

**KNOWLEDGE, ATTITUDE AND PERCEPTION OF FINAL
YEAR CLINICAL STUDENTS OF THE UNIVERSITY OF THE
ROLES OF PHYSIOTHERAPY IN MENTAL HEALTH**

BY

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CERTIFICATION

This dissertation by **ODIN, MATTHEW** is accepted in its present form as satisfying the dissertation requirement of the degree of Bachelor of Physiotherapy of the School of Basic Medical Sciences, College of Medical Sciences of the University of Benin.

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ABSTRACT

Background: Physiotherapists are part of the multidisciplinary health care team (MDT) and are essential in providing mental health education to patients and, when necessary, making referrals for additional customized therapy. However, there is a little or no studies on the knowledge, attitudes and perception of clinical students on the roles of physiotherapy in mental health.

Aim: The aim of the study was to assess the knowledge, attitudes and perception of final clinical students of the university of Benin on the roles of physiotherapy in mental health.

Methods: This was a cross sectional design study where 256 participants were recruited via convenience sampling technique from final year clinical class at University of Benin. Data was summarized using frequency, percentages, mean, median and interquartile range as appropriate. Inferential statistics such as Chi-square was used to test for the association between the variables and Mann Whitney u-test was used to test for the level of differences. The level of significance will be set at $p < 0.05$.

Results: Majority of the participants 221 (86.3%) had adequate knowledge of the role of physiotherapy, 131 (51.2%) had positive attitude and 218 (85.2%) had good perception towards the role of physiotherapy in mental health. There was no significant difference in knowledge, attitude and practice between male and female ($p = >0.05$). However, there was a significant difference in attitude between various departments. Furthermore, there was a significant relationship between knowledge and attitude ($X^2 = 4.627$, $p = 0.031$).

Conclusion: The study revealed there was an adequate knowledge on the role of physiotherapy, attitude towards mental health and a good perception of the role of physiotherapy in mental health among the respondents.

Keywords: Knowledge, attitude, perception, mental health

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TABLE OF CONTENTS

CERTIFICATION	i
ABSTRACT	ii
ACKNOWLEDGEMENT	iii
CHAPTER ONE	1
INTRODUCTION	1
1.1 BACKGROUND OF STUDY	1
1.2 STATEMENT OF PROBLEM	3
1.3 RESEARCH QUESTIONS	4
1.4 AIM OF STUDY	4
1.4.1 SPECIFIC OBJECTIVES	4
1.5 MAIN HYPOTHESES	5
1.5.1 SUB-HYPOTHESES	5
1.6 SIGNIFICANCE OF STUDY	6
1.7 SCOPE OF STUDY	6
1.8 LIMITATIONS	6
1.9 DEFINITION OF TERMS	6
CHAPTER TWO	8
LITERATURE REVIEW	8
2.1 INTRODUCTION	8
2.2 DEFINITIONS OF MENTAL HEALTH	8
2.3 PREVALENCE OF MENTAL HEALTH	10
2.4 PHYSICAL EFFECTS OF MENTAL HEALTH DISORDERS	11
2.6 ROLE OF PHYSIOTHERAPY IN HEALTH PROMOTION	15

2.7 PHYSIOTHERAPY MANAGEMENT OF COMORBIDITY	16
2.8 RECOGNITION OF PHYSIOTHERAPY ROLE IN MENTAL HEALTH	17
2.9 PHYSIOTHERAPIST KNOWLEDGE ON THE ROLE OF PHYSIOTHERAPIST IN MENTAL HEALTH	19
2.10 KNOWLEDGE AND ATTITUDE OF PHYSIOTHERAPY ON THE ROLE OF PHYSIOTHERAPIST IN MENTAL HEALTH	22
2.11 TABLE OF EMPIRICAL REVIEW	27
Physiotherapy Students' Attitudes toward Psychiatry and Mental Health: A Cross-Sectional Study	29
CHAPTER THREE	31
MATERIALS AND METHODS	31
3.1 PARTICIPANTS	31
3.1.1 PARTICIPANTS SELECTION	31
3.1.2 INCLUSION CRITERIA	31
3.1.3 EXCLUSION CRITERIA	31
3.2 MATERIALS	32
3.2.1 APPARATUS/INSTRUMENTS	32
3.3 METHODS	33
3.3.1 SAMPLING TECHNIQUE	33
3.3.2 SAMPLE SIZE	33
3.3.3 RESEARCH DESIGN	34
3.3.4 ETHICAL CONSIDERATION	34
3.3.5 PROCEDURE FOR DATA COLLECTION	34
3.3.6 DATA ANALYSIS	34
CHAPTER FOUR	36
RESULTS	36

4.1.1 SOCIODEMOGRAPHIC DATA OF THE RESPONDENTS	36
4.1.2 KNOWLEDGE OF MENTAL HEALTH AMONG THE RESPONDENTS	38
4.1.3 KNOWLEDGE ON THE ROLE OF PHYSIOTHERAPY IN MENTAL HEALTH	41
4.1.4 ATTITUDE TOWARDS MENTAL HEALTH	42
4.1.5 PERCEPTION OF THE ROLE OF PHYSIOTHERAPY IN MENTAL HEALTH	48
4.1.6 MAN WHITNEY U TEST SHOWING THE DIFFERENCE IN KNOWLEDGE, ATTITUDE AND PERCEPTION AMONG MALE AND FEMALE RESPONDENTS	50
4.1.7 CHI-SQUARE SHOWING THE RELATIONSHIP BETWEEN THE KNOWLEDGE AND ATTITUDE OF THE RESPONDENTS ON MENTAL HEALTH	52
4.1.8 ONE WAY ANOVA COMPARING THE KNOWLEDGE, ATTITUDE AND PERCEPTION OF THE RESPONDENTS AMONG THE VARIOUS DEPARTMENTS	54
4.1.9 POST HOC BONFERRONI COMPARISON OF THE ATTITUDE OF THE RESPONDENTS AMONG VARIOUS DEPARTMENT	56
4.2 HYPOTHESIS TESTING	58
CHAPTER FIVE	61
DISCUSSION, CONCLUSION AND RECOMMENDATION	61
5.1 DISCUSSION OF FINDINGS	61
5.1.1 SOCIO-DEMOGRAPHIC DATA OF THE RESPONDENTS	61
5.1.2 KNOWLEDGE OF MENTAL HEALTH AMONG THE RESPONDENTS	61
5.1.3 KNOWLEDGE OF THE ROLE OF PHYSIOTHERAPY AMONG THE RESPONDENTS	62
5.1.4 ATTITUDES TOWARDS MENTAL HEALTH	63
5.1.6 PERCEPTION TOWARDS THE ROLE OF PHYSIOTHERAPY AMONG THE RESPONDENTS	63
5.2 CONCLUSION	65
5.3 RECOMMENDATION	65

5.4 IMPLICATION FOR FURTHER STUDY	65
REFERENCES	66

LIST OF TABLES

TABLE 1: SOCIO-DEMOGRAPHIC DATA OF THE RESPONDENTS.....	36
TABLE 2: KNOWLEDGE OF MENTAL HEALTH AMONG THE RESPONDENTS.....	38
TABLE 3: ATTITUDE TOWARDS MENTAL HEALTH.....	42
TABLE 4: PERCEPTION OF THE ROLE OF PHYSIOTHERAPY IN MENTAL HEALTH.....	41
TABLE 5: MANN WHITNEY U TEST SHOWING THE DIFFERENCE IN KNOWLEDGE, ATTITUDE AND PERCEPTION AMONG MALE AND FEMALE RESPONDENTS.....	50
TABLE 6: CHI-SQUARE SHOWING THE RELATIONSHIP BETWEEN THE KNOWLEDGE AND ATTITUDE OF THE RESPONDENTS ON MENTAL HEALTH.....	52
TABLE 7: ONE WAY ANOVA COMPARING THE KNOWLEDGE, ATTITUDE AND PERCEPTION OF THE RESPONDENTS AMONG THE VARIOUS DEPARTMENTS.....	54
TABLE 8: POST HOC BONFERRONI COMPARISON OF THE ATTITUDE OF THE RESPONDENTS AMONG VARIOUS DEPARTMENT	55

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF STUDY

Mental health is "a state of wellbeing in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community," according to the World Health Organization (WHO, 2017). Individual well-being and efficient functioning are predicated on their mental health. The ability to control one's thoughts, emotions, behaviors, and social interactions are examples of personal characteristics that influence mental health (Townsend and Morgan, 2017). Furthermore, in addition to particular psychological, behavioral, and genetic characteristics, social, cultural, economic, political, and environmental factors also play a role (Headey *et al.*, 1993). Mental health disorders, often known as MHDs, can manifest in various ways, such as anxiety, depression, bipolar disorder, eating disorders, and schizophrenia (Ritchie and Roser, 2020). Recent years have shown a rise in the prevalence of MHD; in 2017, 970 million cases were reported worldwide, accounting for 5–10% of all cases (Ritchie and Roser, 2020; Sankoh *et al.*, 2018). Between 2000 and 2015, there was a 52% increase in the number of years that Africans lost to incapacity as a result of mental health and drug misuse illnesses (Sankoh *et al.*, 2018). It is anticipated that between 2012 and 2030, mental health disorders will cause an economic loss of USD 1.03 trillion (Melnik *et al.*, 2016).

