither agree nor disagree, disagree, strongly disagree).*
10. *Please indicate how willing you would be to: _____(Tick one response for each other line) (definitely willing, probably willing, probably unwilling, definitely unwilling, don't know).*
11. *Which professional group do you belong to? (professional nurse, staff nurse, enrolled nursing assistant).*
12. *Age? (below 30, 30-39, 40-49, 50-59, 60 or over)*
13. *Sex? (male or female)*
14. *Work experience……*
15. *On average, how often do you deal with problems like John's? (daily, weekly, monthly, less than monthly).*
16. *Do you have any comments you would like to make?.....*

These vignettes (scenarios) contain information regarding certain diagnostic criteria applicable to mental health disorders. Case vignettes can help to identify mental health

disorders and evaluate mental health literacy. The following section will elaborate on the population and sampling for the study.

3.5 Population and sampling

The population is the entire set of individuals or things with the same features that form part of the study participants (Polit & Beck, 2017:739; Brink *et al.,* 2012:131). Botma *et al*. (2022:351) define population as the total number of individuals who meet the required criteria to participate in the study. The target population is the population that meets the criteria for the study to represent the entire population in the study (Willie, 2022:521). The population does not have to be limited to humans, as it can include objects and animals sharing the same characteristics that are eligible for a study (Villegas, 2023: online). The population for this study consisted of the primary healthcare nurses working at the clinics and Community Healthcare Centres (CHC) in three subdistricts (Taung, Kagisano Molopo and Naledi) in Dr. RSM who volunteered to participate in the study. The total population of primary healthcare nurses working in the three districts was approximately 303, who met the eligibility criteria to participate in the study.

Sampling is a method of selecting a certain percentage of the population to participate in the study to represent the entire population (Botma *et al.,* 2022:352; Grove *et al.,* 2013:351; Polit & Beck, 2017:743). There are different types of sampling, including but not limited to quota sampling, random sampling, comprehensive sampling, proportionate sampling, strata sampling, staged sampling, snowball sampling, consecutive sampling, and purposive sampling (Polit & Beck, 2017:251-254).

The researcher used comprehensive sampling, as described by McMillan and Schumacher (2010:486), by inviting the entire population to participate in the study. The sampling for this study comprehensively included all the primary healthcare nurses who volunteered and agreed to participate in the study and worked at the three subdistricts in the Dr Ruth Segomotsi Mompati district. The researcher recruited and invited all study participants during a staff meeting, during their lunchtimes, during low workload times, and when they were free. The population and sampling method were described to the participants, and the next section will describe this study's inclusion and exclusion criteria.

3.5.1 Inclusion criteria

Inclusion criteria refer to the features the target population displays that are similar (Polit & Beck, 2017:250). Garg (2016:642) states that inclusion criteria must be uniform, consistent, and reliable. At the same time, Nikolopoulou (2022a: online) defines it as a characteristic that the population should have to form part of the research study. For this study, all primary healthcare nurses working in the three selected subdistricts in Dr RSM's primary healthcare facilities were included to participate.

3.5.2 Exclusion criteria

Exclusion criteria refer to features that prevent the target population from being considered to participate in a study (Polit & Beck, 2017:728; Garg, 2016:642). Exclusion criteria involve characteristics that identify those unsuitable for participation in a study (Nikolopoulou, 2022a: online). This study excluded people who were not primary healthcare nurses at the three subdistricts in the Dr Ruth Segomotsi Mompati district and those with close relationships with the researcher, such as a spouse, family members, or close friends. The inclusion and exclusion criteria were discussed in this section. A pilot study leads the way to the main study and will be detailed next.

3.6 Pilot study

A pilot study involves evaluating or testing an instrument with a few study participants before using it in the actual study (Botma *et al.,* 2022:353; Lowe, 2019:117; Leavy, 2023:130). Pilot studies are done with individuals who have similar characteristics as those included to participate in the main study (Brink *et al.,* 2018: 161) and are seen as a "trial run" (Lowe, 2019:117). Pilot studies are done to prepare for the main study (In, 2017:601). The pilot study helps to iron out potential problems, such as the time it takes to complete a questionnaire or to determine the optimal sample size. A pilot study helps reduce the burden on participants and avoids the waste of resources (Polit & Beck, 2017:624; Arain, Campbell, Cooper & Lancaster, 2010:1).

A pilot study was done to check the questionnaire's clarity and determine its completion time. Five primary healthcare nurses working at the Mamusa subdistrict in Dr RSM were approached to participate in the pilot study because they provided the same services and experienced similar challenges as other primary healthcare nurses in the same district. The facility manager granted permission to approach these nurses. They were asked to make

recommendations for the improvement of the questionnaire and asked to identify any errors in the questionnaire. A pilot study often also measures how long it will take to complete a questionnaire, which is helpful for the data collection process. Most participants completed the questionnaire on the same day, taking approximately 30 minutes. A few of the other participants returned the questionnaire the following day. The study participants stated that the questionnaire was easy to answer, and technical errors in the numbering of the questionnaire were identified by study participants and were corrected. The pilot study's findings were not used in the main study since the Mamusa subdistrict was not part of the study population. The pilot study results were discussed with the biostatistician, who made no suggestions or amendments. A discussion of the data collection will follow.

3.7 Data collection

Data collection is collecting information on a selected population to respond to the research question using research methods or instruments depending on the selected research design (Polit & Beck, 2017:725; Grove *et al.,* 2013:523; Leavy, 2022:106). Adequate planning and patience are required to achieve successful data collection (Kabir, 2016:202). The data collection component is the same in all study fields but differs in the methods used (Responsible Conduct in Data Management, 2023: online). Data collection in quantitative research usually involves numbers and using instruments to collect data, such as questionnaires (Gray & Grove, 2021:501; Mukherjee, 2020:75). A pre-existing questionnaire was ideal for this study and was also cost-effective. A larger sample size can also be reached more quickly than qualitative data collection methods.

The researcher used a questionnaire to collect data, as mentioned above. The researcher applied for the required permission from the Health Sciences Research Ethics Committee of the University of Free State to conduct the study, and permission was granted (HSREC number UFS-HSD2021/0848/3011 – see Addendum E). The researcher also consulted the North West Department of Health for permission to conduct the study in the North West province (Addendum A). Permission was also obtained from the chief director of the Dr RSM district, who indicated that no additional approval was required. The researcher then arranged a suitable time and date with the operational manager of each facility to approach the primary healthcare nurses and collect data at their facility. Working with the operational manager did not work at all the facilities as some did not have an operational manager available, and some staff meetings did not involve all staff. Only those available attended the staff meeting. The researcher visited each facility during lunchtime and periods of low

workload, while in some facilities, arrangements were made with the operational managers for data collection.

The researcher explained the aim of the study to the primary healthcare nurses and obtained consent from those who indicated their willingness to participate in the study. The information leaflet and written consent (Addendum B) to participate in the study were handed to the participants to read and to complete the informed consent form before participating. The researcher visited each facility on different days to accommodate the study participants working in shifts. A hard copy of the questionnaire was handed to each participant who gave informed consent. The questionnaires (refer to addendum D) had five vignettes (scenarios) followed by a standardised set of questions that had to be completed. Study participants were asked to complete all five scenarios of the MHL questionnaires in their own time after they agreed to participate. In cases where the participants could not complete the questionnaire on the same day, the researcher indicated that he would collect those during the following day. It took participants about 30 minutes to complete the questionnaire. The questionnaire was anonymous and was labelled in numbers, which guaranteed confidentiality. Participants returned the completed questionnaires to the researcher in sealed envelopes. All completed questionnaires were stored in a lockable cupboard during the study. Data collection took 18 months, as several participants did not return their questionnaires on time. Another issue was the distance between the facilities. Some participants postponed the completion of their questionnaires, and in some instances, facility managers reported a very high workload, a lack of funds to distribute questionnaires and staff shortages. A number of participants also withdrew from the study. COVID-19 also created challenges, including the high volume of patients in the PHC facilities and restrictions on movement and gatherings. The number of respondents who returned completed questionnaires was 84.

3.8 Validity

Validity refers to using a relevant instrument to measure the correct subject and ensure the correct interpretation of the issue (Burns & Grove, 2021:463; Leavy, 2022:284; Botma *et al.,* 2010:174). Validity is a complex concept that broadly concerns the soundness of the study's evidence regarding whether the findings are unbiased, cogent, convincing, and well-grounded (Polit & Beck, 2017:161). The original questionnaire by Professor Anthony Jorm includes five vignettes followed by standardised questions. Proof of the validity of the questionnaire (refer to addendum C) was obtained from its developer. The questionnaire

itself was not changed, although biographical questions were added. No further changes were made after the pilot study was conducted. All study participants were given enough time to complete the questionnaire.

3.8.1 External validity

External validity emphasises the extent to which the results can be generalised to other populations (Leavy, 2022:285; Botma *et al.,* 2010:177; Grove *et al.,* 2013:202; Brink *et al.,* 2018:94). External validity is defined as generalising study results to other populations, settings, and samples, focusing on the broader context (Polit & Beck 2017:728; Bhandari, 2020: online). Andrade (2018:499) states that the results may not be generalised to other populations in certain situations. He further states that external validity focuses on judgment in research. The external validity of the MHL of primary healthcare nurses in Dr RSM can be generalised to other primary healthcare nurses providing the same services in other districts.

3.8.2 Content validity

Content validity examines the instrument's content, whether it measures the correct population, and if it is used correctly (Leavy, 2022:284; Botma *et al.,* 2010:175; Middleton, 2019: online; Brink *et al.,* 2018:152). Content validity refers to whether the instrument measures exactly what it aims to measure (Nikolopoulou, 2022b: online). Polit and Beck (2017:724) define content validity as the extent to which the instrument has items reflecting the measured construct in detail.

Content validity was ensured before the questionnaire was applied to determine the MHL of primary healthcare nurses in Dr. RSM. The content validity of this study was further ensured by using a questionnaire that has previously been used in a number of studies. It was suggested that no changes be made to the original questionnaire to retain content validity. Only biographical questions were added. The questionnaire's validity was ensured by using the MHL questionnaire developed by Jorm. The following section will detail how reliability was ensured during the study.

3.9 Reliability

Reliability refers to the accuracy and consistency of the information obtained in a study (Polit & Beck, 2017:160; Heale & Twycross, 2015:66; Leavy, 2022:127). The consistency of measurement should be ensured even if data is collected in different environments

(Mukherjee, 2020:79; Botma *et al.,* 2010:177). Gray and Grove (2021:389) state that there are different types of reliability, such as stability, equivalence, and internal reliability. Reliability was ensured, as all the study participants completed the same questionnaire. The questionnaire was available in English, the official language the Department of Health employees used. No amendments were made to the questionnaire after the pilot study was done.

3.10 Ethical considerations

When humans are used as study subjects, all studies should adhere to measures to protect their rights and social well-being (Brink *et al.,* 2018:28; Polit & Beck, 2017:137). Researchers should promote research integrity, avoid misconduct, and address any problems that may occur (Creswell, 2014:92). Approval to conduct the study was obtained from the HSREC of the University of the Free State (Addendum E). Permission to conduct the study in Dr RSM's primary healthcare facilities was also granted by the North West Department of Health (refer to Addendum A). The researcher ensured that the rights of study participants were respected throughout the study by adhering to the Belmont principle, which emphasises respect for human dignity, beneficence, and justice (Polit & Beck, 2017:139), as explained below.

3.10.1 Respect for human dignity

This can be achieved by ensuring full disclosure about the study and respecting participants' right to self-determination (Polit & Beck, 2017:140). Respect for human dignity is ensured through privacy, confidentiality, and by not disclosing participants' responses (Leavy, 2022:36; Mukherjee, 2020:74). Respect for human dignity is applied through requesting and granting informed consent before commencing with a study, which allows participants to decide whether they want to participate or not (Botma *et al.,* 2010:6). Participants should also be informed that they are under no obligation to participate (Brink *et al.,* 2012:35). The study participants were informed about the purpose of the study and allowed to ask questions for clarity. The consent form was given to participants, demonstrating that participation was voluntary and that they could withdraw at any time.