Poor physical health can increase the likelihood of developing MHD, and poor mental health can have a detrimental effect on physical health (Connaughton and Gibson, 2016). The WHO

estimates that the life expectancy of individuals with severe MHD such as schizophrenia and significant affective disorders including depression and bipolar disorder is generally 10–20 years lower than that of the general population (WHO, 2020; Arnoldy *et al.*, 2014). Poor physical health issues that coexist with MHD are frequently to blame for these untimely deaths. Cardiovascular illness, ischemic heart disease, hypertension, diabetes, and respiratory disorders are among them (Connaughton and Gibson, 2016). Restoring mental health is crucial for economic growth and poverty reduction in addition to being important for an individual's well-being. Inadequate, unequally distributed, and inefficient utilization of resources contribute to a treatment gap of over 75% in many nations as they attempt to address the massive burden of mental, neurological, and substance use disorders. Mental health problems are more common in communities where there is inequality, low education, and relative poverty. Only about 30 million Indians are receiving treatment for the almost 150 million people who require mental health services. A number of underperforming components as well as a lack of a public health plan are indicated by the assessment of the mental health systems. (Mohr *et al.*, 2004).

Physiotherapists are part of the multidisciplinary health care team (MDT) and are essential in providing mental health education to patients and, when necessary, making referrals for additional customized therapy. Additionally, physiotherapists use evidence-based methods to enhance function and general well-being. These methods include movement, exercise, physical activity, relaxation techniques, and body and movement awareness (Andrew *et al.*, 2019; Probst, 2017; Stubbs *et al.*, 2014). Physiotherapists play a crucial role in promoting motivation in individuals with mental illnesses by offering support, highlighting strengths, giving positive reinforcement, addressing values, and leveraging guilt to achieve goals. It has been demonstrated that empowering patients with activities that provide chances for success and self-control reduces

mental diseases like depression. Cognitive therapy, guided imagery, body and movement awareness, yoga therapy, relaxation and breathing techniques, and physical education (including lifestyle and pain management) are among the therapies provided by physiotherapists. These therapies are an essential component of patient education and can both prevent and treat mental disorders (Chandratreya, 2011). Numerous research studies have demonstrated the positive impact of physical therapy therapies, such as different types of aerobic exercise, on depression (Craft and Perna, 2004), brain Gym activities for improving mood and cognitive abilities (Basso and Suzuki, 2017; Adriani *et al.*, 2020) and aerobic exercises on anxiety (Broocks *et al.*, 1998; Salmon, 2001).

The physiotherapist's contribution to mental health is rarely acknowledged, despite its critical importance. Students are prepared to address musculoskeletal (including chronic pain), cardiac, and neurological diseases, according to Connaughton and Gibson (2016). On the other hand, concomitant mental health conditions, which frequently manifest in these patients, are not well addressed through training. Probst and Peuskens (2010) claim that many physiotherapy curricula have minimal emphasis on psychiatry and mental health, which prevents physiotherapists from having the chance to get the abilities required to handle patients with MHD.

1.2 STATEMENT OF PROBLEM

Physiotherapists and students of physiotherapy will encounter patients with MHD more frequently as the condition becomes more commonplace worldwide. The available data indicates that physiotherapists are crucial to the treatment of MHD patients. Therefore, to manage these patients with confidence, additional knowledge and a positive attitude are required (Probst 2017, Vancampfort et al. 2018). Students studying physiotherapy have better attitudes toward patient

care the more knowledge they have about MHD (Probst and Peuskens, 2010). There are studies done globally on knowledge and attitudes towards psychiatric illness and mental health, but to the best of the researcher's knowledge, there is a little or no studies done on the knowledge, attitudes and perception of final year clinical students of the university of Benin on the roles of physiotherapy in mental health. Thus, the purpose of our study was to assess the knowledge, attitudes and perception of final year clinical students of the university of Benin on the roles of physiotherapy in mental health.

1.3 RESEARCH QUESTIONS

This study is therefore aimed to answer the following questions;

- i. What is the level of knowledge of final year clinical students of the university of Benin on the roles of physiotherapy in mental health?
- ii. What is the attitude of final year clinical students of the university of Benin towards the roles of physiotherapy in mental health?
- iii. What is the perception of final year clinical students of the university of Benin on the roles of physiotherapy in mental health?

1.4 AIM OF STUDY

This study is aimed at assessing the knowledge, attitudes and perception of final clinical students of the university of Benin on the roles of physiotherapy in mental health.

1.4.1 SPECIFIC OBJECTIVES

The specific objectives of this study are aimed at:

- i. Determining the level of knowledge of the final year clinical students of the university of Benin on the roles of physiotherapy in mental health
- ii. Determining the attitude of final year clinical students of the university of Benin towards the roles of physiotherapy in mental health
- iii. Determining the perception final year clinical students of the university of Benin on the roles of physiotherapy in mental health

1.5 MAIN HYPOTHESES

- i. There would be no significant relationship between the knowledge and attitude of final year clinical students of the university of Benin on the roles of physiotherapy in mental health.
- ii. There would be no significant difference in the knowledge, attitude and perception between the male and female final year clinical students of the university of Benin on the roles of physiotherapy in mental health.

1.5.1 SUB-HYPOTHESES

- i. There would no significant difference in the level of knowledge between the male and female final year clinical students of the university of Benin on the roles of physiotherapy in mental health
- ii. There would no significant difference in the attitude between the male and female final year clinical students of the university of Benin on the roles of physiotherapy in mental health

- iii. There would no significant difference in perception between the male and female final year clinical students of the university of Benin on the roles of physiotherapy in mental health

1.6 SIGNIFICANCE OF STUDY

- i. The findings from this study could contribute to the body of knowledge on the knowledge attitude and perceptions final year clinical students of the university of Benin on the roles of physiotherapy in mental health
- ii. The findings from this current study could also help to educate clinicians and intending clinicians on the roles of physiotherapy as part of a multidisciplinary team in the management of mental health patients.

1.7 SCOPE OF STUDY

This study was conducted among the final year clinical students of the university of Benin. It involved final year students from the departments of physiotherapy, nursing, MLS, Radiography, medicine and surgery, dentistry.

1.8 LIMITATIONS

1.9 DEFINITION OF TERMS

- i. **Knowledge:** It is defined as information, facts, and skills acquired through experience or education, and reflect an awareness or familiarity gained by experience of a fact or situation (Hiew *et al.*, 2015).

- ii. **Attitude:** Attitude is defined as a settled way of thinking or feeling about something (Pickens, 2005). Attitude is a particular mental state or a tendency to act in a particular way due to both an individual's experience and temperament (Pickens, 2005). An attitude influences behaviour, due to personal experience and character (Jagadeesan *et al.*, 2017; Pickens, 2005). An attitude is formed through learning and observing others and through personal experiences with people and situations (Jagadeesan *et al.*, 2017; Pickens, 2005).
- iii. **Perception:** a belief or opinion, often held by many people and based on how things seem (Cambridge dictionary)
- iv. **Mental Health:** Mental health is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community. It is an integral component of health and well-being that underpins our individual and collective abilities to make decisions, build relationships and shape the world we live in. Mental health is a basic human right. And it is crucial to personal, community and socio-economic development (WHO, 2022).

LIST OF ABBREVIATIONS

- i. **MHD:** Mental Health Disorders
- ii. **MDT:** Multidisciplinary Health Team
- iii. **MLS:** Medical Laboratory Science
- iv. **WHO:** World Health Organization

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The available material on physiotherapy and mental health will be evaluated in this review of the literature. specifically, the understanding of physiotherapy's role in mental health and the perspectives of physiotherapy students on this function. The following databases served as the literature's sources: A search of the literature was conducted using PubMed, Google scholar. The following keywords were used: undergraduate, mental health, physiotherapy, knowledge, and attitudes.

2.2 DEFINITIONS OF MENTAL HEALTH

The World Health Organization (WHO) defines mental health as "a state of well-being in which the individual is able to contribute to his or her community, realizes his or her own abilities, and can cope with normal stresses of life (WHO, 2004). Mental health can be categorized into three areas: sense of mastery over one's surroundings, self-realization, and autonomy, which refers to

the capacity to recognize, face, and resolve issues (Jahoda, 1958). Mental health is a dynamic state of internal equilibrium which enables individuals to use their abilities in harmony with universal values of society. Basic cognitive and social skills; ability to recognize, express and modulate one's own emotions, as well as empathize with others; flexibility and ability to cope with adverse life events and function in social roles; and harmonious relationship between body and mind represent important components of mental health which contribute, to varying degrees, to the state of internal equilibrium (Galderisi *et al.*, 2015). Given the misleading usage of the term "universal values" in some political and social contexts, it is thought important to include a note elucidating the meaning of this term in the definition. The principles we are talking about are: acknowledging one's interconnectedness with others, treating oneself and all living things with respect, protecting the environment, and respecting one's own and other people's freedom. The phrase "dynamic state of internal equilibrium" refers to the idea that different stages of life call for adjustments to the equilibrium that has been reached. Adolescent crises, marriage, parenthood, and retirement are a few examples of life epochs that call for a proactive search for a new mental equilibrium. This theory also takes into account and recognizes the fact that individuals in good mental health are capable of feeling normal human emotions, such as fear, anger, sadness, and grief, while still having the resilience to quickly return the dynamic state of internal equilibrium. All of the definition's suggested components are significant but not necessary elements of mental health; in fact, they may each contribute to the state of equilibrium to varying degrees, allowing fully developed functions to compensate for deficiencies in other areas of mental functioning. For example, a highly reciprocal and empathic individual may be able to make up for a moderate degree of cognitive impairment in order to maintain a satisfactory equilibrium and pursue their goals in life (Galderisi *et al.*, 2015).

2.3 PREVALENCE OF MENTAL HEALTH

Over the past three decades, there has been an increase in mental health issues (Dattani *et al.*, 2021). Depression affects 264 million individuals globally and is the most common mental health disorder, bipolar illnesses closely trail dementia, with 50 million cases worldwide (Gunduza *et al.*, 2022). It was reported that about 20% of all disability-associated burdens in Sub-Saharan Africa are related to mental and drug use disorders (Vancampport *et al.*, 2018). Furthermore, the top ten conditions that led to the disability-adjusted life years (DALYs) for individuals aged 10 to 49 between 2009 and 2019 included anxiety and depression disorders (Vos *et al.*, 2019).

Depression and anxiety are among the most common mental diseases in low- and middle-income nations like Nigeria (Gureje *et al.*, 2005; Audu, 2013). In Nigeria, there is a dearth of knowledge about mental health disorders, and many people believe that the underlying causes of these disorders are due to drug and alcohol abuse (80.8%), possession by evil spirits (30.2%), traumatic events or shocks (29.9%), stress (29.2%), and genetic inheritance (26.5%). Very few people also think that brain diseases or biological factors are the root cause of these disorders (Gureje *et al.*, 2005). Data from national WMHS (World Mental Health Survey) epidemiology reports are excluded because there is no reliable, local information available about the prevalence of mental illness in the Nigerian community. Reports indicate very low prevalence for depressive and anxiety disorders (3.1% lifetime depression, 5.7% lifetime anxiety) (Audu, 2013). All of this ultimately led to the significant issue receiving little attention at the local and international levels, and it has since gotten worse, particularly in light of the COVID-19 epidemic (Adewuya *et al.*, 2018). According to a study, the most prevalent depressive symptoms among depressed individuals in Nigeria were psychomotor retardation (1.8%), anhedonia (9.1%), suicidal ideation

(7.3%), and hopelessness (6.9%). Similarly, individuals with generalized anxiety disorder reported being unable to regulate their worrying (7.3%), being easily irritated (11.1%), and worrying excessively about a variety of topics (12.3%) (Adewuya et al., 2018). In Nigeria, stigmatizing behavior toward those with mental illnesses is well-documented and pervasive across all social strata and groups. Aside from being a barrier to receiving mental health care and significantly impacting the patient's quality of life, this behavior propagates false beliefs about the origins of mental diseases throughout the community (Audu, 2013).

2.4 PHYSICAL EFFECTS OF MENTAL HEALTH DISORDERS

A large body of research, including record linkage and clinical trials, has demonstrated that those with severe mental illness have a higher prevalence of chronic physical diseases and an earlier death rate (Lawrence *et al.*, 2010; Wahlbeck *et al.*, 2011; Mitchell et al., 2013) as well as among people who suffer from prevalent mental illnesses (Lawrence *et al.*, 2013; Cunningham *et al.*, 2014; Kisely *et al.*, 2005). It is less evident, nevertheless, whether mental problems in the community both treated and untreated may be associated with a later risk of developing chronic physical conditions because the results of these research are restricted to individuals who receive treatment (Lawrence *et al.*, 2010). Furthermore, it's uncertain how broadly applicable these correlations might be to a variety of physical health outcomes. The treatment of mental illness and the primary prevention of chronic physical disease are significantly impacted by this information. Physical health can be directly or indirectly impacted by mental illness. For example, by compromising and/or changing the immune response, mental illnesses like depression can cause physical sickness. Numerous studies have indicated that stress may result in weakened immune system performance (Kiecolt-Glaser and Glaser, 1992; Miller *et al.*, 2007). Research indicates that compared to the general population, individuals with schizophrenia had

greater incidences of cardiovascular illness, including myocardial infarction (Tsuang *et al.*, 1983; Harris, 1988). There is an even higher correlation between depression and cardiovascular morbidity. Depression itself raises the risk of myocardial infarction (Ford *et al.*, 1998) and is a predictor of a poor prognosis following the event, despite the fact that it is evident that individuals are more susceptible to depression following the incident (Frasure-Smith *et al.*, 1995). Whether effective treatment of depression can reduce cardiovascular morbidity and enhance the prognosis following a myocardial infarction is still to be determined. Compared to the general population, patients with psychoses, including schizophrenia, are more likely to have lifestyle risk factors for mortality and cardiovascular disease (Brown *et al.*, 1999). Compared to the overall population, they had higher smoking rates (Jeste *et al.*, 1996) even when populations from lower socioeconomic classes are taken into account (Brown *et al.*, 1999). They become economically impoverished due to the costs of tobacco usage, which also has negative effects on their physical health (McCreadie and Kelly, 2000). There are two possible explanations for the higher smoking rates among those diagnosed with schizophrenia: first, smoking may have a therapeutic impact on psychotic symptoms due to nicotine's metabolism, and second, smoking may raise the risk of side effects from antipsychotic medications (Jeste *et al.*, 1996). Individuals diagnosed with persistent psychoses are more likely than the general population to consume diets heavy in fat and low in fiber, and they are also less likely to exercise (Brown *et al.*, 1999). When alcohol consumption and obesity are taken into account in this patient population, the picture becomes less clear. While some research indicates that the general population's rates of obesity and alcohol abuse are also present in patients with chronic psychosis, other studies come to the conclusion that a clear correlation between alcohol and drug abuse and schizophrenia exists (Jeste *et al.*, 1996).

2.5 PHYSIOTHERAPY ROLE IN MENTAL HEALTH

The physiotherapist is an important member of the mental health MDT and plays a big part in managing MHD. Probst (2017) states that a physiotherapist's job is to educate their patients about mental health issues and, if necessary, send them to specialized therapy. Additionally, physiotherapists play a part in helping individuals with MHD maintain their health (Stubbs *et al.*, 2014). The role of physiotherapists is to maximize an individual's total well-being by encouraging functional movement and physical activity (Probst, 2017, Vancampfort et al., 2018). Vancampfort et al.'s (2018) study goes on to detail the impacts of the various physiotherapy methods that were employed. According to Vancampfort et al. (2018), therapeutic techniques like yoga, progressive muscle relaxation, and aerobic strength training have been shown to reduce cognitive symptoms and improve health-related quality of life. Research suggests that increases in physical function, such as balance and flexibility, are linked to patients' feelings of safety and self-worth. Additionally, better posture can boost happiness and self-esteem while reducing pain in various body parts (including the neck and back). There is compelling data that suggests individuals with depression and anxiety benefit from a sufficient exercise schedule (Hedlund and Gyllensten, 2010; Lichtman *et al.*, 2009). Anxiety disorders are among the emotional states in which physiotherapeutic techniques are particularly useful (Kaur et al., 2013). The greatest significant gains are shown in individuals participating in respiratory, aerobic, rhythmic exercise regimens and using vast muscle groups at low to moderate intensities (cycling, walking, running, and swimming, among other activities). At least three times a week, for 15 to

30 minutes each session, these exercises should be performed gradually. At the end of ten weeks of treatment, the effects will be apparent. The improvement in anxiety disorders is attributed to the release of more endorphins, modifications in body temperature and cerebral blood flow, as well as favorable effects on the hypothalamic-pituitary-adrenal axis and the physiological response to stress (Guszkowska, 2004). Furthermore, physical therapy assists the patient in learning how to identify and comprehend various body sensations as well as learn coping mechanisms for anxiety rather than running away from it. These strategies help the patient manage their symptoms and keep them from getting worse (Danielsson *et al.*, 2013).

Engaging in physical activity has been shown to enhance multiple outcomes for MHD patients. It results in a higher quality of life and encourages healthy aging (Cuijpers *et al.*, 2014). The World Health Organization (WHO, 2020) suggests 150 minutes a week of moderate to intense physical activity, which should include 30 minutes of aerobic exercise. In addition, the WHO has launched a worldwide action plan with the goal of lowering the percentage of adults and adolescents who do not engage in physical activity by 15% by 2030 (WHO, 2018). This is a component of a program to lessen the burden of MHD and non-communicable diseases (WHO, 2018). Exercise and physical activity have been shown to enhance quality of life for patients with psychosis, cardiorespiratory fitness, cognitive function, and cardio-metabolic risk factors (Firth *et al.*, 2016, Firth *et al.*, 2015, Vancampfort *et al.*, 2016, Vancampfort *et al.*, 2018). In patients with other MHD, such as anxiety, bipolar disorder, and schizophrenia, physical activity also lessens depressive symptoms (Priyono and Pramana, 2020, Stubbs *et al.*, 2018). Furthermore, the aforementioned articles focused on the advantages of physical activity rather than specifying if this was physical activity prescribed by physiotherapy. In 2020, Priyono and Pramana looked on the connection between depression scores and physical activity in schizophrenia patients. Low

physical activity and greater depression ratings were found to be positively correlated (Priyono and Pramana, 2020). Additionally, a study by Vancampfort et al. (2018) demonstrates that men with schizophrenia might benefit from physical activity because they are at risk of developing metabolic and cardiovascular disorders (Vancampfort *et al.*, 2018). According to Stubbs *et al.* (2014), physiotherapists ought to be at the forefront of encouraging physical activity and offering structured exercise regimens to eight patients with schizophrenia. After that, these programs need to be continuously monitored and outcome metrics used (Stubbs *et al.*, 2014). The International Organization of Physical Therapists in Mental Health (IOPTMH) guidelines support the Stubbs et al. (2014) proposal. Physiotherapy in mental health and psychiatry, according to the IOPTMH (2019), connects people's physical and mental health requirements by addressing function, activity, and involvement through physical activity, exercise, relaxation, movement, and body awareness techniques. Moreover, a recent consensus indicates that exercise enhances physical health and quality of life while also preventing and reducing mental symptoms IOPTMH (2019). Benefits have been noted in a variety of illnesses, such as schizophrenia, alcohol use disorders, depression, and anxiety (Stubbs *et al.*, 2018)

2.6 ROLE OF PHYSIOTHERAPY IN HEALTH PROMOTION

Physiotherapists, as members of the health promoter community, serve as a vital link between health and the delivery of healthcare, contributing to the promotion of health, wellness, fitness, and the prevention and management of disease and disability for both people and populations. In other words, physiotherapists seized the opportunity to use their training and experience to help people and groups become healthier overall and prevent illness. Physiotherapists can work in research, education, direct intervention, and advocacy. in line with the goal of the profession, which is to enable individuals to manage their own health. By supporting and motivating patients

to adopt healthier lifestyle choices and so maximize their function, physiotherapists contribute to the promotion of health for patients with motor neuropathy (MHD) (Stubbs *et al.*, 2014). In a different study, Stubbs *et al.* (2018) discovered that individuals suffering from schizophrenia consumed less fruit than people in general, which in turn led to their inadequate nutrition. In addition, this function includes minimizing bad habits such as consuming too much sugar, smoke, or alcohol and directing people seeking particular dietary plans to a dietician (Schnor *et al.*, 2021). Furthermore, chronic medication is frequently administered to MHD patients, some of which result in considerable weight gain (Schnor *et al.*, 2021). Consequently, the patient may be forced to make a decision between their emotional and physical well-being (Schnor *et al.*, 2021). Therefore, it is essential to enhance health in order to reduce weight gain, maximize the benefits of pharmaceutical treatment, and encourage making healthy decisions (Schnor *et al.*, 2021). In order to help patients with MHD (such as those with schizophrenia, bipolar disorder, and psychosis) find alternate and healthy sources of joy, physiotherapists are an important element of the MHD team. It has been observed that junk food and excessive alcohol use might exacerbate feelings of joy in these individuals. (Schnor *et al.*, 2021).