3.10.2 Beneficence

Beneficence emphasises the need to protect study participants from harm and

discomfort and to ensure protection from exploitation (Polit & Beck, 2017:139; Botma *et al.,* 2010:10; Leavy, 2022:33). Beneficence promotes human care and ensures that human beings are kept safe, and that studies are conducted in their best interest (Singh, 2015:1). The prevention of harm refers to physical, psychological and emotional harm (Brink *et al.,* 2012:35). Polit and Beck (2017:139) state that the exploitation of study subjects should be avoided at all costs. In this study, there was no harm done to the participants. They were briefed beforehand, gave informed consent, and were assured that participation was voluntary. Exploitation was prevented by keeping questionnaires anonymous. No identifying information appeared, so responses could not be linked to individuals. Responses were also not shared with direct employers. The choice not to participate in or to withdraw from the study was respected.

3.10.3 Justice

Justice refers to the need for fair treatment and ensuring privacy in a study (Polit & Beck, 2017:141; Brink *et al.,* 2018:30). Participants deserve to be treated fairly and respectfully during a research study (Polit & Beck, 2017:141). Unfair treatment severely violates participants' rights (Damtew, 2018:1).

All participants were invited to participate in the study and were given the same questionnaire in the same language (English). Privacy and confidentiality were ensured through anonymously labelling questionnaires by numbers and not linking the names of participants to the questionnaires. Data analysis for this study will be described in the next section.

3.11 Data analysis

To effectively carry out data analysis in a quantitative study, data from completed questionnaires must be transformed into computer files (Polit & Beck, 2017:57). Data analysis can then be done using computer software. Quantitative data analysis involves the analysis and interpretation of numerical data (Ali, 2021:3). Printed questionnaires with responses from participants in this study were captured in Excel for data analysis. Data analysis was done with the help of a biostatistician at the University of the Free State (UFS). The researcher coded the questionnaires and entered all responses (n=84) into an Excel document. The researcher checked the captured data and arranged with the biostatistician to confirm the process. The biostatistician assisted with the coding in Excel, including the numbering of each scenario. Descriptive statistics were used in this study to enable the

researcher to describe the MHL of the participants, thereby focusing on diagnosing, managing, and preventing mental healthcare disorders as defined by Jorm. The data analysis was managed by the Department of Biostatistics at the UFS. The data will be presented in detailed tables and figures in Chapter 4. The chapter conclusion follows.

3.12 Conclusion

This chapter investigated how the research was done using a quantitative, descriptive, and cross-sectional design. Research methods, research techniques, the population and sampling methods were documented. Furthermore, the study discussed the pilot study, data collection methods, validity and reliability, data analysis, and ethical issues of the study. The next chapter will discuss data analysis and present the research findings.

Chapter 4

Results

4.1 Introduction

The previous chapter discussed the research methodology in detail. This chapter presents the results of this study. The first section will focus on the demographic profile of participants and their MHL, in other words, their identification, management, and prevention of mental health disorders. A comparison of the identification of mental health disorders by years of working experience and nurse category will also be discussed in detail.

4.2 Demographic profile

A total of 84 participants completed and returned the questionnaire. Of the participants in this study, 59 were female, and 25 were male. The age ranged from below 30 years to 59 years. The duration of work experience was from one to 30 years. For this study, all the participants responded in English, and no other language was used during data collection. The majority of the participants (n=77) were professional nurses, with (n=6) staff nurses and (n=1) enrolled nursing assistants. A total number of 46 PHC nurses, from the participants, assist patients with mental health disorders daily, while (n=12) assist them weekly, (n=6) monthly, and (n=20) less than once a month. Table 4.1 below illustrates the demographic profile.

Table 4.1 Demographic profile

Variable	Frequency (N)	Percentage (%)
Gender		
-Male	25	29.76
-Female	59	70.24
Qualifications		
-Professional nurses	77	91.67
-Staff nurses	6	7.14
-Enrolled nursing assistants	1	1.19
How often do you deal with cases like John's?		
-Daily	46	54.76

-Weekly	12	14.29
-Monthly	6	7.14
-Less than once a month	20	23.81

Table 4.2 Median work experience distributions in years

Variable	Minimum	Median	Maximum
Duration = work experience in years	1	6	30

The median work experience of the participants was six years. The minimum, one, and the maximum, 32, are presented in Table 4.2.

4.3 Results

Mental health literacy (MHL), as defined by Jorm *et al*. (1997:182), includes the recognition, management, and prevention of mental health disorders. Each vignette with subsequent questions could be grouped according to the defining elements. The participants had to recognise the mental health disorders illustrated in each scenario. They had to be able to identify the correct course of management which would be helpful for each mental health disorder. In addition, there was an element of how to prevent mental health disorders. The following section will present the results of MHL among primary healthcare nurses. The results related to MHL among primary healthcare nurses will be discussed based on the components in Jorm's definition, namely the recognition, management, and prevention of mental health disorders.

4.3.1 Recognition of mental health disorders

For this study, it was expected that the healthcare workers would be able to recognise the following mental health disorders from the five vignettes: depression, suicidal thoughts, schizophrenia, anxiety disorder, and post-traumatic stress disorder.

Table 4.3.1 presents the results of the recognition of **depression**, vignette 1 of the questionnaire for the study. Most participants, 73.81% (n=62), were able to correctly recognise vignette one as depression, while only 20.24 (n=17) incorrectly identified it as stress. Four participants (4.76%) just stated that it is a mental health disorder, and one made an incorrect diagnosis of Down Syndrome. Overall, the answer to "Depression" was indicative of good mental health literacy, as the majority of the participants could make the

correct diagnosis. A higher percentage of depression recognition was found in this study than in a study by Loureiro, Jorm, Mendes, Santos, Ferreira & Pedreiro (2013:4). Table 4.3.1 presents the depression recognition by participants.

Table 4.3.1 Depression (Vignette 1)

Variable	Frequency (N)	Percent (%)
Depression	62	73.81
Stress	17	20.24
Mental health disorder	4	4.76
Down Syndrome	1	1.19

Suicidal thoughts were correctly identified by 66.67% (n=56) of the participants, incorrectly identified by 21.43% of the participants as depression, identified by 7% as stress, identified by 2.38% as a mental health disorder, and by 1.19% as schizophrenia. Most participants correctly identified suicidal thoughts. The above-average recognition of MHL is supported in another study (Hao *et al*., 2020:5). See Table 4.3.2 below for the results on suicidal thoughts.

Table 4.3.2 Suicidal thoughts (Vignette 2)

Variable	Frequency (N)	Percent (%)
Suicidal thoughts	56	66.67
Depression	18	21.43
Stress	7	8.33
Mental health disorder	2	2.38
Schizophrenia	1	1.19

Schizophrenia had a recognition rate of 59.52% (n=50). Thirteen of the participants (n=13) classified it as hallucination and delusions (15.48%). They could at least recognise specific symptoms (hallucinations and delusions) related to the correct diagnosis, indicating a good association. Thirteen participants (n=13) incorrectly thought it was depression (15.48%), and 9.52% also incorrectly classified the vignette as a mental health disorder but could not specify it. Hao *et al*. (2020:5) and Farrer, Leach, Griffiths, Christensen and Jorm (2008:3) also found an above-average recognition of schizophrenia. See Table 4.3.3 presenting results on vignette 3.

Table 4.3.3 Schizophrenia (Vignette 3)

Variable	Frequency (N)	Percent (%)
Depression	13	15.48
Mental health disorder	8	9.52
Schizophrenia	50	59.52
Hallucinations and delusions	13	15.48

Anxiety disorder was recognised correctly by 69.05% (n=58) of the participants, while 11 other participants classified it as being scared (13.10%). It seems that anxiety was also considerably easier to be appropriately identified than depression. Of these participants, 7.14% indicated that it may be schizophrenia, indicating poor knowledge of the recognition of anxiety. Some participants (2.38%) mistakenly stated that it was suicidal thoughts. Good MHL was identified for anxiety disorder. The correct recognition of anxiety was also high in a study by Sinnema, Terluin, Volker, Wensing and Balkom (2018:8). At the same time, Hao *et al*. (2020:5) found a lower recognition of anxiety in their study. Hao *et al*. (2020:6) further stated that participants assumed that anxiety is not a disorder but instead that it is stress-related. In the current study, participants misdiagnosed anxiety as isolation and panic disorder (3.57%), respectively. See Table 4.3.4 with results on anxiety disorder.

Table 4.3.4 Anxiety disorder (Vignette 4)

Variables	Frequency (N)	Percent (%)
Suicidal thoughts	2	2.38
Schizophrenia	6	7.14
Anxiety disorder	58	69.05
Scared	11	13.10
Other	1	1.19
Isolation	3	3.57
Panic disorder	3	3.57

Post-traumatic stress disorder (PTSD) had a lower recognition rate of 41.67% by 35 participants, while 33.33% (n=28) regarded it as trauma. PTSD is trauma-related, indicating that these participants have a degree of insight into the disorder. 13.10% incorrectly stated that it was depression, and 7.14% said anxiety disorder, while 1.19% incorrectly regarded PTSD as stress. Most participants failed to recognise post-traumatic disorder, indicating low MHL among participants correctly. See Table 4.3.5 below for the results for PTSD.

Table 4.3.5. Post-traumatic stress disorder (Vignette 5)

Variable	Frequency (N)	Percent (%)
Depression	11	13.10
Stress	1	1.19
Mental health disorder	1	1.19
Anxiety disorder	6	7.14
Scared	1	1.19
PTSD	35	41.67
Trauma	28	33.33
Yes	1	1.19

The above table presents the recognition of post-traumatic disorder. Table 4.3.6 presents results on the summary of the recognition of mental health disorders and the associated p-value. Depression had the highest recognition at 73.81% (n=62), suicidal thoughts at 66.67% (n=56), schizophrenia at 59.52% (n=50), anxiety disorder 69.05% (n=58), and post-traumatic stress disorder had the lowest recognition of 41.67% (n=35).

Table 4.3.6 Summary of recognition of mental disorders

Condition	Frequency (N)	Percentage (%)	P-value
-Depression	62	73.81	0.2955
-Suicidal thoughts	56	66.67	0.7769
-Schizophrenia	50	59.52	0.5077
-Anxiety disorder	58	69.05	1.0000
-Post-traumatic stress disorder	35	41.67	0.5153

The results in Table 4.3.6 indicate that most participants correctly recognised depression (73.81%), followed by anxiety disorder (69.05%). Suicidal thoughts were recognised by 66.67%, and schizophrenia by 59.52%. Post-traumatic stress disorder had a below-average

recognition level of 41.67%. Overall, it shows an above-average literacy level of recognition of depression, anxiety, suicidal thoughts, and schizophrenia, while PTSD reflected a below-average MHL. This was interesting because PTSD symptoms are common in South Africa, although there are still misconceptions and underrecognition of the condition (Ng, Stevenson, Kalapurakkel, Hanlon, Seedat, Harerimana, Chiliza, & Koenan, 2020:21).

Chen *et al*. (2017:7) identified low MHL among healthcare providers, and Jorm *et al*. (2005:7) stated that there is poor recognition of mental health disorders. Additionally, Marangu *et al*. (2021:5) indicated that there is usually poor recognition of depression and schizophrenia. Hao *et al.* (2020:5) and Hlongwane and Juby (2023:3) also mentioned the low recognition of mental health disorders. The p-value indicates the significance of the relationship between variables. A p-value less than 0.05 indicates a significant relationship between variables. The lowest p-value was 0.29, and the highest was 1.0 for the current study on recognition of mental disorders. The P-value for recognition of mental health disorders is not significant for all the disorders since they are all above 0.05. The following section presents results on the management of mental health disorders, beliefs about the helpfulness of possible treatments, and appropriate treatment providers.

4.3.2 Management of mental health disorders

According to Dube and Uys (2015:2) and Maconick *et al*. (2018:7), primary healthcare nurses manage people with mental health disorders at primary healthcare facilities. The participants indicated relevant persons whom they believed that a person with a mental health disorder could contact for assistance. They classified these as “helpful”, “harmful”, “neither”, “depends”, and “don’t know”. These results on the management of mental health disorders included the following relevant persons as options in the vignettes: medical practitioners, psychiatrists, psychologists, naturopaths or herbalists, and clergy, ministers, or priests. The score percentage of participants in managing mental health disorders by choosing the type of professional help is presented in Table 4.4 below.

Table 4.4: Scores on the suggested help for the management of mental health disorders

People who can help	Depression	Suicidal thoughts	Schizophrenia	Anxiety disorder	PTSD	Average
Doctor	76.19	75	76.19	76.19	77.36	76.19
Psychiatrist	90.48	89.29	90.48	88.10	90.48	89.77
Psychologist	92.48	91.67	92.86	90.48	92.86	92.07
Naturopath or herbalist	4.76	5.95	5.95	4.76	4.76	5.24
Clergy, minister, or priest	64.29	64.29	64.29	64.29	64.29	64.29

Most participants believed that a psychologist would be helpful for the management of all five mental health disorders, with an average of 92.07%, followed by a psychiatrist at 89.77%. Literature supports that professional help is indeed suitable for the management of mental health disorders (Hao *et al*., 2020:6). It is concerning that 64.29% of primary healthcare nurses believe that clergy, ministers, or priests could assist. Religion is important in South Africa and is seen as "helpful". Tesfaye *et al*. (2021:6), Jorm *et al*. (1997:185), and Burns and Tomita (2016:7) confirm that there are religious considerations for the management of mental disorders. Therefore, the management of mental health disorders may be necessary concerning the belief systems and religion of mental health clients. The belief that non-professionals can be suitable for the management of mental health disorders is also supported by several studies (Nicholas *et al*., 2022:1; Delobelle, 2013:163; Burns & Tomita, 2016:7). The inappropriate choice of people to manage of mental health disorders is also identified in a number of studies (Bjorkman *et al*., 2018:1028; Al-Atram, 2018:776; Nilsson *et al.,* 2023:2). The next section presents the results on medicines suggested for mental health disorders.

4.4 Medicines suggested for mental health disorders

The results of medicines suggested for mental health disorders are presented. Vitamins and minerals, tonics or herbal medicines, analgesics, antidepressants, antibiotics,

sedatives/hypnotics, antipsychotics, and tranquillizers such as valium are suggested. The participants selected medicines which they believed to be “helpful”, “harmful”, “neither”, “depends”, and “don’t know”. Table 4.5 presents the scores on medicines.

Table 4.5: Scores on medicines

Medicines that can help	Depression	Suicidal thoughts	Schizophrenia	Anxiety disorder	PTSD	Average
Vitamins and minerals, tonics, or herbal medicines	15.48	14.29	14.29	13.10	14.29	14.29
Analgesics	7.14	5.95	4.76	4.76	4.76	5.47
Antidepressants	66.67	66.67	66.67	65.48	65.48	66.19
Antibiotics	11.90	14.29	11.90	10.71	13.10	12.38
Sedatives/Hypnotics	41.67	44.05	44.05	42.86	45.24	43.57
Antipsychotics	51.19	54.76	55.95	53.57	54.76	54.05
Tranquilizers such as Valium	29.76	28.57	29.76	23.81	27.38	27.86

Fortunately, many participants (66.67%) selected antidepressants as helpful for people with depression which is the correct medicine. It is concerning that 11.90% stated that it may be helpful to use antibiotics as medicines for depression. This indicates low MHL. Suicidal thoughts were correctly identified to be managed with antidepressants (66.67%), while 14.29% believed that vitamins or herbal medicines were suitable, which is incorrect.

Antidepressants (66.67%) were selected by most to be a suitable medicine for schizophrenia, which is not valid, and this signifies poor knowledge. For anxiety disorder, 42.86% believed sedatives to be suitable medicine, and 64.29% believed that clergy or a priest would be helpful. Post-traumatic stress disorder was correctly identified to be managed with antidepressants (65.48%), antipsychotics (54.76%), and tranquillizers (27.38%), while 4.76% believed that incorrect medicine such as an analgesic could assist. This indicated a low MHL. A deficient number of participants believed that anxiety can be managed by analgesics, which is incorrect. Interestingly, most participants selected the correct medicine for the management of anxiety, which is antidepressants (65.48%) and antipsychotics (53.57%).

Participants selected the right medicines, such as sedatives (43.57), antipsychotics (54.05), and tranquillizers (27.86), to be helpful for mental health disorders. Most believe that antidepressants are suitable medicine for mental health disorders, with a 66.19% average, although this is not the correct medicine for schizophrenia. The wrong choice of medicine indicates that there is poor MHL among participants. Vitamins and herbal medicine averaged 5.47%, stating that staff nurses, enrolled nursing assistants and other professionals believed these were helpful. Surprisingly, healthcare providers believed vitamins and herbal medicines could assist, indicating poor MHL literacy. The belief that the use of vitamins and other herbal medicines could assist has been confirmed in other studies (Loureiro *et al.,* 2013:4; Hao *et al*., 2020:7). The cultural belief that cultural factors cause mental health disorders contributed to the fact that those with mental health disorders use herbal medicine and seek help from non-professionals (Venkataraman *et al*., 2019:2726). The next section, 4.4, presents results on preventing mental health disorders.

4.5 Prevention of mental health disorders

The results on the prevention of mental health disorders included becoming more physically active, psychotherapy, admission to a psychiatric ward, and having an occasional drink to relax. Participants endorsed certain items depicted in the vignettes as more applicable to preventing mental health disorders. Table 4.6 presents the results on beliefs about preventing mental health disorders.

Table 4.6: Prevention of mental health disorders

Prevention of mental health disorders	Depression	Suicidal thoughts	Schizophrenia	Anxiety disorder	PTSD	Average
Become more physically active	78.57	75.00	75.00	75.00	76.19	75.95
Psychotherapy	85.71	86.90	89.29	88.10	89.29	87.86
Admission to a psychiatric ward	55.95	55.95	57.14	53.57	53.57	55.24
Having an occasional alcoholic drink to relax	16.67	16.67	15.48	15.48	16.67	16.19

An average of 87.86% believed that psychotherapy is suitable for the prevention of mental health disorders. Farrer *et al*. (2008:5) support that psychotherapy is believed to be helpful for the prevention of mental health disorders. Hao *et al*. (2020:9) further confirm that education about mental health would help prevent mental health disorders. About 75.95% of participants believed that becoming more physically active would prevent mental health disorders. Loureiro *et al*. (2013:6) confirm that keeping physically active is believed to be helpful for the prevention of mental health disorders. Several participants (16.19%) stated that alcohol would also assist. Loureiro *et al*. (2013:4) revealed a much lower percentage of participants believing that alcohol can prevent mental disorders. The choice of alcohol to prevent mental health disorders shows a lack of knowledge as well as poor insight. One would expect that healthcare professionals should instead suggest giving up on alcohol altogether. The next section, 4.6, presents results comparing mental health literacy among the categories of primary healthcare nurses.

4.6 Comparison between identified variables

This section compares MHL recognition among professional nurses, staff nurses, and enrolled nursing assistants in Table 4.7 below. The total number of professional nurses who participated in the study was 77, with six staff nurses and one enrolled nursing assistant.

Table 4.7: Comparison of MHL among primary healthcare nurses

Variables	Frequency (N)	Percentage (%)
Professional nurses	**N=77**	**100%**
Depression	57	74.03
Suicidal thoughts	50	64.94
Schizophrenia	47	61.04
Anxiety disorder	53	68.83
Post-traumatic stress disorder	31	40.26
Staff nurses	**N=6**	**100%**
Depression	5	83.33
Suicidal thoughts	5	83.33
Schizophrenia	3	50.00
Anxiety disorder	4	66.67
Post-traumatic stress disorder	3	50
Enrolled nursing assistant	**N=1**	**100%**
Depression	0	0
Suicidal thoughts	1	100
Schizophrenia	0	0
Anxiety disorder	1	100
Post-traumatic stress disorder	1	100

When it came to recognising depression in vignette 1, 74.03% of professional nurses, 83.33% of staff nurses, and 0% of enrolled nurses recognised depression, with a p-value of 0.2955. In comparison, 64.94% of professional nurses identified suicidal thoughts, 83.33% of staff nurses did, and 100% of enrolled nursing assistants did, with a p-value of 0.7769. For this study, no significant difference was found. Schizophrenia was identified correctly by 61.04% of professional nurses, 50% of staff nurses and 0% of enrolled nursing assistants, with a p-value of 0.5077. Anxiety disorder had a recognition of 68.83% by professional nurses, 66.67% by staff nurses, and 100% by enrolled nursing assistants, with a high p-

value of 1.0000. Post-traumatic stress disorder was correctly identified by 40.26% of professional nurses, 50% of staff nurses, and 100% of enrolled nursing assistants, with a p-value of 0.5153. The p-value was above 0.05 on all mental health disorders, which shows that there was no significant association between recognition of all mental health disorders and the nurse category. The professional nurses had a better recognition for mental health disorders, followed by staff nurses, while enrolled nursing assistants could not recognise all the mental health disorders. The next section discusses work experience in the recognition of mental health disorders.

4.7 Work experience

The results of the comparison of recognition of mental health disorders regarding years of work experience among PHC nurses are presented in Table 4.8 below. The table presents those who classified the vignettes correctly (c=) and wrongly (w=) to their years of work experience. The median, minimum and maximum indicate years of working experience.

Table 4.8 Recognition of mental health disorders in relation to years of work experience.

TOTAL (N)	Median years of work experience	Minimum years of work experience	Maximum years of work experience
Depression			
C=57	5	1	30
W=20	8.5	1	20
Suicidal thoughts			
C=52	5	1	30
W=25	6	1	20
Schizophrenia			
C=45	6	1	30
W=32	5.5	1	20
Anxiety disorder			
C=53	5	1	30
W=24	6	1	17
Post-traumatic stress disorder			
C=31	4	1	30
W=46	6	1	21

Most PHC nurses who had 4-6 years of working experience recognised all five mental health disorders, while those who had more working experience (5-8 years) had a poor recognition of mental health disorders. Surprisingly, schizophrenia was primarily recognised by those who had more experience, with a median of six years. Farrer *et al*. (2008:3) support the findings that those with more experience failed to recognise mental health disorders correctly. The recognition of mental health disorders in relation to work experience indicates that there is a low MHL, especially for those with more years of working experience in the case of most disorders. The following section offers some of the comments made by participants.

4.8 Comments by participants

The participants could make any comments at the end of the study. Some of these comments indicated that people with mental health disorders are not seeking help, while other comments related to advising those who had mental health disorders to seek help. They also expressed a need for campaigns to educate healthcare staff on mental health issues. Hao *et al*. (2020:9), Mtshawuli (2020:51) and Tonsing (2018:44) all support that there is a need for training and education of primary healthcare nurses on mental health so that they can recognise, manage, and prevent mental health disorders. Most of the participants stated that they had no comments. Any comments made are presented in Table 4.9 below.

Table 4.9 Comments made by the participants

Variables	Frequency(N)	Percent (%)
I would advise anyone who is having the problem like John, to get help	1	3.57
Most people with John's problem do not accept that they have a problem	1	3.57
Need more campaigns to educate the community on mental health issues	1	3.57
Health education about mental health disorders	2	7.14
More health education	1	3.57
No	7	25
None	12	42.85
People like John must never be left alone on a regular basis	1	3.57
People with psychological or mental problems must be given maximum attention	1	3.57
To advise my colleagues to seek medical help if having a problem like John	1	3.57

The comments made by participants were discussed, and some indicated a need for education. The next section will discuss the conclusion of this chapter.

4.8 Conclusion

The chapter discussed the results of the participants' demographic data for this study. The results of the recognition of depression, suicidal thoughts, schizophrenia, anxiety disorder, and post-traumatic disorder were elaborated on in detail. The chapter considered the management, medicine, and prevention of mental health disorders mentioned by participants. The comparison of the recognition of mental health disorders by years of work experience was discussed, and the comments made by participants were shared.

Chapter 5

Recommendations, limitations and value of the study

5.1 Introduction

Chapter 4 discussed the results of the study. The current study was conducted to describe the mental health literacy of primary healthcare nurses in Dr RSM, North West Province. This chapter will provide a summary of the results, a discussion of the recommendations based on the research results, the limitations of the study, as well as its value. A conclusion closes the chapter. The summary of the results is discussed in the next section.