2.7 PHYSIOTHERAPY MANAGEMENT OF COMORBIDITY

Physiotherapy plays a crucial role in managing physical co-morbidities that coexist with multiple sclerosis. Several coexisting conditions include the somatization of symptoms, discomfort, respiratory disorders like chronic obstructive pulmonary disease (COPD), extrapyramidal drug side effects, movement disorders, and physical manifestations of neurological conditions like stroke. The effect of physiotherapy on a group of individuals with functional mobility abnormalities resulting from psychological disorders was examined and 69% of the intervention group reported improved symptoms following a week of intense rehabilitation targeted at

reversing aberrant learnt movement patterns (Czarnecki *et al.*, 2012). Furthermore, physical therapy plays a crucial role in the treatment of COPD, which accounts for less than 10% of co-morbid illnesses in individuals with MHD (Czarnecki *et al.*, 2012).

According to Dimitrova *et al.* (2017), it has been linked to enhancements in exercise tolerance, mobility during daily activities, and a reduction in dyspnea, all of which contribute to an individual's increased quality of life. Additionally, in individuals with anxiety and depression who also had a stroke as a comorbid disease, physiotherapy improved both physical and mental performance (Yuan and He, 2019). Physiotherapy methods utilized with this demographic group included strength training, neurodevelopmental techniques, shoulder wheel exercises, and stationary cycling. According to Yuan and He (2020), a stroke is a neurovascular event that happens when there is an inadequate flow of blood to the brain, either because of a blood clot in the micro vessel or a brain blood vessel rupture. Stroke was the co-occurring ailment for patients who already had depression and anxiety disorders (Yuan and He, 2019).

2.8 RECOGNITION OF PHYSIOTHERAPY ROLE IN MENTAL HEALTH

The quality of life for those suffering from mental illnesses can be enhanced by physiotherapy (Torales *et al.*, 2017; Richardson *et al.*, 2005). Achieving this goal can involve improving their physical well-being, alleviating their psychosocial impairment (Pope, 2009), and acting as a supportive treatment for the underlying mental illness (Probst, 2017; Guskowska, 2004). Studies have shown a correlation between enhanced self-esteem and a sense of safety and flexibility in the muscles. Better posture can also lessen physical discomfort, enhance mood, and enhance one's perception of one's body. Additionally, there is substantial evidence to suggest that individuals with mental illnesses like anxiety and depression benefit from a regular physical

exercise regimen (Guszkowska, 2004; Torales *et al.*, 2018). The evidence makes apparent how important physiotherapists are to mental health, yet neither the MDT nor national policies often recognize this fact (Lee *et al.*, 2017). Moreover, according to Lee *et al.* (2017), not many members of the mental health MDT are able to recognize the significance of physiotherapy in mental health. This is explained by physiotherapists' low visibility in the field of mental healthcare (Lee *et al.*, 2017).

Medical personnel in the mental health MDT were not knowledgeable about physical activity programs and were pressed for time when it came to referring patients to physiotherapists or other specialists who support physical exercise. Members of the MDT are aware of the roles played by social workers and occupational therapists, but they are not as familiar with physiotherapy, according to Lee *et al.* (2017). Additionally, it was mentioned that physiotherapists do not have specialized training or clinical expertise, which contributes to their lack of acceptance in mental health (MH) MDT (Lee *et al.*, 2017). Mental health specialists from Perth, Australia's Metropolitan Health Service participated in this study. These individuals held power or influence over the decision to refer patients to physiotherapists who suffer from serious and ongoing mental illness. Participants were chosen from the Western Australian community who had a history of severe mood disorder or schizophrenia spectrum disorder as determined by a mental health practitioner. To the best of my knowledge, the Lee *et al.* (2017) work has not been mirrored in any current literature. Furthermore, a study by McCurdy *et al.* (2020) claims that although the involvement of physiotherapy in MHD is acknowledged, it hasn't been investigated. Physiotherapists are among the experts who encourage physical activity, along with kinesiologists, exercise physiologists, and personal trainers (McCurdy *et al.*, 2020). Physiotherapists contribute by offering patients with MHD professional care, customised

physical activity programmes, and encouragement of physical exercise in the treatment of MHD (McCurdy *et al.*, 2020). This tension is further highlighted by the Cartesian bio-medical model, which maintains that the body and mind are distinct entities despite research demonstrating a relationship between the two (Connaughton and Gibson, 2016a). This is important to comprehend the effect of MHD on physical health and the function of physiotherapists in mental health.

Some research has examined the obstacles that individuals with mental illnesses face when trying to access physiotherapy services, as seen from the perspective of mental health professionals (Lee *et al.*, 2017) the factors that physiotherapists believe influence physiotherapy's provision in the management of individuals with mental illnesses' physical health; or the benefits of physiotherapy in the management of individuals with mental illnesses' physical health, as seen from their perspective (Andrew *et al.*, 2019). There is scant information on the use of physiotherapy as an adjuvant treatment for mental illnesses, not just physical illnesses that afflict people with mental illnesses.

2.9 PHYSIOTHERAPIST KNOWLEDGE ON THE ROLE OF PHYSIOTHERAPIST IN MENTAL HEALTH

Despite research detailing the functions and advantages of physiotherapy in mental health, physiotherapists have demonstrated a lack of understanding of this function and, as a result, a decrease in confidence when it comes to treating patients with MHD. An Australian study (Andrew *et al.*, 2019) that looked into physiotherapists' perspectives of their role in managing the physical health of people with severe and chronic mental illnesses makes this clear. Responses to survey questions on the function of the physiotherapist in this population group included pain

treatment and exercise programs. Overall, nevertheless, the participants were unclear about the role that physical therapy plays in this area (Andrew *et al.*, 2019). The lack of training and expertise in mental health specializations that physiotherapists themselves stated also had an impact on how they managed the psychosocial components of their patients' care (Hemmings and Soundy, 2021).

Hemmings and Soundy's (2021) study was carried out in Birmingham, UK, and its participants were drawn from various mental health trusts. Among them were those who needed the assistance of a physiotherapist due to co-occurring physical health issues and severe mental illness (Hemmings and Soundy, 2021). The study also included physiotherapists who are currently employed by a mental health trust and have at least a year of experience working in the field of adult mental health (Hemmings and Soundy, 2021).

Furthermore, Connaughton and Gibson (2016) found that Western Australian physiotherapists are deficient in appropriate communication techniques and abilities to manage MHD patients. The article contained no additional information about communication abilities. The responders emphasized that communication problems make treatment less effective. Later in the piece, the writers did not go into further detail about the lack of communication abilities. Using an online survey conducted in 31 different countries, Stubbs *et al.* (2014) investigated the use of physiotherapy in the treatment of individuals with schizophrenia. According to their findings, physiotherapists saw their job as promoting patients' health and offering their knowledge of physical health inside the mental MDT (12). Furthermore, according to Stubbs *et al.* (2014), physiotherapists made a good contribution by prescribing individualized exercise programs to meet each person's present state of physical health, increasing the physical activity levels of individuals with schizophrenia, and optimizing function. The psychosocial therapies, such

mindfulness and body awareness techniques, that physiotherapists in this study were aware of could help patients' physical health by utilizing the mind-body connection (Stubbs *et al.*, 2014). The study conducted by Stubbs *et al.* (2014) is the first global investigation into the function of physiotherapy in patients diagnosed with schizophrenia, based on feedback from MH physiotherapists across the globe. No, there weren't any notable distinctions between the nations. Participants were chosen from among IOPTMH member nations. Since the replies came from a variety of participants on a range of subjects covered in the study, it was challenging to draw any parallels. Regarding the variations by nation, the writers said nothing. Their results were insightful, but they only looked at patients with schizophrenia; they did not address other forms of MHD, and the physiotherapists who answered had at least a year's experience working in a mental health facility. The specialist' experience they possessed was demonstrated by their higher comprehension of the functions of physiotherapy in comparison to physiotherapists in the Connaughton and Gibson (2016a) and Andrews *et al.* (2019) research. It's interesting to note that physiotherapists from an African nation were not included in this international study by Stubbs *et al.* (2014), indicating the need for more research in this field throughout the continent.

The necessity for further training to help physiotherapists manage patients with psychiatric problems and reduce their fear is a prominent issue in the literature (Connaughton and Gibson, 2016a, Hemmings and Soundy, 2021, Andrew *et al.*, 2019 Driver *et al.*, 2017). Because the focus of undergraduate training was on the management of physical health, physiotherapists in Kwazulu-Natal, South Africa, expressed surprise that they had a role to play in managing patients living with MHD (Hooblalul *et al.*, 2020). Managers from Kwazulu-Natal hospitals' Department of Health Physiotherapy departments made up the responders (Hooblalul *et al.*, 2020). Their ages ranged from 26 to 57, with a mean of 38 (Hooblalul *et al.*, 2020). They also reiterated

the notion that physiotherapists' inadequate undergraduate training in mental health contributed to stigmatization of patients with mental health disorders and a lack of confidence in treating them (Hooblaul *et al.*, 2020).