5.2 Summary of the results

The results of MHL, based on the recognition, management, and prevention of mental health disorders, are summarised below. The recognition of MH disorders is discussed in the next section.

5.2.1 Recognition

Identifying mental health disorders was adequate in four of the five vignettes. Depression (73.81%) was recognised by most of the participants, followed by anxiety disorders (69.05%). The disorder of suicidal thoughts (66.67%) was the third recognised mental disorder, and the fourth was schizophrenia (59.52%). Surprisingly, post-traumatic stress disorder (41.67%) was the least recognised. This is a common disorder in South Africa. The following section will discuss the results of the management of mental health disorders.

5.2.2 Management

Healthcare professionals, as the best way to manage the mental health disorders presented in the vignettes, were correctly identified by most participants. Psychologists had an average of 92.07% for all mental disorders, and psychiatrists had a score of 89.77%. PHC nurses correctly stated that a doctor (76.19%) is suitable for the management of mental health disorders, which is also true. It was interesting that PHC nurses had an above average of labelling clergy, ministers, and a priest (64.29%) to be helpful in the management of mental health disorders. A naturopath or herbalist (5.24%) was less recommended. The participants in this study showed appropriate knowledge regarding the management of mental health disorders. The following section focuses on prevention.

5.2.3 Prevention

For the prevention of mental disorders, most PHC nurses indicated correctly that psychotherapy is most suitable (87.86%) for the prevention of mental health disorders. Physical activity followed (75.95%) as the next most suitable way for preventing mental disorders. Quite a number of PHC nurses (16.19%) believed that alcohol can help a person with a mental health disorder. This shows limited insight, as well as inadequate knowledge, as alcohol use/abuse can be regarded as a mental health disorder. Overall, most PHC nurses had good MHL on preventing mental disorders. The following section discusses the recommendations of this study based on the three domains mentioned above.

5.3 Recommendations related to the results

The recommendations will focus on recognising, managing, and preventing mental health disorders. Recognition is crucial to assist in early management and the avoidance of complications. The management of mental health disorders by suitable healthcare professionals ensures that patients receive correct treatments and complete care. At the same time, prevention relates to knowledge about the causes of mental health disorders. It encourages help-seeking behaviour from healthcare providers if someone experiences signs of a mental health disorder. The study explored the PHC nurses' ability to recognise, prevent and manage mental health disorders. It was essential to know the MHL of PHC nurses to make recommendations on improving knowledge of mental health. Not all PHC nurses were able to recognise, manage and prevent mental health disorders correctly, but most of them demonstrated good MHL. However, there is still a need for education and training to ensure that healthcare professionals become and remain competent. Education is confirmed to have a good impact on the MHL levels of healthcare professionals (Cheung *et al.,* 2023:12). The following section offers some recommendations applicable to the recognition of mental health disorders.

5.3.1 Recognition

All patients visiting primary healthcare facilities should be screened for mental health disorders using mental health screening tools.

- Mental health screening tools are available in PHC but not utilised. The current mental health screening tool is adequate, but it explores only certain signs of mental health

disorders. There is a need for the Department of Health (DoH) to reconsider the existing tool and possibly develop another tool that could explore the signs of a mental health disorder, assist in making a diagnosis, and give recommendations for the management and prevention of the identified mental health disorder.

- The APC (adult primary care) guideline that uses a symptom-based integrated approach is available as a clinical tool in all South African clinics but is not utilised by most staff members. It is seen as time-consuming. This guideline includes the symptoms of common mental health disorders, along with management suggestions. Utilising this APC guide should be strengthened by all clinic managers and provincial department directors.
- Mental health screening for all patients should be part of daily clinic activities. The WHO (World Health Organization) recommends the use of the Mental Health Gap Action Programme (mhGAP) guide in non-specialised settings such as PHC clinics for assessing and managing mental health disorders (World Health Organization, 2018:x). It could be valuable to investigate the possibility of incorporating the mhGAP guide to be used together with the APC guide. There is a need to implement mhGAP approved by the WHO, which will encourage PHC nurses to use mental health guidelines. Using a mhGAP digital application that could be downloaded would be helpful to healthcare professionals.
- Currently, the DoH offers training on mental health, but this is not done annually. Mental health is neglected as most of the training focuses on communicable diseases such as TB and HIV or maternal and neonatal conditions. There is, therefore, a need to provide regular training (preferably quarterly) on mental health disorders. The DoH should ensure that PHC nurses undergo the necessary training, including refresher courses on mental health, to be able to recognise mental health disorders.
- Currently, there is no internet or Wi-Fi at the facilities. Online training and education should be implemented to address challenges such as staff shortages, which might make it difficult for PHC nurses to leave their facilities to attend training. Training is crucial in improving the MHL of PHC nurses (Mclnnes *et al*., 2022:547). There is a shift towards hybrid training and learning after the COVID-19 pandemic, which could be implemented to accommodate any staff shortages.
- Staff shortages are problematic and a complex challenge that undermines healthcare access and delivery. Dube and Uys (2016:124) state that staff shortages contribute to the burden of rendering mental health services. The DoH should prioritise staff shortages in South Africa to improve the quality of care and healthcare services.

Another need is to address staff shortages in PHC facilities and to ensure that nurses have adequate time to assess patients in totality, which could help with the early identification of mental health disorders. The management of mental disorders is discussed in the next section.

5.3.2 Management

- Nurses should get opportunities for skills training and in-service training to improve their knowledge of the management and treatment of individuals with mental health disorders. The International Council of Nurses (2022:28) and Cheung *et al*. (2023:12) support the idea that education is necessary to boost skills and competency in managing mental health disorders. They further state that training is offered at universities and colleges. The DoH should, therefore, collaborate with universities and colleges to offer short courses in managing mental health disorders.
- Developing and offering post-graduate courses in mental health nursing is necessary. A gap in this regard is foreseen due to the country's new Bachelor in Nursing degree curriculum. It offers comprehensive general nursing and midwifery training but does not include enough mental health content to receive a mental health qualification or SANC registration.
- Nursing training institutions, in collaboration with SANC, should reconsider post-graduate courses focused on mental health training. Post-graduate training programs on mental health have been confirmed to increase knowledge and skills in treating mental health disorders (International Council of Nurses, 2022:44). Such training could further empower nurses to work with individuals with mental health disorders, including recognition, diagnosis, management and prevention.
- The District Specialist Team should consider the need to include a sessional psychologist or psychiatrist at primary healthcare facilities to assist with the timely identification and management of mental health disorders. It is necessary to collaborate with religious leaders, herbalists, and other non-professionals who are consulted and believed by individuals in the communities to manage mental health disorders correctly. The prevention of mental health disorders is discussed in the next section.

5.3.3 Prevention

- Healthcare professionals should pay attention to implementing mental health awareness campaigns. All primary healthcare facilities should offer these at least twice

a year. Mental healthcare professionals such as psychologists or mental health nurses should be invited to educate communities about mental health-related matters. Campaigns could also be launched at schools and churches and should be supported by DoH programs. Cheung *et al*. (2023:12) support the idea that education about mental health will increase the level of MHL.

- World Mental Health Day should be used for mental health screening and awareness campaigns. Sports activities such as marathons and football should be supported in communities and used as an opportunity to teach and encourage sports participation to prevent mental health disorders. Physical activity and participation in sports are known to prevent mental disorders (Loureiro *et al.,* 2013:6).
- Training of community healthcare workers about mental health disorders should take place. Experienced healthcare professionals in mental healthcare should facilitate training. Such training should include the signs and symptoms of mental health disorders and the necessary steps to be taken when someone in the community is presenting with mental health problems. Community healthcare workers are usually the "first responders" during home visits and must be empowered to identify at-risk individuals. They are central to health prevention and promotion (Johnson *et al.,* 2022:2).
- Information sessions in communities, schools, churches, and clinics could assist in the prevention of mental health disorders. Relevant information and knowledge about mental health symptoms, risk factors, and help-seeking practices should be communicated through community platforms. Such campaigns could improve the public's knowledge, attitude and beliefs regarding mental health disorders. Sibeko *et al*. (2018:9) support the idea that education and training about mental health result in better mental health outcomes.
- Healthcare professionals must promote mental health and well-being in their communities. This can be done through advocacy and information sharing through health talks, pamphlets, and posters in the PHC clinic. PHC clinics could focus on a specific mental health disorder and present the relevant information. They could present a different mental health disorder every two months and even ask local radio stations to have a health talk about the chosen disorder. The following section discusses the limitations of the study.

5.4 Limitations

The sample size for this study was small, as not all PHC nurses participated. The distribution of questionnaires was influenced by financial constraints experienced by the researcher, which included money for petrol and the printing of questionnaires. The study received no funding. Limited participation in the study was a challenge. In some instances, participants signed consent forms but returned questionnaires without completing them, stating that they did not know about mental health. Some also indicated that they didn't understand what was asked on the questionnaire and refused to participate in the study. Some clinics had awful access roads, and facilities were often distributed over a wide geographic area. This also contributed to the limited number of completed questionnaires. The participants in this study involved all categories of primary healthcare nurses, and those who didn't have psychiatric nursing qualifications mostly refused to participate. The long time to complete the questionnaire might also have affected participation.

The researcher assumes that the mental health literacy of participants can change if these suggestions are implemented at primary healthcare facilities. The cross-sectional study was done in a population of PHC nurses who volunteered to participate; not all of them participated, and this could not be the true reflection of the whole population. The results of this study reflect PHC nurses' MHL level in the Dr RSM district. The following section discusses the value of the study.

5.5 Value of the study

This study on the MHL of PHC nurses conducted in the North West province, in Dr RSM, was the first of its kind, according to the researcher's knowledge. A few studies have been done in South Africa examining the MHL of nurses. This study gives an overview of nurses' MHL, although it was done in a limited population in a specific province.

The problem statement focused on MHL, defined by Jorm (1997:182) as the ability to recognise, manage, and prevent mental disorders. The study results answered the research question of the study. Most of the participants demonstrated a good level of MHL in the recognition, management, and prevention of mental disorders. The researcher assumed the MHL of PHC nurses to be low, but it was found to be above average. The study results indicate that the recognition, management, and prevention of mental disorders were not

correctly identified by all participants. Therefore, the MHL of PHC nurses should be continuously improved through training and campaigns.

5.6 Conclusion

The study aimed to describe the mental health literacy of primary healthcare nurses in Dr RSM, North West Province, as explained in Chapter 1. The literature revealed that mental health disorders contribute to the burden of disease and that mental health services are rendered by healthcare professionals who are not adequately trained in mental health or are not continuously developed, as discussed in Chapter 2. The research methodology used in the study, a quantitative cross-sectional study, was debated in Chapter 3. The collection of data was done through PHC nurses, and the results indicated that the majority had good MHL and could correctly recognise mental health disorders. The results are presented in Chapter 4. The last chapter of the study made recommendations based on the MHL results.

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Addendums

Addendum A

Permission from North West department of health

health
Department of
Health
North West Province
REPUBLIC OF SOUTH AFRICA

Cnr Sekame & First Street
New Office Park
Mafikeng, 2745
Private Bag X2068
MMABATHO, 2735

Enq: Ms. Tshiamo Mokate
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2030 NDP

RESEARCH, MONITORING AND EVALUATION DIRECTORATE

Name of researchers: **M.G Morifi**
University of the Free State

DEPARTMENT OF HEALTH
OFFICE OF THE SUPERINTENDENT GENERAL
17 -11- 2021
PRIVATE BAG X 2068 MMABATHO, 2735

Physical Address (Work/ Institution) MATSHENG VILLAGE
GREATER TAUNG SUB-DISTRICT
MATSHENG CLINIC

Subject: **Research Approval Letter – Mental health literacy among primary healthcare nurses in Dr Ruth Mompati Segomotsi Mompati.**

This letter serves to inform the Researcher that permission to undertake the above mentioned study has been granted by the North West Department of Health. The Researcher must arrange in advance a meeting with the District Chief Director and District Director to introduce their research team/members on the proposed research to be undertaken. Further to the above the researcher must produce this letter to the District and chosen facilities as proof that the research was approved by the NWDoH.