Finally, as noted by Stubbs *et al.* (2014), physiotherapists acknowledge that their function in assessing musculoskeletal issues in patients with MHDs is identical to that of assessing a patient with a musculoskeletal condition in the absence of MHDs. Furthermore, physiotherapists are aware of their role in promoting health by addressing co-morbid illnesses like schizophrenia that are frequently present in patients with MHD as well as other relevant risk factors like metabolic syndrome, obesity, diabetes, and other related chronic diseases. Moreover, physiotherapists believe that they have a favorable impact on the mental health of individuals with schizophrenia by encouraging social contact, raising self-awareness and confidence, and cultivating a sense of accomplishment in relation to improved physical health. Stubbs *et al.*, 2014).

2.10 KNOWLEDGE AND ATTITUDE OF PHYSIOTHERAPY ON THE ROLE OF PHYSIOTHERAPIST IN MENTAL HEALTH

The understanding of mental health and the role of physiotherapy among students has not been extensively studied in published research. Additionally, these papers frequently explore students' attitudes regarding mental health concurrently with the knowledge component; as a result, this section of the literature review will look at both organizations jointly (Connaughton and Gibson, 2016a). Physiotherapy students in Australia are well-prepared to treat disorders of the musculoskeletal, cardiorespiratory, and neurological systems by the end of their undergraduate studies, but they lack the authority to treat mental health and psychiatric problems. This is according to Connaughton and Gibson (2016a). This study found that by the time they completed

their undergraduate degrees, physiotherapists working in general practice were more adept at treating physical symptoms than mental health and psychiatric problems. Another study (Connaughton and Gibson, 2016b) looked at the physiotherapy programs offered at the majority of Australian institutions, specifically the amount of material covered at the undergraduate level on MHD and psychiatry. The investigation was dual. The first section focused on first-, second-, fourth-, and fifth-year physiotherapy students at the University of Notre Dame in Australia.

Employees of Physiotherapy Clinical Education Managers Australia and New Zealand participated in the second section. Ten academic institutions took part in the latter. According to Connaughton and Gibson (2016b), half of the universities stated that they did not offer specialized content on the pathophysiology of the majority of MHD and psychiatry conditions. None of the institutions had a dedicated section that handled MHD and psychiatric conditions. The research made clear the necessity for additional instruction on the warning signs and symptoms of mental health disorders, the management of medical conditions and physical therapy, as well as the application of efficient communication techniques with this population (Connaughton and Gibson, 2016a).

Probst and Peuskens (2010) also looked at the attitudes of Flemish students regarding psychiatry. They also compared students specializing in physiotherapy to those without a background in biomedicine, with the latter serving as the control group. Participants included undergraduate students from a variety of fields, including the social sciences, law, theology, and communication sciences, as well as those in their first and second years of a program in rehabilitation sciences and physiotherapy. The latter group's study years were not specified by the authors. (Pauskens and Probst, 2010). The study's findings demonstrated that, in contrast to their physiotherapy student peers, students without a background in biomedicine had a more

positive attitude toward patients with psychiatric illnesses. This might be explained by the fact that between the times the first and second surveys were given (20 weeks apart), second-year physiotherapy students had a 67-hour course on "Pathology and psychomotor rehabilitation for patients with psychopathological illnesses." Additionally, non-medical students' responses tended to score more things as neutral or no opinion (score 3), whereas physiotherapy students' scores varied (scores 1–5). Within this research, a further comparison was conducted between first-year physiotherapy students who had not taken a psychiatry course and second-year students who did (Probst and Peuskens, 2010). Findings indicated that second-year students had a more positive attitude than their first-year counterparts, indicating that attitudes about mental illnesses and psychiatry knowledge may be related (Pauskens and Probst, 2010). Other differences also surfaced: compared to their male counterparts, female students showed a more positive outlook and greater empathy for those who suffered from mental illness. Furthermore, people with past experience with mental illness showed a more positive outlook.

Nevertheless, cause-and-effect relationships could not be established because this study was cross-sectional. The authors suggested that further training in psychiatry for physiotherapy students could improve attitudes toward members of this population group and lessen the possibility that they would be stigmatized (Probst and Peuskens, 2010). Additionally, physiotherapy students who had completed clinical placements exhibited noticeably more positive attitudes regarding psychiatry and mental health than those who had not yet completed their clinical placements, as demonstrated by Connaughton and Gibson (2016). Furthermore, male students exhibited a more pessimistic attitude than their female peers, which was consistent with Probst and Peuskens (2010). Male physiotherapists had a lower ATP-30 score than their female counterparts, Probst and Peuskens (2010), suggesting a more pessimistic mindset. One

distinction between the two studies is that the Flemish study employed theoretical attendance to a psychiatric course, whereas the Australian study used practical learning via attendance at clinical placements to distinguish the two groups. Furthermore, only physiotherapy students were included in the Australian study; in contrast, both students without a background in biomedicine and those studying physiotherapy were enrolled in the Flemish study. According to these studies, attending clinical placements is linked to practical learning experiences and a more positive attitude toward mental health and psychiatry.

Regardless of their year of study, physiotherapy students had a fairly positive attitude regarding mental illness, according to a study by Yildirim et al., 2015. Physiotherapy students from two Turkish universities in their first to fourth year of study participated in the Yildirim et al. (2015) study. The participants' views toward mental illness were assessed using the Belief Toward Mental Illness Questionnaire. The findings demonstrated that students with a history of mental health issues who saw a psychiatrist or psychologist had more optimistic views than students who chose not to seek medical attention when they experienced mental health issues. Pre-existing unfavorable attitudes on mental illness may have contributed to this discrepancy by preventing the person from seeking medical attention. Furthermore, compared to those who did not have a relationship, those who had a relationship with a 16-year-old with a mental health issue held more positive beliefs. Also, individuals who knew or were in a connection with someone who had a mental illness were more accepting of mental disease than those who did not; this was a factor that was overlooked in the research by Probst and Peuskens (2010) and Connaughton and Gibson (2016). Finally, this study recruited people from two separate Turkish institutions for physiotherapy, while the previous two investigations only included volunteers from one university. One of the study's limitations was the absence of a control group. There was

no comparison between the year groups; all physiotherapy students from the first to the fourth year of study were included as participants.

2.11 TABLE OF EMPIRICAL REVIEW

AUTHORS/COUNTRY	TITLES	OBJECTIVES	METHODS/MEASUREMENT INSTRUMENTS	SAMPLE SIZE	STATISTICAL TESTS	KEY FINDINGS
Gunduza et al., 2023/ South Africa	Physiotherapy students' knowledge and attitude about their role in mental health	To establish the knowledge of and attitudes towards the role of physiotherapy in determining the mental health attitudes	Mental Health Knowledge Schedule (MAKS) and Mental Illness Clinicians' Attitudes (MICA) scales were used	34 students were recruited for the study	A multiple linear regression	Third- and fourth-year University of the Witwatersrand physiotherapy students have moderate knowledge and a positive attitude towards the role of physiotherapy in mental health
Almirion et al., (2020)	Physiotherapists' knowledge on the provision of physiotherapy to people with mental illness. A study from Paraguay	knowledge of physiotherapists about the provision of Physiotherapy services to people with mental	Cross-sectional survey using a self-administered questionnaire from Spanish version of the survey used by Andrew et al., which was adapted	187 Physiotherapist practicing in paraguay were recruited for this study	Chi-squares	There are gaps in the knowledge of physiotherapists in Paraguay about the provision of Physiotherapy

		disorders, about the role of Physiotherapy in the treatment of physical illnesses of mentally ill persons and in the treatment of the mental disorder itself				to people with mental disorders.
Rathi et al., 2023/India	Attitude and Knowledge of Physiotherapy Students toward Mental Health and Patients with Psychiatric Illnesses	To assess the attitude and knowledge of physiotherapy students toward mental health and patients with psychiatric illnesses and also to identify the barrier faced by them	Mental Illness Clinicians' Attitude version 4 and a prevalidated questionnaire	191 students were recruited for this study	Spearman's coefficient of rank correlation	The majority of students had a moderately positive attitude with little room for improvement (57.07%) followed by 40.31% having a negative attitude. Good knowledge was found in 59.69% of students followed by 22.51% of students having moderate and 14.14% excellent knowledge. It was observed a negative

						significant correlation between attitude and knowledge ($r = -0.369$, $P < 0.001$). Gender, year of study, and age have a considerable impact on one's knowledge and attitude
Connaughton and Gibson. (2016)/Australia	Physiotherapy Students' Attitudes toward Psychiatry and Mental Health: A Cross-Sectional Study	To assess the attitude physiotherapy students' attitudes toward psychiatry and mental health	A questionnaire including demographic details, level of exposure to mental illness, and the Attitudes Toward Psychiatry–30 items (ATP-30)	162 students were recruited for this study	independent t-tests	Student response rate was 89%. Students generally had a positive attitude about psychiatry and mental health. Women were significantly more positive than men, and students who had completed clinical experience had a significantly more positive attitude. Physiotherapy

						program responses (response rate ¼ 59%) highlighted disparate approaches to psychiatry and mental health learning opportunities in terms of quantity and content

CHAPTER THREE

MATERIALS AND METHODS

This chapter describes the methodology for the study, including the research designs, participant information, participant selection as well as the collection, and analysis and synthesis of the data.

3.1 PARTICIPANTS

3.1.1 PARTICIPANTS SELECTION

This study population included final clinical undergraduates of the university of Benin.