This letter of permission should be signed and a copy returned to the Department. By signing, the Researcher agrees, binds him/herself and undertakes to furnish the Department with an electronic copy of the final research report. Alternatively, the Researcher can also provide the Department with electronic summary highlighting recommendations that will assist the Department in its planning to improve some of its services where possible. Through this the Researcher will not only contribute to the academic body of knowledge but also contributes towards the bettering of health care services and thus the overall health of citizens in the North West Province.

Below are the contact details of Office of the Chief Director and District Director of Dr. Ruth Segomotsi Mompati district.

Dr. Ruth Segomotsi Mompati district

Office of the Acting Chief Director	Office of the District Director
Dr Kakale Ndinaye Holonga Ms. Kesaobaka Monchwe (PA)	Mr. Oupa Moalusi Mr. Onkarabile Pheko
KNHolonga@nwpg.gov.za KMonchwe@nwpg.gov.za	OMoalusi@nwpg.gov.za GOPheko@nwpg.gov.za
053 928 0506/7	053 928 0502

Kindest regards.

Dr. FRM Reichel
Director: RM&E

16/11/2021
Date

Researcher

19/11/2021
Date

Addendum B

Participant information leaflet and consent form

TITLE OF THE RESEARCH PROJECT: MENTAL HEALTH LITERACY AMONG PRIMARY HEALTHCARE NURSES IN DR RUTH SEGOMOTSI MOMPATI

REFERENCE NUMBER: 2018174496
PRINCIPAL INVESTIGATOR: MORIFI M.G
ADDRESS: STAND NO: 30115 MATSHENG VILLAGE, TAUNG.
CONTACT NUMBER: 076 644 9062

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask the study staff or doctor any questions about any part of this project you do not fully understand. It is crucial that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the **Health Sciences Research Ethics Committee at the University of the Free State**. It will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research.

The study aims to describe the mental health literacy of primary healthcare nurses in Dr Ruth Segomotsi Mompati (Dr RSM) district. The researcher, therefore, invites all primary healthcare nurses working in Dr RSM primary healthcare facilities to participate in the study. Participation in this study is voluntary. Questionnaires and envelopes will be distributed to those that volunteer to participate in the study to fill the questionnaires and give them back to the researcher. You are invited to participate in the study as you are working with clients, some presenting with mental health issues daily; this needs primary healthcare nurses to intervene. You are expected to complete the questionnaire to the best of your ability. The benefits of participating could be that the results of this study might identify a learning need. There is no seen possible risk or harm for participating since data will be collected through the filling of questionnaires. If you do not take part in this study, there is no alternative because the researcher is using a single method for all the participants.

Your results will not be disclosed to your manager or supervisor will be confidential and protected. Completed questionnaires will be kept in a lockable cupboard or access control area and retrieved during data analysis. If the information may be published, it will be confidential. The biostatistician may also access the results during data analysis. You will not be paid and there are no costs for participating in this study. For more information you can contact Morifi MG at contact: 0766449062 if you have any further queries or encounter any problems. You can contact the Health Sciences Research Ethics Committee at 051-401 7794/5 if you have any concerns or complaints that have not been adequately addressed by your study doctor.

Declaration by participant

By signing below, I ……..……. agree to take part in a research study entitled: Mental health literacy among primary healthcare nurses in DR Ruth Segomotsi Mompati.

I declare that:

- I have read the attached information leaflet and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (*place*) .....…..…….. On (*date*) ……...……..20…..

.....

Signature of participant

Addendum C

Communication and permission related to Jorm's MHL instrument and questionnaires (Proof of validity)

Anthony Jorm 25 Sep 2019

to me

Hello Gabriel

You have permission. I have attached the original CATI questionnaires that were used for national surveys of Australian adults in youth in 2011. I have also attached short postal survey questionnaires we used with health professionals. Some relevant articles on validity of the measures are also attached.

Best wishes for your project.

Tony Jorm

Anthony Jorm PhD, DSc, FASSA

Professor Emeritus

Centre for Mental Health

Melbourne School of Population and Global Health

University of Melbourne

207 Bouverie Street (Room 435)

Addendum D

Jorm's MHL instrument and questionnaires.

1. Vignette 1

This questionnaire concerns a hypothetical person called John. The box below describes how he has been recently.

> **John is 30 years old. He has been feeling unusually sad and miserable for the last few weeks. Even though he is tired all the time, he has trouble sleeping nearly every night. John doesn't feel like eating and has lost weight. He can't keep his mind on his work and puts off making decisions. Even day-to-day tasks seem too much for him. This has come to the attention of his boss, who is concerned about John's lowered productivity.**

1. From the information given, what, if anything, is wrong with John?

……
……

2. If John were to seek help from any of the following people, is it likely to be helpful, harmful or neither for him? (*Tick on response for each line)*

		Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a)	A typical family GP or Doctor	☐1	☐2	☐3	☐4	☐5
b)	A typical chemist (pharmacist)	☐1	☐2	☐3	☐4	☐5
c)	A counsellor	☐1	☐2	☐3	☐4	☐5
d)	A social worker	☐1	☐2	☐3	☐4	☐5
e)	Telephone counselling service, e.g lifeline	☐1	☐2	☐3	☐4	☐5
f)	A psychiatrist	☐1	☐2	☐3	☐4	☐5
g)	A psychologist	☐1	☐2	☐3	☐4	☐5
h)	Help from his close family	☐1	☐2	☐3	☐4	☐5
i)	Help from some close friends	☐1	☐2	☐3	☐4	☐5
j)	A naturopath or herbalist	☐1	☐2	☐3	☐4	☐5
k)	The clergy, a minister or a priest	☐1	☐2	☐3	☐4	☐5
l)	John tries to deal with his problems on his own	☐1	☐2	☐3	☐4	☐5

3. If John were to take one of the following medicines, is it likely to be helpful, harmful or harmful neither for him? (*Tick one response for each other line)*

	Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a. Vitamins and minerals, tonics or herbal medicines	☐1	☐2	☐3	☐4	☐5
b. Analgesics	☐1	☐2	☐3	☐4	☐5
c. Antidepressants	☐1	☐2	☐3	☐4	☐5
d. Antibiotics	☐1	☐2	☐3	☐4	☐5
e. Sedatives / hypnotics	☐1	☐2	☐3	☐4	☐5
f. Antipsychotics	☐1	☐2	☐3	☐4	☐5
g. Tranquilisers such as Valium	☐1	☐2	☐3	☐4	☐5

4. If John were to undertake any of the following, is it likely to be helpful or neither for him? (*Tick one response for each other line)*

	Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a. Becoming more physically active?	☐1	☐2	☐3	☐4	☐5
b. Reading about people with similar problems and how they have dealt with them.	☐1	☐2	☐3	☐4	☐5
c. Getting out and about more	☐1	☐2	☐3	☐4	☐5
d. Courses on relaxation, stress management, Meditation or yoga	☐1	☐2	☐3	☐4	☐5
e. Cutting out alcohol altogether	☐1	☐2	☐3	☐4	☐5
f. Psychotherapy	☐1	☐2	☐3	☐4	☐5
g. Cognitive behaviour therapy	☐1	☐2	☐3	☐4	☐5
h. Hypnosis	☐1	☐2	☐3	☐4	☐5
i. Admission to a psychiatric ward of a hospital	☐1	☐2	☐3	☐4	☐5
j. Electroconvulsive therapy (ECT)	☐1	☐2	☐3	☐4	☐5
k. Having an occasional alcoholic drink to relax	☐1	☐2	☐3	☐4	☐5
l. A special diet or avoiding certain foods	☐1	☐2	☐3	☐4	☐5
m. Consulting a website that gives information about his problem	☐1	☐2	☐3	☐4	☐5
n. Consulting an expert using email or the web about his problem	☐1	☐2	☐3	☐4	☐5
o. Consulting a book that gives information about his health problem	☐1	☐2	☐3	☐4	☐5
p. Receiving information about his problem from health educator	☐1	☐2	☐3	☐4	☐5

5. What would be the likely result if John had the sort of **professional** help you think is most appropriate? (*Tick one box only)*

☐ 1 Full recovery with no further problems

☐ 2 Full recovery, but problems would probably re-occur

☐ 3 Partial recovery

☐ 4 Partial recovery, but problems would probably re-occur

☐ 5 No improvement

☐ 6 Get worse

☐ 7 Don't know

6. What would be the likely result if John did **not** have any professional help? (*Tick one box only)*

☐ 1 Full recovery with no further problems

☐ 2 Full recovery, but problems would probably re-occur

☐ 3 Partial recovery

☐ 4 Partial recovery, but problems would probably re-occur

☐ 5 No improvement

☐ 6 Get worse

☐ 7 Don't know

7. Do you think that John would be discriminated against by others in the community if they knew about the problems he had?

☐ 1 Yes ☐ 2 NO

8. Please indicate how strongly you personally agree or disagree with each statement (*Tick one response for each other line)*

	Strongly Agree	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
a. People with a problem like John's could Snap out of it they wanted	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

b.	A problem like John's is a sign of personal weakness	☐1	☐2	☐3	☐4	☐5
c.	John's problem is not a real medical illness	☐1	☐2	☐3	☐4	☐5
d.	People with a problem like John's are dangerous	☐1	☐2	☐3	☐4	☐5
e.	It is best to avoid people with a problem like John's so that you don't develop this problem	☐1	☐2	☐3	☐4	☐5
f.	People with problem like John's are unpredictable	☐1	☐2	☐3	☐4	☐5
g.	If I had a problem like John's I would not tell Anyone	☐1	☐2	☐3	☐4	☐5
h.	I would not employ someone if I knew they had a problem like John's	☐1	☐2	☐3	☐4	☐5
i.	I would not vote for a politician if I knew they had suffered a problem like John's	☐1	☐2	☐3	☐4	☐5

9. Please indicate how strongly you agree or disagree with each statement (*Tick one response for each other line)*

		Strongly Agree	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
a.	Most other people believe that people snap out of it they wanted	☐1	☐2	☐3	☐4	☐5
b.	Most people believe that a problem like John's is a sign of personal weakness	☐1	☐2	☐3	☐4	☐5
c.	Most people believe that John's problem is not a real medical illness	☐1	☐2	☐3	☐4	☐5
d.	Most people believe that people with a problem like John's are dangerous	☐1	☐2	☐3	☐4	☐5
e.	Most people believe that it is best to avoid people with a problem like John's so that you don't develop this problem	☐1	☐2	☐3	☐4	☐5
f.	Most people believe that people with a problem like John's are unpredictable	☐1	☐2	☐3	☐4	☐5
g.	If they had a problem like John's most people would not tell anyone	☐1	☐2	☐3	☐4	☐5
h.	Most people would not employ someone they knew had a problem like John's	☐1	☐2	☐3	☐4	☐5
i.	Most people would not vote for a politician they knew had suffered problem like John's	☐1	☐2	☐3	☐4	☐5

10. Please indicate how willing you would be to: (*Tick one response for each other line)*

	Definely willing	*Probably willing*	*Probably unwilling*	*Definitely unwilling*	*Dont know*
a. Move next door to John	☐1	☐2	☐3	☐4	☐5
b. Spend an evening socialising with John	☐1	☐2	☐3	☐4	☐5
c. Make friends with John	☐1	☐2	☐3	☐4	☐5
d. Have John start working closely with you on a job	☐1	☐2	☐3	☐4	☐5
e. Have John marry into your family	☐1	☐2	☐3	☐4	☐5

Finally we would appreciate it if you would answer a few questions about yourself.

11. Which professional group do you belong to?

1….Professional Nurse 2….Staff Nurse 3…..Enrolled Nurse

12. Age?

☐1Below 30 ☐2 ☐330-39 ☐440-49 ☐450-59 ☐46….60 or over

13. Sex?

☐1Male ☐2Female

14. Work experience

……

15. On average, how often do you deal with problems like John's?

☐11….Daily ☐2Weekly ☐3Monthly ☐4Less than monthly

16. Do you have any comments you would like to make?

.....…….