3.1.2 INCLUSION CRITERIA

- i. 500 level students of Nursing, physiotherapy, Medical Laboratory Science departments, 600 level students of Medicine and dentistry departments.
- ii. Students who are willing to participate.

3.1.3 EXCLUSION CRITERIA

- i. 100-400 level students of nursing, physiotherapy, Medical Laboratory Science departments, and 100-500 level students of Medicine and dentistry departments
- ii. Students who will not be willing to participate.

3.2 MATERIALS

3.2.1 APPARATUS/INSTRUMENTS

Knowledge and attitudes were the outcomes that was assessed. The Mental Illness Clinicians' Attitudes (MICA-4) scale was used to examine attitudes, while the Mental Health Knowledge Schedule (MAKS) was used to evaluate knowledge.

i. MENTAL HEALTH KNOWLEDGE SCHEDULE (MAKS)

In order to assess mental health knowledge related to stigma, the Mental Health Knowledge Schedule (MAKS) will be developed in the United Kingdom (Evans-Lacko, Little, Meltzer et al., 2010). It consists of six questions that assess mental health knowledge related to stigma, including seeking help, receiving support, being recognized, receiving treatment and recovery, and finding work. The knowledge of mental illness conditions will be evaluated by the remaining six questions (Evans-Lacko, Little, Meltzer et al., 2010). The MAKS uses a Likert scale to rate items. One means that you strongly disagree, and five means that you don't know. According to Martensson, G., Jacobsson, J.W., and Engstrom (2014), the total score for statements connected to stigma ranges from six to thirty, with higher scores suggesting less knowledge about stigma. Overall test-retest reliability for the MAKS has been demonstrated to be moderate to substantial (0.71 according to Lin's concordance statistic) and a Cronbach's α of 0.65 for total internal consistency (Evans-Lacko, Little, Meltzer et al., 2010).

ii. MENTAL ILLNESS CLINICIANS' ATTITUDES (MICA-4) SCALE

This study will employ the self-administered MICA-4 Scale, which measures attitudes about psychiatry and individuals with mental illness. Nurses and other health and social sector professionals use the MICA-4 Scale. The literature describes the population healthcare professionals in which the questionnaire has been used but is ambiguous on the nation in which it has been used. It has sixteen statements, and the answers are rated using a Likert-style scale. The score is the total of the scores for each individual item and goes from 16 to 96. A lower total score suggested a more upbeat outlook. It has been established that the MICA-4 Scale is a viable measure that responds to a range of interventions (Siddiqua and Foster, 2015). The split-half correlation is 0.73 and the internal consistency (Cronbach's α) of the MICA is 0.79. With a 0.80 test-retest reliability, it is high.

3.3 METHODS

3.3.1 SAMPLING TECHNIQUE

Participants were selected from the university under study via a convenience sampling technique

3.3.2 SAMPLE SIZE

The sample size for this study was calculated using the slovin formula: $n = N / ((1 + N [e]^2))$

n= minimum sample size

N= Population size

e = margin of error (0.05)

$$n = 709 / (1 + 709 [0.05]^2)$$

$$n = 255.7$$

Sample size =256

Therefore, the minimum sample size for this study was 256 participants

3.3.3 RESEARCH DESIGN

This was a cross-sectional study

3.3.4 ETHICAL CONSIDERATION

The ethical approval for this study was sought and obtained from the Ethical and Research Committee of College of Medical Sciences, University of Benin, Edo state

3.3.5 PROCEDURE FOR DATA COLLECTION

A letter of introduction was obtained from the Department of Physiotherapy, University of Benin, to introduce the study to the Head of Departments of the departments under study. Approval from the participants was obtained before data collection. A total of 256 students were recruited for this study, and the privacy of each participant was ensured. Each participant was given a consent form and briefed on the research and its aim before the questionnaire was issued to them. Copies of the questionnaires were distributed to the participants, who were allowed sufficient time to complete the questionnaire before it was retrieved.

3.3.6 DATA ANALYSIS

Data was analysed using the IBM for statistical package for social sciences version 27.0. The distribution of the data was checked for normality using the histogram and other normality tests. Data was summarized using frequency, percentages, mean, median and interquartile range as appropriate. Inferential statistics such as Chi-square was used to test for the association between

the variables and Mann Whitney u-test was used to test for the level of differences. The level of significance will be set at $p < 0.05$.

CHAPTER FOUR

RESULTS

4.1.1 SOCIODEMOGRAPHIC DATA OF THE RESPONDENTS

Two hundred and fifty-six participants were recruited for this study, out of which 137(53.5%) were females while 119(46.5%) were males. 171(66.8%) of the respondents were between the ages of 21-24years, 61(23.8%) were between the ages of 25-29 years. 94(36.7%) of the respondents were physiotherapy students, 63(24.6%) were Nursing students, 45(17.6%) were medical laboratory science students, 28(10.9%) were dentistry students while 26(10.2%) were medicine students. 148(57.8%) of the respondents reported that they have had previous experience in mental health facility while 108(42.2%) reported they have not had previous experience in mental health facility as shown in table 1.

Table 1: Sociodemographic data of the respondents**N=256**

Variables	Category	Frequency	Percentages
Age	16-20	12	4.7
	21-24	171	66.8
	25-29	61	23.8
	≥ 30	12	4.7
Gender	Female	137	53.5
	Male	119	46.5
Department	Dentistry	28	10.9
	MLS	45	17.6
	Medicine and surgery	26	10.2
	Nursing	63	24.6
	Physiotherapy	94	36.7
Have had a previous experience in mental health facility ?	Yes	148	57.8
	No	108	42.2

4.1.2 KNOWLEDGE OF MENTAL HEALTH AMONG THE RESPONDENTS

84(32.8%) of the respondents agreed that most people with mental health problems want to have paid employment. 103(40.2%) of the respondents agreed that if a friend had a mental health problem, they know what advice to give them to get professional help. 119(46.5%) strongly agreed that medication can be an effective treatment for people with mental health problems. 160(62.5%) of the respondents strongly agreed that Psychotherapy (e.g. talking therapy or counselling) can be an effective treatment for people with mental health problems. 93(36.3%) of the respondents strongly agreed that People with severe mental health problems can fully recover. 88(34.4%) of the respondents agreed that most people with mental health problems go to a healthcare professional to get help. 118(46.1%) of the respondents strongly agreed that depression is a type of mental illness. 118(46.1%) of the respondents agreed that stress is a type of mental illness. 136(53.1%) of the respondents strongly agreed that schizophrenia is a type of mental illness. 163(63.7%) of the respondents strongly agreed that bipolar disorder (manic depression) is a type of mental illness. 131(51.2%) of the respondents strongly agreed that Drug/substance addiction is a type of mental illness. 73(28.5%) of the respondents strongly agreed that grief is a type of mental illness In summary, 221(86.3%) of the respondents had adequate knowledge of mental health as shown in table 2.

Table 2: Knowledge of mental health and role of physiotherapy in mental health

Questions	Agree strongly	Agree slightly	Neutral	Disagree strongly	Disagree slightly	Don't know
Most people with mental health problems want to have paid employment	69(27.0%)	84(32.8%)	40(15.6)	30(11.7)	8(3.1%)	25(9.8%)
If a friend had a mental health problem, I know what advice to give them to get professional help	73(28.5%)	103(40.2%)	42(16.4%)	18(7.0%)	8(3.1%)	12(4.7%)
Medication can be an effective treatment for people with mental health problems	119(46.5%)	85(33.2%)	46(18.0%)	0 (0%)	6(2.3%)	0 (0%)
Psychotherapy (e.g. talking therapy or counselling) can be an effective treatment for people with mental health problems	160(62.5%)	78(30.5%)	12(4.7%)	6(2.3%)	0 (0%)	0 (0%)
People with severe mental health problems can fully recover	93(36.3%)	86(33.6%)	48(18.8%)	11(4.3%)	12(4.7%)	6(2.3%)
Most people with mental health problems go to a healthcare professional to get help	53(20.7%)	88(34.4%)	47(18.4%)	42(16.4%)	20(7.8%)	6(2.3%)
Do you think each condition is a type of mental illness?						
Depression	118(46.1%)	103(40.2%)	15(5.9%)	12(4.7%)	5(2.0%)	3(1.2%)

Stress	40(15.6%)	118(46.1%)	41(16.0%)	26(10.2%)	31(12.1%)	0 (0%)
Schizophrenia	136(53.1%)	70(27.3%)	33(12.9%)	0 (0%)	4(1.6%)	13(5.1%)
Bipolar disorder (manic depression)	163(63.7%)	48(18.8%)	29(11.3%)	6(2.3%)	0 (0%)	29(11.3%)
Drug/substance addiction	131(51.2%)	83(32.4%)	24(9.4%)	6(2.3%)	12(4.7%)	0 (0%)
Grief	73(28.5%)	63(24.6%)	68(26.6%)	22(8.6%)	30(11.7%)	0 (0%)
OVERALL KNOWLEDGE						
ADEQUATE						
KNOWLEDGE 221(86.3%)						
INADEQUATE						
KNOWLEDGE 35(13.7%)						

4.1.3 KNOWLEDGE ON THE ROLE OF PHYSIOTHERAPY IN MENTAL HEALTH

On the knowledge of the respondents on the roles of physiotherapy in mental health, 116(45.3%) of the respondents strongly agreed that Informing individuals adequately about mental health, 105(41.0%) of the respondents agreed that eliminate misconceptions about mental illness, 120(46.9%) strongly agreed that referring necessary patients to specialized professionals in mental health and psychiatry, 119(46.5%) of the respondents agreed that Optimizing well-being, 136(53.1%) strongly agreed that empowering the individual by promoting functional movement, 166(64.8%) strongly agreed that promoting movement awareness and 165(64.5%) of the respondents strongly agreed that promoting physical activity and exercises are the roles of physiotherapy in mental health. Majority of the respondents 221(86.3%) had adequate knowledge of mental health and majority of the respondents 239(93.4%) also had adequate knowledge of the role of physiotherapy in mental health as shown in table 3.