……..

Please return the questionnaire in the envelope provided. Thank you for your assistance.
By submitting this questionnaire the participant gives consent

2. Vignette 2

This questionnaire concerns a hypothetical person called John. The box below describes how he has been recently.

> **John is 30 years old. He has been feeling unusually sad and miserable for the last few weeks. Even though he is tired all the time, he has trouble sleeping nearly every night. John doesn't feel like eating and has lost weight. He can't keep his mind on his work and puts off making any decisions. Even day-to-day tasks seem too much for him. This has come to the attention of John's boss who is concerned about his lowered productivity. John feels he will never be happy again and believes his family would be better off without him. John has been so desperate, he has been thinking of ways to end his life.**

1. From the information given, what, if anything, is wrong with John?

……

……

2. If John were to seek help from any of the following people, is it likely to be helpful, harmful or neither for him? (*Tick on response for each line)*

		Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a)	A typical family GP or Doctor	☐1	☐2	☐3	☐4	☐5
b)	A typical chemist (pharmacist)	☐1	☐2	☐3	☐4	☐5
c)	A counsellor	☐1	☐2	☐3	☐4	☐5
d)	A social worker	☐1	☐2	☐3	☐4	☐5
e)	Telephone counselling service, e.g. Lifeline	☐1	☐2	☐3	☐4	☐5
f)	A psychiatrist	☐1	☐2	☐3	☐4	☐5
g)	A psychologist	☐1	☐2	☐3	☐4	☐5
h)	Help from his close family	☐1	☐2	☐3	☐4	☐5
i)	Help from some close friends	☐1	☐2	☐3	☐4	☐5
j)	A naturopath or herbalist	☐1	☐2	☐3	☐4	☐5
k)	The clergy, a minister or a priest	☐1	☐2	☐3	☐4	☐5
l)	John tries to deal with his problems on his own	☐1	☐2	☐3	☐4	☐5

3. If John were to take one of the following medicines, is it likely to be helpful, harmful or harmful neither for him? (*Tick one response for each other line)*

	Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a) Vitamins and minerals, tonics or a. herbal medicines	☐1	☐2	☐3	☐4	☐5
b) Analgesics	☐1	☐2	☐3	☐4	☐5
c) Antidepressants	☐1	☐2	☐3	☐4	☐5
d) Antibiotics	☐1	☐2	☐3	☐4	☐5
e) Sedatives / hypnotics	☐1	☐2	☐3	☐4	☐5
f) Antipsychotics	☐1	☐2	☐3	☐4	☐5
g) Tranquilisers such as Valium	☐1	☐2	☐3	☐4	☐5

4. If John were to undertake any of the following, is it likely to be helpful or neither for him?

(*Tick one response for each other line)*

	Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a. Becoming more physically active?	☐1	☐2	☐3	☐4	☐5
b. Reading about people with similar problems and how they have dealt with them.	☐1	☐2	☐3	☐4	☐5
c. Getting out and about more	☐1	☐2	☐3	☐4	☐5
d. Courses on relaxation, stress management, Meditation or yoga	☐1	☐2	☐3	☐4	☐5
e. Cutting out alcohol altogether	☐1	☐2	☐3	☐4	☐5
f. Psychotherapy	☐1	☐2	☐3	☐4	☐5
g. Cognitive behaviour therapy	☐1	☐2	☐3	☐4	☐5
h. Hypnosis	☐1	☐2	☐3	☐4	☐5
i. Admission to a psychiatric ward of a hospital	☐1	☐2	☐3	☐4	☐5
j. Electroconvulsive therapy (ECT)	☐1	☐2	☐3	☐4	☐5
k. Having an occasional alcoholic drink to relax	☐1	☐2	☐3	☐4	☐5
l. A special diet or avoiding certain foods	☐1	☐2	☐3	☐4	☐5
m. Consulting a website that gives information about his problem	☐1	☐2	☐3	☐4	☐5
n. Consulting an expert using email or the web about his problem	☐1	☐2	☐3	☐4	☐5
o. Consulting a book that gives information about his health problem	☐1	☐2	☐3	☐4	☐5
p. Receiving information about his problem from health educator	☐1	☐2	☐3	☐4	☐5

5. What would be the likely result if John had the sort of **professional** help you think is most appropriate? (*Tick one box only)*

☐ 1 Full recovery with no further problems

☐ 2 Full recovery, but problems would probably re-occur

☐ 3 Partial recovery

☐ 4 Partial recovery, but problems would probably re-occur

☐ 5 No improvement

☐ 6 Get worse

☐ 7 Don't know

6. What would be the likely result if John did **not** have any professional help? (*Tick one box only)*

☐ 1 Full recovery with no further problems

☐ 2 Full recovery, but problems would probably re-occur

☐ 3 Partial recovery

☐ 4 Partial recovery, but problems would probably re-occur

☐ 5 No improvement

☐ 6 Get worse

☐ 7 Don't know

7. Do you think that John would be discriminated against by others in the community if they knew about the problems he had?

☐ 1 Yes ☐ 2 NO

8. Please indicate how strongly you personally agree or disagree with each statement (*Tick one response for each other line)*

	Strongly Agree	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Agree*
a. People with a problem like John's could	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

Snap out of it they wanted

b.	A problem like John's is a sign of personal weakness	☐1	☐2	☐3	☐4	☐5
c.	John's problem is not a real medical illness	☐1	☐2	☐3	☐4	☐5
d.	People with a problem like John's are dangerous	☐1	☐2	☐3	☐4	☐5
e.	It is best to avoid people with a problem like John's so that you don't develop this problem	☐1	☐2	☐3	☐4	☐5
f.	People with problem like John's are unpredictable	☐1	☐2	☐3	☐4	☐5
g.	If I had a problem like John's I would not tell Anyone	☐1	☐2	☐3	☐4	☐5
h.	I would not employ someone if I knew they had a problem like John's	☐1	☐2	☐3	☐4	☐5
i.	I would not vote for a politician if I knew they had suffered a problem like John's	☐1	☐2	☐3	☐4	☐5

9. Please indicate how strongly you agree or disagree with each statement (*Tick one response for each other line)*

		Strongly Agree	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Agree*
a.	Most other people believe that people snap out of it they wanted	☐1	☐2	☐3	☐4	☐5
b.	Most people believe that a problem like John's is a sign of personal weakness	☐1	☐2	☐3	☐4	☐5
c.	Most people believe that John's problem is not a real medical illness	☐1	☐2	☐3	☐4	☐5
d.	Most people believe that people with a problem like John's are dangerous	☐1	☐2	☐3	☐4	☐5
e.	Most people believe that it is best to avoid people with a problem like John's so that you don't develop this problem	☐1	☐2	☐3	☐4	☐5
f.	Most people believe that people with a problem like John's are unpredictable	☐1	☐2	☐3	☐4	☐5
g.	If they had a problem like John's most people would not tell anyone	☐1	☐2	☐3	☐4	☐5
h.	Most people would not employ someone they knew had a problem like John's	☐1	☐2	☐3	☐4	☐5
i.	Most people would not vote for a politician they knew had suffered problem like John's	☐1	☐2	☐3	☐4	☐5

10. Please indicate how willing you would be to: (*Tick one response for each other line)*

	Definely willing	*Probably willing*	*Probably unwilling*	*Definitely unwilling*	*Dont know*
a. Move next door to John	☐1	☐2	☐3	☐4	☐5
b. Spend an evening socialising with John	☐1	☐2	☐3	☐4	☐5
c. Make friends with John	☐1	☐2	☐3	☐4	☐5
d. Have John start working closely with you on a job	☐1	☐2	☐3	☐4	☐5
e. Have John marry into your family	☐1	☐2	☐3	☐4	☐5

Finally we would appreciate it if you would answer a few questions about yourself.

11. Which professional group do you belong to?

1….Professional Nurse 2….Staff Nurse 3. Enrolled Nurse

12. Age?

☐1Below 30 ☐2 ☐330-39 ☐440-49 ☐550-59 ☐66….60 or over

13. Sex?

☐1Male ☐2Female

14. Work experience

……..

15. On average, how often do you deal with problems like John's?

☐11….Daily ☐2Weekly ☐3Monthly ☐4Less than monthly

16. Do you have any comments you would like to make?

.....
……..

Please return the questionnaire in the envelope provided. Thank you for your assistance.
By submitting this questionnaire the participant gives consent

3. Vignette 3

This questionnaire concerns a hypothetical person called John. The box below describes how he has been recently.

John is 44 years old. He is living in a boarding house in an industrial area. He has not worked for years. He wears the same clothes in all weathers and has left his hair to grow long and untidy. He is always on his own and is often seen sitting in the park talking to himself. At times he stands and moves his hands as if to communicate to someone in nearby trees. He rarely drinks alcohol. He speaks carefully using uncommon and sometimes made-up words. He is polite but avoids talking with other people. At times he accuses shopkeepers of giving information about him to other people. He has asked his landlord to put extra locks on his door and to remove the television set from his room. He says spies are trying to keep him under observation because he has secret information about international computer systems which control people through television transmitters. His landlord complains that he will not let him clean the room which is increasingly dirty and filled with glass objects. John says he is using these "to receive messages from space".

1. From the information given, what, if anything, is wrong with John?

……
……

2. If John were to seek help from any of the following people, is it likely to be helpful, harmful or neither for him? (*Tick on response for each line)*

	Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a. A typical family GP or Doctor	☐1	☐2	☐3	☐4	☐5
b. A typical chemist (pharmacist)	☐1	☐2	☐3	☐4	☐5
c. A counsellor	☐1	☐2	☐3	☐4	☐5
d. A social worker	☐1	☐2	☐3	☐4	☐5
e. Telephone counselling service, e.g.Lifeline	☐1	☐2	☐3	☐4	☐5
f. A psychiatrist	☐1	☐2	☐3	☐4	☐5
g. A psychologist	☐1	☐2	☐3	☐4	☐5
h. Help from his close family	☐1	☐2	☐3	☐4	☐5
i. Help from some close friends	☐1	☐2	☐3	☐4	☐5
j. A naturopath or herbalist	☐1	☐2	☐3	☐4	☐5
k. The clergy, a minister or a priest	☐1	☐2	☐3	☐4	☐5
l. John tries to deal with his problems on his own	☐1	☐2	☐3	☐4	☐5

3. If John were to take one of the following medicines, is it likely to be helpful, harmful or harmful neither for him? (*Tick one response for each other line)*

	Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a. Vitamins and minerals, tonics or herbal medicines	☐1	☐2	☐3	☐4	☐5
b. Analgesics	☐1	☐2	☐3	☐4	☐5
c. Antidepressants	☐1	☐2	☐3	☐4	☐5
d. Antibiotics	☐1	☐2	☐3	☐4	☐5
e. Sedatives / hypnotics	☐1	☐2	☐3	☐4	☐5
f. Antipsychotics	☐1	☐2	☐3	☐4	☐5
g. Tranquilisers such as Valium	☐1	☐2	☐3	☐4	☐5

4. If John were to undertake any of the following, is it likely to be helpful or neither for him? (*Tick one response for each other line)*

	Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a. Becoming more physically active?	☐1	☐2	☐3	☐4	☐5
b. Reading about people with similar problems and how they have dealt with them.	☐1	☐2	☐3	☐4	☐5
c. Getting out and about more	☐1	☐2	☐3	☐4	☐5
d. Courses on relaxation, stress management, Meditation or yoga	☐1	☐2	☐3	☐4	☐5
e. Cutting out alcohol altogether	☐1	☐2	☐3	☐4	☐5
f. Psychotherapy	☐1	☐2	☐3	☐4	☐5
g. Cognitive behaviour therapy	☐1	☐2	☐3	☐4	☐5
h. Hypnosis	☐1	☐2	☐3	☐4	☐5
i. Admission to a psychiatric ward of a hospital	☐1	☐2	☐3	☐4	☐5
j. Electroconvulsive therapy (ECT)	☐1	☐2	☐3	☐4	☐5
k. Having an occasional alcoholic drink to relax	☐1	☐2	☐3	☐4	☐5
l. A special diet or avoiding certain foods	☐1	☐2	☐3	☐4	☐5
m. Consulting a website that gives information about his problem	☐1	☐2	☐3	☐4	☐5
n. Consulting an expert using email or the web about his problem	☐1	☐2	☐3	☐4	☐5
o. Consulting a book that gives information about his health problem	☐1	☐2	☐3	☐4	☐5
p. Receiving information about his problem from health educator	☐1	☐2	☐3	☐4	☐5

5. What would be the likely result if John had the sort of **professional** help you think is most appropriate? *(tick one box only)*

☐ 1 Full recovery with no further problems

☐ 2 Full recovery, but problems would probably re-occur

☐ 3 Partial recovery

☐ 4 Partial recovery, but problems would probably re-occur

☐ 5 No improvement

☐ 6 Get worse

☐ 7 Don't know

6. What would be the likely result if John did **not** have any professional help? (*tick one box only)*

☐ 1 Full recovery with no further problems

☐ 2 Full recovery, but problems would probably re-occur

☐ 3 Partial recovery

☐ 4 Partial recovery, but problems would probably re-occur

☐ 5 No improvement

☐ 6 Get worse

☐ 7 Don't know

7. Do you think that John would be discriminated against by others in the community if they knew about the problems he had?

☐ 1 Yes ☐ 2 NO

8. Please indicate how strongly you personally agree or disagree with each statement (*Tick one response for each other line)* *Neither*

		Strongly Agree	*Agree*	*Agree nor Disagree*	*Disagree*	*Strongly Disagree*
a.	People with a problem like John's could Snap out of it they wanted	☐1	☐2	☐3	☐4	☐5
b.	A problem like John's is a sign of personal weakness	☐1	☐2	☐3	☐4	☐5
c.	John's problem is not a real medical illness	☐1	☐2	☐3	☐4	☐5
d.	People with a problem like John's are dangerous	☐1	☐2	☐3	☐4	☐5
e.	It is best to avoid people with a problem like John's so that you don't develop this problem	☐1	☐2	☐3	☐4	☐5
f.	People with problem like John's are unpredictable	☐1	☐2	☐3	☐4	☐5
g.	If I had a problem like John's I would not tell Anyone	☐1	☐2	☐3	☐4	☐5
h.	I would not employ someone if I knew they had a problem like John's	☐1	☐2	☐3	☐4	☐5
i.	I would not vote for a politician if I knew they had suffered a problem like John's	☐1	☐2	☐3	☐4	☐5

9. Please indicate how strongly you agree or disagree with each statement (*Tick one response for each other line)*

		Strongly Agree	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
a.	Most other people believe that people snap out of it they wanted	☐1	☐2	☐3	☐4	☐5
b.	Most people believe that a problem like John's is a sign of personal weakness	☐1	☐2	☐3	☐4	☐5
c.	Most people believe that John's problem is not a real medical illness	☐1	☐2	☐3	☐4	☐5
d.	Most people believe that people with a problem like John's are dangerous	☐1	☐2	☐3	☐4	☐5
e.	Most people believe that it is best to avoid people with a problem like John's so that you don't develop this problem	☐1	☐2	☐3	☐4	☐5
f.	Most people believe that people with a problem like John's are unpredictable	☐1	☐2	☐3	☐4	☐5

g.	If they had a problem like John's most people would not tell anyone	☐1	☐2	☐3	☐4	☐5
h.	Most people would not employ someone they knew had a problem like John's	☐1	☐2	☐3	☐4	☐5
i.	Most people would not vote for a politician they knew had suffered problem like John's	☐1	☐2	☐3	☐4	☐5

10. Please indicate how willing you would be to: (*Tick one response for each other line)*

		Definely willing	*Probably willing*	*Probably unwilling*	*Definitely unwilling*	*Dont know*
a.	Move next door to John	☐1	☐2	☐3	☐4	☐5
b.	Spend an evening socialising with John	☐1	☐2	☐3	☐4	☐5
c.	Make friends with John	☐1	☐2	☐3	☐4	☐5
d.	Have John start working closely with you on a job	☐1	☐2	☐3	☐4	☐5
e.	Have John marry into your family	☐1	☐2	☐3	☐4	☐5

Finally we would appreciate it if you would answer a few questions about yourself.

11. Which professional group do you belong to?

1….Professional Nurse 2….Staff Nurse 3. Enrolled Nurse

12. Age?

☐1Below 30 ☐2 ☐3 30-39 ☐4 40-49 ☐4 50-59 ☐4 6….60 or over

13. Sex?

☐1Male ☐2Female

14. Work experience?

.....

15. On average, how often do you deal with problems like John's?

☐1 1….Daily ☐2Weekly ☐3Monthly ☐4Less than monthly

16. Do you have any comments you would like to make?

.....

.....

Please return the questionnaire in the envelope provided. Thank you for your assistance.

By submitting this questionnaire the participant gives consent

4. Vignette 4

This questionnaire concerns a hypothetical person called John. The box below describes how he has been recently.

John is a 30-year old who lives alone. Since moving to a new town last year he has become even more shy than usual and has made only one friend. He would really like to make more friends but is scared that he'll do or say something embarrassing when he's around others. Although John's work is OK he rarely says a word in meetings and becomes incredibly nervous, trembles, blushes and seems like he might vomit if he has to answer a question or speak in front of his workmates. John is quite talkative with his close relatives, but becomes quiet if anyone he doesn't know well is present. He never answers the phone and he refuses to attend social gatherings. He knows his fears are unreasonable but he can't seem to

1. From the information given, what, if anything, is wrong with John?

……
……

2. If John were to seek help from any of the following people, is it likely to be helpful, harmful or neither for him? (*Tick on response for each line)*

	Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a. A typical family GP or Doctor	☐1	☐2	☐3	☐4	☐5
b. A typical chemist (pharmacist)	☐1	☐2	☐3	☐4	☐5
c. A counsellor	☐1	☐2	☐3	☐4	☐5
d. A social worker	☐1	☐2	☐3	☐4	☐5
e. Telephone counselling service e.g.Lifeline	☐1	☐2	☐3	☐4	☐5
f. A psychiatrist	☐1	☐2	☐3	☐4	☐5
g. A psychologist	☐1	☐2	☐3	☐4	☐5T
h. Help from his close family	☐1	☐2	☐3	☐4	☐5
i. Help from some close friends	☐1	☐2	☐3	☐4	☐5
j. A naturopath or herbalist	☐1	☐2	☐3	☐4	☐5
k. The clergy, a minister or a priest	☐1	☐2	☐3	☐4	☐5
l. John tries to deal with his problems on his own	☐1	☐2	☐3	☐4	☐5

3. If John were to take one of the following medicines, is it likely to be helpful, harmful or harmful neither for him? (*Tick one response for each other line)*

	Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a. Vitamins and minerals, tonics or herbal medicines	☐1	☐2	☐3	☐4	☐5

b. Analgesics	☐1	☐2	☐3	☐4	☐5
c. Antidepressants	☐1	☐2	☐3	☐4	☐5
d. Antibiotics	☐1	☐2	☐3	☐4	☐5
e. Sedatives / hypnotics	☐1	☐2	☐3	☐4	☐5
f. Antipsychotics	☐1	☐2	☐3	☐4	☐5
g. Tranquilisers such as Valium	☐1	☐2	☐3	☐4	☐5

4. If John were to undertake any of the following, is it likely to be helpful or neither for him? (*Tick one response for each other line)*

	Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a. Becoming more physically active?	☐1	☐2	☐3	☐4	☐5
b. Reading about people with similar problems and how they have dealt with them.	☐1	☐2	☐3	☐4	☐5
c. Getting out and about more	☐1	☐2	☐3	☐4	☐5
d. Courses on relaxation, stress management, Meditation or yoga	☐1	☐2	☐3	☐4	☐5
e. Cutting out alcohol altogether	☐1	☐2	☐3	☐4	☐5
f. Psychotherapy	☐1	☐2	☐3	☐4	☐5
g. Cognitive behaviour therapy	☐1	☐2	☐3	☐4	☐5
h. Hypnosis	☐1	☐2	☐3	☐4	☐5
Admission to a psychiatric ward of a hospital	☐1	☐2	☐3	☐4	☐5
i. Electroconvulsive therapy (ECT)	☐1	☐2	☐3	☐4	☐5
j. Having an occasional alcoholic drink to relax	☐1	☐2	☐3	☐4	☐5
k. A special diet or avoiding certain foods	☐1	☐2	☐3	☐4	☐5
l. Consulting a website that gives information about his problem	☐1	☐2	☐3	☐4	☐5
m. Consulting an expert using email or the web about his problem	☐1	☐2	☐3	☐4	☐5
n. Consulting a book that gives information about his health problem	☐1	☐2	☐3	☐4	☐5
o. Receiving information about his problem from health educator	☐1	☐2	☐3	☐4	☐5

5. What would be the likely result if John had the sort of **professional** help you think is most appropriate? *(Tick one box only)*

☐ 1 Full recovery with no further problems

☐ 2 Full recovery, but problems would probably re-occur

☐ 3 Partial recovery

☐ 4 Partial recovery, but problems would probably re-occur

☐ 5 No improvement

☐ 6 Get worse

☐ 7 Don't know

6. What would be the likely result if John did **not** have any professional help? *(Tick one box only)*

☐ 1 Full recovery with no further problems

☐ 2 Full recovery, but problems would probably re-occur

☐ 3 Partial recovery

☐ 4 Partial recovery, but problems would probably re-occur

☐ 5 No improvement

☐ 6 Get worse

☐ 7 Don't know

7. Do you think that John would be discriminated against by others in the community if they knew about the problems he had?

☐ 1 Yes ☐ 2 NO

8. Please indicate how strongly you personally agree or disagree with each statement (*Tick one response for each other line)*

	Strongly Agree	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
a. People with a problem like John's could Snap out of it they wanted	☐1	☐2	☐3	☐4	☐5
b. A problem like John's is a sign of personal weakness	☐1	☐2	☐3	☐4	☐5
c. John's problem is not a real medical illness	☐1	☐2	☐3	☐4	☐5
d. People with a problem like John's are dangerous	☐1	☐2	☐3	☐4	☐5
e. It is best to avoid people with a problem like John's so that you don't develop this problem	☐1	☐2	☐3	☐4	☐5
f. People with problem like John's are unpredictable	☐1	☐2	☐3	☐4	☐5
g. If I had a problem like John's I would not tell Anyone	☐1	☐2	☐3	☐4	☐5
h. I would not employ someone if I knew they had a problem like John's	☐1	☐2	☐3	☐4	☐5
i. I would not vote for a politician if I knew they had suffered a problem like John's	☐1	☐2	☐3	☐4	☐5

9. Please indicate how strongly you agree or disagree with each statement (*Tick one response for each other line)*

	Strongly Agree	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
a. Most other people believe that people snap out of it they wanted	☐1	☐2	☐3	☐4	☐5
b. Most people believe that a problem like John's is a sign of personal weakness	☐1	☐2	☐3	☐4	☐5
c. Most people believe that John's problem is not a real medical illness	☐1	☐2	☐3	☐4	☐5
d. Most people believe that people with a problem like John's are dangerous	☐1	☐2	☐3	☐4	☐5
e. Most people believe that it is best to avoid people with a problem like John's so that you don't develop this problem	☐1	☐2	☐3	☐4	☐5
f. Most people believe that people with a problem	☐1	☐2	☐3	☐4	☐5

like John's are unpredictable

g. If they had a problem like John's most people would not tell anyone ☐1 ☐2 ☐3 ☐4 ☐5

h. Most people would not employ someone they knew had a problem like John's ☐1 ☐2 ☐3 ☐4 ☐5

i. Most people would not vote for a politician they knew had suffered problem like John's ☐1 ☐2 ☐3 ☐4 ☐5

10.Please indicate how willing you would be to: (*Tick one response for each other line)*

	Definely willing	*Probably willing*	*Probably unwilling*	*Definitely unwilling*	*Dont know*
a. Move next door to John	☐1	☐2	☐3	☐4	☐5
b. Spend an evening socialising with John	☐1	☐2	☐3	☐4	☐5
c. Make friends with John	☐1	☐2	☐3	☐4	☐5
d. Have John start working closely with you on a job	☐1	☐2	☐3	☐4	☐5
e. Have John marry into your family	☐1	☐2	☐3	☐4	☐5

Finally we would appreciate it if you would answer a few questions about yourself.