Table 3: Knowledge on the role of physiotherapy in mental health

Questions	Agree strongly	Agree slightly	neutral	Disagree strongly	Disagree slightly	Don't know
Informing individuals adequately about mental health	116(45.3%)	91(35.5%)	37(14.5%)	6(2.3%)		
Eliminate misconceptions about mental illness	96(37.5%)	105(41.0%)	20(7.8%)	9(3.5%)		
Refer necessary patients to specialized professionals in mental health and psychiatry	120(46.9%)	119(46.5%)		5(2.0%)		
optimizing well-being	119(46.5%)	114(44.5%)	6(2.3%)	11(4.3%)		
Empowering the individual by promoting functional movement	136(53.1%)	79(30.9%)	6(2.3%)	24(9.4%)		
Promoting movement awareness	166(64.8%)	66(25.8%)		14(5.5%)		
Promoting physical activity and exercises	165(64.5%)	61(23.8%)	7(4.3%)	11(4.3%)		

4.1.4 ATTITUDE TOWARDS MENTAL HEALTH

59(23.0%) of the respondents agreed that they just learn about mental health when they have to, and would not bother reading additional material on it. 75(29.3%) of the respondents disagreed that People with a severe mental illness can never recover enough to have a good quality of life. 84(32.8%) of the respondents disagreed that working in the mental health field is just as respectable as other fields of health and social care. 55(21.5%) of the respondents agreed that if they had a mental illness, they would never admit this to their friends because they would fear being treated differently. 92(25.9%) of the respondents agreed that people with a severe mental illness are dangerous more often than not. 88(34.4%) of the respondents agreed that health/social care staff know more about the lives of people treated for a mental illness than do family members or friends. 85(33.2%) of the respondents disagreed that being a health/social care professional in the area of mental health is not like being a real health/social care professional. 94(36.7%) of the respondents strongly agreed that if a senior colleague instructed them to treat people with a mental illness in a disrespectful manner, they would not follow their instructions. 50(19.5%) of the respondents disagreed that they feel as comfortable talking to a person with a mental illness as they do talking to a person with a physical illness. 104(40.6%) of the respondents strongly agreed that it is important that any health/social care professional supporting a person with a mental illness also ensures that their physical health is assessed. 93(36.3%) of the respondents somewhat disagreed that the public does not need to be protected from people with a severe mental illness. 82(32.0%) of the respondents disagreed that if a person with a mental illness complained of physical symptoms (such as chest pain) they would attribute it to their mental illness. 85(33.2%) of the respondents agreed that general practitioners should not be expected to complete a thorough assessment for people with psychiatric symptoms because they can be referred to a psychiatrist. 71(27.7%) of the respondents disagreed that they

would use the words ‘crazy’, ‘nutter’, ‘mad’ etc to describe to colleagues’ people with a mental illness and finally 64(25.0%) of the respondents somewhat agreed that if a colleague told them they had a mental illness, they would still want to work with them. In summary, 131(51.2%) of the respondent had positive attitude towards mental health while 125(48.8%) of the respondents had negative attitude towards mental health as shown in table 4.

Table 4: Attitude towards mental health

Questions	Strongly agree	Agree	Somewhat agree	Somewhat disagree	Disagree	Strongly disagree
I just learn about mental health when I have to, and would not bother reading additional material on it.	45(17.6%)	59(23.0%)	42(16.4%)	32(12.5%)	46(18.0%)	32(12.5%)
People with a severe mental illness can never recover enough to have a good quality of life.	22(8.6%)	36(14.1%)	32(12.5%)	47(18.4%)	75(29.3%)	47(18.4%)
Working in the mental health field is just as respectable as other fields of health and social care.	28(10.9%)	44(17.2%)	30(11.7%)	26(10.2%)	84(32.8%)	26(10.2%)
If I had a mental illness, I would never admit this to my friends because I would fear being treated differently.	47(18.4%)	55(21.5%)	69(27.0%)	24(9.4%)	47(18.4%)	14(5.5%)
People with a severe mental illness are dangerous more often than not.	43(16.8%)	92(25.9%)	63(24.6%)	7(2.7%)	45(17.6%)	6(2.3%)
Health/social care staff know more about the lives of people treated for a mental illness than do family members or friends.	68(26.6%)	88(34.4%)	51(5.9%)	34(13.3%)	51(19.9%)	
Being a health/social care professional in the area of mental health is not like being a real health/social care professional.	25(9.8%)	58(22.7%)	28(10.9%)	23(9.0%)	85(33.2%)	37(14.5%)

If a senior colleague instructed me to treat people with a mental illness in a disrespectful manner, I would not follow their instructions.	94(36.7%)	65(25.4%)	22(8.6%)	41(16.0%)	23(9.0%)	11(4.3%)
I feel as comfortable talking to a person with a mental illness as I do talking to a person with a physical illness.	32(12.5%)	93(36.3%)	50(19.5%)	25(9.8%)	50(19.5%)	6(2.3%)
It is important that any health/social care professional supporting a person with a mental illness also ensures that their physical health is assessed.	104(40.6%)	104(40.6%)	26(10.2%)	6(2.3%)	16(6.3%)	
The public does not need to be protected from people with a severe mental illness.	39(15.2%)	32(12.5%)	24(9.4%)	93(36.3%)	43(16.8%)	25(9.8%)
If a person with a mental illness complained of physical symptoms (such as chest pain) I would attribute it to their mental illness.	26(10.2%)	56(21.9%)	26(10.2%)	35(13.7%)	82(32.0%)	31(12.1%)
General practitioners should not be expected to complete a thorough assessment for people with psychiatric symptoms because they can be referred to a psychiatrist.	44(17.2%)	85(33.2%)	37(14.5%)	36(14.1%)	36(14.1%)	18(7.0%)
I would use the words	26(10.2%)	21(8.2%)	42(16.4%)	29(11.3%)	71(27.7%)	67(26.2%)

‘crazy’, ‘nutter’, ‘mad’
etc to describe to
colleagues’ people with
a mental illness who I
have seen in my work.

If a colleague told me they had a mental illness, I would still want to work with them.	37(14.5%)	74(28.9%)	64(25.0%)	41(16.0%)	25(9.8%)	15(5.9%)
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OVERALL
ATTITUDE

POSITIVE ATTITUDE
131(51.2%)

NEGATIVE
ATTITUDE
(125(48.8%))

4.1.5 PERCEPTION OF THE ROLE OF PHYSIOTHERAPY IN MENTAL HEALTH

115(44.9%) of the respondents agreed that physiotherapist have adequate knowledge to rehabilitate people living with mental health. 139(54.3%) of the respondents strongly agreed that physiotherapy can be helpful in mental health. 78(30.5%) of the respondents disagreed that Physiotherapist can assess and diagnose mental health patients without the presence of a psychiatrist. 103(40.2%) of the respondents strongly agreed that the role of physiotherapy is important in the management of a mental health patient. 102(39.8%) of the respondents were neutral as to if mental health patients are too aggressive for physiotherapy management or not. 68(26.6%) of the respondent agreed that involvement of Physiotherapy in mental health is a means of expanding physiotherapy influence into mental health to make more income and not for the benefit of people living with mental health issues. 78(30.5%) of the respondents disagreed that the role of physiotherapy in mental health is limited to infrared, bicycle ergometry and massage. 218(85.2%) of the respondents had good perception of the role of physiotherapy in mental health as shown in table 5.

Table 5: Perception of the role of physiotherapy in mental health

QUESTIONS	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
Do you think Physiotherapist have adequate knowledge to rehabilitate people living with mental health?	65(25.4%)	115(44.9%)	40(15.6%)	36(14.1%)	
Physiotherapy can be helpful in mental health?	139(54.3%)	70(27.3%)	31(12.1%)	12(4.7%)	4(1.6%)
Physiotherapist can assess and diagnose mental health patients without the presence of a psychiatrist?	54(21.1%)	42(16.4%)	54(21.1%)	78(30.5%)	28(10.9%)
The role of physiotherapy is important in the management of a mental health patient	103(40.2%)	92(35.9%)	51(19.9%)	10(3.9%)	
Mental health patients are too aggressive for physiotherapy management	10(3.9%)	39(15.2%)	102(39.8%)	97(37.9%)	8(3.1%)
Involvement of Physiotherapy in mental health is a means of expanding physiotherapy influence into mental health to make more income and not for the benefit of people living with mental health issues.	55(21.5%)	68(26.6%)	25(9.8%)	57(22.3%)	51(19.9%)
The role of physiotherapy in mental health is limited to infrared, bicycle ergometry and massage	21(8.2%)	34(13.3%)	46(18.0%)	78(30.5%)	77(30.1%)
OVERALL PERCEPTION					
Good perception 218(85.2%)					
Poor perception 38(14.8%)					

4.1.6 MAN WHITNEY U TEST SHOWING THE DIFFERENCE IN KNOWLEDGE, ATTITUDE AND PERCEPTION AMONG MALE AND FEMALE RESPONDENTS

A Mann Whitney U test was conducted to test the significant difference in knowledge, attitude and perception of the role of physiotherapy in mental health among male and female respondents. No significant difference was observed between male and female respondents regarding the knowledge of the role of physiotherapy in mental health ($U=8058.000$, $p=0.790$). No significant difference was observed between male and female respondents regarding the attitude of the role of physiotherapy in mental health ($U=7269.000$, $p=0.085$). Furthermore, no significant difference was observed between male and female respondents regarding the perception of the role of physiotherapy in mental health ($U=7596.500$, $p=0.127$) as shown in table 6.