11 Which professional group do you belong to?

1….Professional Nurse 2….Staff Nurse 3….Enrolled Nurse

12. Age?

☐1Below 30 ☐2 ☐330-39 ☐440-49 ☐450-59 ☐46….60 or over

13. Sex?

☐1Male ☐2Female

14. Work experience?

.....

15. On average, how often do you deal with problems like John's?

☐11….Daily ☐2Weekly ☐3Monthly ☐4Less than monthly

16. Do you have any comments you would like to make?

.....……

……..

Please return the questionnaire in the envelope provided. Thank you for your assistance.

By submitting this questionnaire the participant gives consent

5. Vignette 5

This questionnaire concerns a hypothetical person called John. The box below describes how he has been recently.

John is a 30-year-old who lives with his wife. Recently his sleep has been disturbed and he has been having vivid nightmares. He has been increasingly irritable, and can't understand why. He has also been jumpy, on edge and tending to avoid going out, even to see friends. Previously he had been highly sociable. These things started happening around two months ago. John owns a newsagent shop with his wife and has found work difficult since a man armed with a knife attempted to rob the cash register while he was working four months ago. He sees the intruder's face clearly in his nightmares. He refuses to talk about what happened and his wife says she feels that he is shutting herout.

1. From the information given, what, if anything, is wrong with John?

   .....
   .....

2. If John were to seek help from any of the following people, is it likely to be helpful, harmful or neither for him? (*Tick on response for each line)*

	Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a. A typical family GP or Doctor	☐1	☐2	☐3	☐4	☐5
b. A typical chemist (pharmacist)	☐1	☐2	☐3	☐4	☐5
c. A counsellor	☐1	☐2	☐3	☐4	☐5
d. A social worker	☐1	☐2	☐3	☐4	☐5
e. Telephone counselling service, e.g.Lifeline	☐1	☐2	☐3	☐4	☐5
f. A psychiatrist	☐1	☐2	☐3	☐4	☐5
g. A psychologist	☐1	☐2	☐3	☐4	☐5
h. Help from his close family	☐1	☐2	☐3	☐4	☐5
i. Help from some close friends	☐1	☐2	☐3	☐4	☐5
j. A naturopath or herbalist	☐1	☐2	☐3	☐4	☐5
k. The clergy, a minister or a priest	☐1	☐2	☐3	☐4	☐5
l. John tries to deal with his problems on his own	☐1	☐2	☐3	☐4	☐5

3. If John were to take one of the following medicines, is it likely to be helpful, harmful or harmful neither for him? (*Tick one response for each other line)*

	Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a. Vitamins and minerals, tonics or herbal medicines	☐1	☐2	☐3	☐4	☐5
b. Analgesics	☐1	☐2	☐3	☐4	☐5
c. Antidepressants	☐1	☐2	☐3	☐4	☐5
d. Antibiotics	☐1	☐2	☐3	☐4	☐5
e. Sedtives / hypnotics	☐1	☐2	☐3	☐4	☐5
f. Antipsychotics	☐1	☐2	☐3	☐4	☐5
g. Tranquilisers such as Valium	☐1	☐2	☐3	☐4	☐5

4. If John were to undertake any of the following, is it likely to be helpful or neither for him? (*Tick one response for each other line)*

	Helpful	*Neither*	*Harmful*	*Depends*	*Don't know*
a. Becoming more physically active?	☐1	☐2	☐3	☐4	☐5
b. Reading about people with similar problems and how they have dealt with them.	☐1	☐2	☐3	☐4	☐5
c. Getting out and about more	☐1	☐2	☐3	☐4	☐5
d. Courses on relaxation, stress management, Meditation or yoga	☐1	☐2	☐3	☐4	☐5
e. Cutting out alcohol altogether	☐1	☐2	☐3	☐4	☐5
f. Psychotherapy	☐1	☐2	☐3	☐4	☐5
g. Cognitive behaviour therapy	☐1	☐2	☐3	☐4	☐5
h. Hypnosis	☐1	☐2	☐3	☐4	☐5
i. Admission to a psychiatric ward of a hospital	☐1	☐2	☐3	☐4	☐5
j. Electroconvulsive therapy (ECT)	☐1	☐2	☐3	☐4	☐5
k. Having an occasional alcoholic drink to relax	☐1	☐2	☐3	☐4	☐5
l. A special diet or avoiding certain foods	☐1	☐2	☐3	☐4	☐5
m. Consulting a website that gives information about his problem	☐1	☐2	☐3	☐4	☐5
n. Consulting an expert using email or the web about his problem	☐1	☐2	☐3	☐4	☐5
o. Consulting a book that gives information about his health problem	☐1	☐2	☐3	☐4	☐5
p. Receiving information about his problem from health educator	☐1	☐2	☐3	☐4	☐5

5. What would be the likely result if John had the sort of **professional** help you think is most appropriate? *(tick one box only)*

☐ 1 Full recovery with no further problems

☐ 2 Full recovery, but problems would probably re-occur

☐ 3 Partial recovery

☐ 4 Partial recovery, but problems would probably re-occur

☐ 5 No improvement

☐ 6 Get worse

☐ 7 Don't know

6. What would be the likely result if John did **not** have any professional help? *(Tick one box only)*

☐ 1 Full recovery with no further problems

☐ 2 Full recovery, but problems would probably re-occur

☐ 3 Partial recovery

☐ 4 Partial recovery, but problems would probably re-occur

☐ 5 No improvement

☐ 6 Get worse

☐ 7 Don't know

7. Do you think that John would be discriminated against by others in the community if they knew about the problems he had?

☐ 1 Yes ☐ 2 NO

8. Please indicate how strongly you personally agree or disagree with each statement (*Tick one response for each other line)*

		Strongly Agree	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
a.	People with a problem like John's could Snap out of it they wanted	☐1	☐2	☐3	☐4	☐5
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c.	John's problem is not a real medical illness	☐1	☐2	☐3	☐4	☐5
d.	People with a problem like John's are dangerous	☐1	☐2	☐3	☐4	☐5
e.	It is best to avoid people with a problem like John's so that you don't develop this problem	☐1	☐2	☐3	☐4	☐5
f.	People with problem like John's are Unpredictable	☐1	☐2	☐3	☐4	☐5
g.	If I had a problem like John's I would not tell Anyone	☐1	☐2	☐3	☐4	☐5
h.	I would not employ someone if I knew they had a problem like John's	☐1	☐2	☐3	☐4	☐5
i.	I would not vote for a politician if I knew they had suffered a problem like John's	☐1	☐2	☐3	☐4	☐5

9. Please indicate how strongly you agree or disagree with each statement (*Tick one response for each other line)*

		Strongly Agree	*Agree*	*Neither Agree nor Disagree*	*Disagree*	*Strongly Disagree*
a.	Most other people believe that people snap out of it they wanted	☐1	☐2	☐3	☐4	☐5
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d.	Most people believe that people with a problem like John's are dangerous	☐1	☐2	☐3	☐4	☐5
e.	Most people believe that it is best to avoid people with a problem like John's so that you don't develop this problem	☐1	☐2	☐3	☐4	☐5
f.	Most people believe that people with a problem like John's are unpredictable	☐1	☐2	☐3	☐4	☐5

g. If they had a problem like John's most people would not tell anyone	☐1	☐2	☐3	☐4	☐5
h. Most people would not employ someone they knew had a problem like John's	☐1	☐2	☐3	☐4	☐5
i. Most people would not vote for a politician they knew had suffered problem like John's	☐1	☐2	☐3	☐4	☐5

10. Please indicate how willing you would be to: (*Tick one response for each other line)*

	Definitely willing	*Probably willing*	*Probably unwilling*	*Definitely unwilling*	*Dont know*
a. Move next door to John	☐1	☐2	☐3	☐4	☐5
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c. Make friends with John	☐1	☐2	☐3	☐4	☐5
d. Have John start working closely with you on a job	☐1	☐2	☐3	☐4	☐5
e. Have John marry into your family	☐1	☐2	☐3	☐4	☐5

Finally we would appreciate it if you would answer a few questions about yourself.

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13. Sex?

☐1Male ☐2Female

14. Work experience?

.....

15. On average, how often do you deal with problems like John's?

☐11….Daily ☐2Weekly ☐3Monthly ☐4Less than monthly

16. Do you have any comments you would like to make?.....…….

……..

Please return the questionnaire in the envelope provided. Thank you for your assistance.

By submitting this questionnaire the participant gives consent

Addendum E

Permission Ethics committee

UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA

UFS·UV
HEALTH SCIENCES
GESONDHEIDSWETENSKAPPE

Health Sciences Research Ethics Committee

22-Nov-2021

Dear **Mr Gabriel Morifi**

Ethics Clearance: **MENTAL HEALTH LITERACY AMONGST PRIMARY HEALTHCARE NURSES IN**
DR RUTH SEGOMOTSI MOMPATI
Principal Investigator: **Mr Gabriel Morifi**
Department: **School of Nursing Department (Bloemfontein Campus)**
Submission Page

APPLICATION APPROVED

Please ensure that you read the whole document
With reference to your application for ethical clearance with the Faculty of Health Sciences, I am pleased to inform you on behalf of the Health Sciences Research Ethics Committee that you have been granted ethical clearance for your project.
Your ethical clearance number, to be used in all correspondence is:**UFS-HSD2021/0848/3011**
The ethical clearance number is valid for research conducted for one year from issuance. Should you require more time to complete this research, please apply for an extension.

We request that any changes that may take place during the course of your research project be submitted to the HSREC for approval to ensure we are kept up to date with your progress and any ethical implications that may arise. This includes any serious adverse events and/or termination of the study.
A progress report should be submitted within one year of approval, and annually for long term studies.
A final report should be submitted at the completion of the study.

Research conducted in any Department of Health facility: Researchers are required to sign and return the HSREC approval letters to the provincial Department of Health where they applied. It is also a requirement for researchers to submit electronic copies of their final research findings, and/or make a presentation of their findings and recommendations at departmental research days when and where indicated.

The HSREC functions in compliance with, but not limited to, the following documents and guidelines: The SA National Health Act. No. 61 of 2003; Ethics in Health Research: Principles, Structures and Processes (2015); SA GCP(2006); Declaration of Helsinki; The Belmont Report; The US Office of Human Research Protections 45 CFR 461 (for non-exempt research with human participants conducted or supported by the US Department of Health and Human Services- (HHS), 21 CFR 50, 21 CFR 56; CIOMS; ICH-GCP-E6 Sections 1-4; International Council for Harmonisation (ICH) Harmonised Guideline, Integrated Addendum to ICH E6(R1), Guideline for Good Clinical Practice (GCP) E6(R2), 2016, SAHPRA Guidelines as well as Laws and Regulations with regard to the Control of Medicines, Constitution of the HSREC of the Faculty of Health Sciences.

For any questions or concerns, please feel free to contact HSREC Administration: 051-4017794/5 or email EthicsFHS@ufs.ac.za.

Thank you for submitting this proposal for ethical clearance and we wish you every success with your research.

Yours Sincerely

Prof. A. Sherriff
Chairperson: Health Sciences Research Ethics Committee

Health Sciences Research Ethics Committee
Office of the Dean: Health Sciences
T: +27 (0)51 401 7795/7794 | E: ethicsfhs@ufs.ac.za
IRB 00011992; REC 230408-011; IORG 0010096; FWA 00027947
Block D, Dean's Division, Room D104 | P.O. Box/Posbus 339 (Internal Post Box G40) | Bloemfontein 9300 | South Africa
www.ufs.ac.za

Addendum F

Proof of editing

To whom it may concern

This is to state that the Master's study titled *Mental Health Literacy among Primary Healthcare Nurses in the Dr Ruth Segomotsi Mompati District* by Gabriel Morifi has been language edited by me, according to the tenets of academic discourse. The final responsibility for applying any proposed corrections lies with the author.

Annamarie du Preez
B.Bibl.; B.A. Hons. (English)
0837641864

21-11-2023