Table 6: Man whitney u test showing the difference in knowledge, attitude and perception among male and female respondents

	GENDER	N	Mean	Sum of	U	P
			Rank	Ranks		
KNOWLEDGE	Male	119	127.71	15198.00	8058.000	0.790
	Female	137	129.18	17698.00		
ATTITUDE	Male	119	121.08	14409.00	7269.000	0.085
	Female	137	134.94	18487.00		
PERCEPTION	Male	119	123.84	14736.50	7596.500	0.127
	Female	137	132.55	18159.50		

4.1.7 CHI-SQUARE SHOWING THE RELATIONSHIP BETWEEN THE KNOWLEDGE AND ATTITUDE OF THE RESPONDENTS ON MENTAL HEALTH

A chi-square test was conducted to examine the relationship between the knowledge and attitude of the respondents towards mental health. The findings revealed there was a significant relationship between the knowledge and attitude of the respondents towards mental health ($X^2=4.627$, $p=0.031$) as shown in table 7.

Table 7: Chi-square showing the relationship between the knowledge and attitude of the respondents on mental health

	Negative attitude	Positive attitude	X²	P
Inadequate knowledge	23	12	4.627	0.031
Adequate knowledge	102	119		

4.1.8 ONE WAY ANOVA COMPARING THE KNOWLEDGE, ATTITUDE AND PERCEPTION OF THE RESPONDENTS AMONG THE VARIOUS DEPARTMENTS

One-way ANOVA was done to compare the knowledge, attitude and perception of the respondents among the various departments. The findings revealed there was no significant difference in the knowledge of the respondents among the various departments ($p=0.262$). There was also no significant difference in the perception of the respondents among the various departments ($p=0.081$). However, there was a significant difference in the attitude of the respondents among the various departments ($p<0.001$) as shown in table 8

Table 8: One way anova comparing the knowledge of the respondents among the various departments

		Sum of squares	Mean square	F	P
Knowledge	Between groups	0.327	0.082	1.322	0.262
	Within groups	15.544	0.062		
Attitude	Between groups	5.801	1.450	6.258	<0.001
	Within groups	58.164	0.232		
Perception	Between groups	1.051	0.263	2.106	0.081
	Within groups	31.309	0.125		

4.1.9 POST HOC BONFERRONI COMPARISON OF THE ATTITUDE OF THE RESPONDENTS AMONG VARIOUS DEPARTMENT

A post hoc analysis was done to compare the attitude of the respondents among the various departments. This study only reported the comparison of the attitude of the physiotherapy students with other departments. A significant difference was only observed attitude of physiotherapy students and nursing students ($p < 0.001$) as shown in table 9

Table 9: Post hoc bonferroni comparison of the attitude of the respondents among various department

		Mean difference	P	95% CI	
				Lower bound	Upper bound
Physiotherapy	Dentistry	-0.07599	1.000	-0.2146	0.2161
	MLS	0.21608	0.139	-0.1321	0.2305
	Medicine	0.13830	1.000	-0.2511	0.1922
	Nursing	0.33671	<0.001	-0.0153	0.3104

4.2 HYPOTHESIS TESTING

Hypothesis one: There would no significant difference in the level of knowledge between the male and female final year clinical students of the university of Benin on the roles of physiotherapy in mental health

Test: Mann Whitney

Alpha value: 0.05

Observed p value = 0.790

JUGEMENT: Since the observed p value is greater than 0.05, the null hypothesis is therefore
ACCEPTED

Hypothesis two: There would no significant difference in the Attitude between the male and female final year clinical students of the university of Benin towards the roles of physiotherapy in mental health

Test: Mann Whitney

Alpha value: 0.05

Observed p value = 0.085

JUGEMENT: Since the observed p value is greater than 0.05, the null hypothesis is therefore
ACCEPTED

Hypothesis three: There would no significant difference in the perception between the male and female final year clinical students of the university of Benin on the roles of physiotherapy in mental health

Test: Mann whitney

Alpha value: 0.05

Observed p value = 0.127

JUGEMENT: Since the observed p value is greater than 0.05, the null hypothesis is therefore
ACCEPTED

Hypothesis four: There would be no significant relationship between the knowledge and attitude of final year clinical students of the university of Benin on the roles of physiotherapy in mental health.

Test: Chi-square

Alpha value: 0.05

Observed p value = 0.031

JUGEMENT: Since the observed p value is less than 0.05, the null hypothesis is therefore
REJECTED.

Hypothesis five: There would no significant difference in the level of knowledge among the various clinical students of the university of Benin on mental health

Test: One-way ANOVA

Alpha value: 0.05

Observed p value = 0.262

JUGEMENT: Since the observed p value is greater than 0.05, the null hypothesis is therefore
ACCEPTED

Hypothesis six: There would no significant difference in the attitude towards mental health among the various clinical students of the university of Benin.

Test: One-way ANOVA

Alpha value: 0.05

Observed p value = <0.001

JUGEMENT: Since the observed p value is greater than 0.05, the null hypothesis is therefore
REJECTED

Hypothesis seven: There would no significant difference in the level of perception among the various clinical students of the university of Benin on mental health

Test: One-way ANOVA

Alpha value: 0.05

Observed p value = 0.081

JUGEMENT: Since the observed p value is greater than 0.05, the null hypothesis is therefore
ACCEPTED

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 DISCUSSION OF FINDINGS

The aim of this study was to evaluate the knowledge, attitude and perception of final year clinical students on the role of physiotherapy in mental health.

5.1.1 SOCIO-DEMOGRAPHIC DATA OF THE RESPONDENTS

The finding from this study revealed there were more female respondents than their male counterparts. This finding could be as a result of the fact there are more of female population generally than male Majority of the respondents, 120(69.0%) were between the ages of 21-24years. 94(36.7%) of the respondents were physiotherapy students, 63(24.6%) were Nursing students, 45(17.6%) were Medical laboratory science students, 28(10.9%) were dentistry students while 26(10.2%) were medicine students. This finding of having more of physiotherapy students may be as a result of the fact that the researcher is a physiotherapy student and thus more access to these sets of students. 148(57.8%) of the respondents reported that they have had previous experience in mental health facility and this finding could be as a result of the fact that these sets of students ought to have had some clinical posting experiences in mental health facility.

5.1.2 KNOWLEDGE OF MENTAL HEALTH AMONG THE RESPONDENTS

The finding from this current study revealed that 221(86.3%) of the respondents had adequate knowledge of mental health. This finding was not supported by the findings from a study done by Hooblaul *et al.* (2020) that reported that the participants lacked self-reported knowledge about mental health. Rathi *et al.* (2023) conducted a study on the Attitude and Knowledge of Physiotherapy Students towards Mental Health and Patients with Psychiatric Illnesses and it was reported that the respondents had good knowledge about mental health and psychiatric illnesses. This finding was in agreement with the finding of this current study. A similar study was conducted by Kihumuro *et al.* (2022) and it was reported that 77.72% of the respondents had high knowledge. This finding was similar to the finding from this current study. Finally, on this note, Gunduza *et al.* (2022) reported from their study, moderate level of knowledge on mental health (MAKS score was 26.94 (SD 3.57). This was not in agreement with the finding from this current study.

5.1.3 KNOWLEDGE OF THE ROLE OF PHYSIOTHERAPY AMONG THE RESPONDENTS

The finding from this current study revealed that majority of the respondents 239(93.4%) also had adequate knowledge of the role of physiotherapy in mental health. This finding was in agreement with the findings from a study conducted by Gunduza *et al.* (2023) that reported that the respondents recognize that physiotherapy has a role in mental health. Most of the participants recognized that physiotherapists contribute to the management of patients with MHD by optimizing well-being, promoting physical activity and referral to specialized professionals in mental health and psychiatry. These findings were consistent with the findings from this current study. Furthermore, research indicates that the physiotherapist's role is to maximize a person's health by promoting movement and function (Stubbs *et al.*, 2014, Probst, 2017, Vancampfort *et*

al., 2018). The findings from these current study aligns with these clearly defined roles from these literatures.

5.1.4 ATTITUDES TOWARDS MENTAL HEALTH

The finding from this current study revealed that 131(51.2%) of the respondent had positive attitude towards mental health. Gunduza et al. (2022) reported from their study a positive attitude from the respondents towards mental health and patients with psychiatric illnesses. This finding was in tandem with the finding from this current study. The finding from this current study was also in agreement with a study conducted by Connaughton and Gibson (2016) and it was reported that Students generally had a positive attitude about psychiatry and mental health and this finding did not agree with the finding from this current study. Rathi et al. (2023) conducted a study on the Attitude and Knowledge of Physiotherapy Students towards Mental Health and Patients with Psychiatric Illnesses and it was reported that the respondents had moderately positive attitude toward mental health and patients with psychiatric illnesses and this finding also was also similar with the finding from this current study. A similar study was conducted by Kihumuro *et al.* (2022) and it was reported that majority of the respondents had negative attitudes towards mental health, this was not in tandem with the finding from this current study. This finding was also supported by the findings from a study done by Hooblaul *et al.* (2020) that reported that the respondents had a relatively positive attitude towards mental health,

5.1.6 PERCEPTION TOWARDS THE ROLE OF PHYSIOTHERAPY AMONG THE RESPONDENTS

218(85.2%) of the respondents had good perception of the role of physiotherapy in mental health. 78(30.5%) of the respondents reported that the role of physiotherapy in mental health goes far

beyond the use of infrared, bicycle ergometry and massage. The respondent clearly demonstrated that physiotherapy is important in the management of a mental health patient. Despite the overall good perception of the respondents of this current study, they also reported that involvement of Physiotherapy in mental health is a means of expanding physiotherapy influence into mental health to make more income and not for the benefit of people living with mental health issues. This claims are not trues considering the role of physiotherapy in the overall wellbeing of patients including those with mental health illnesses.

The other findings of this current study includes the fact that no significant difference was observed between male and female respondents regarding the knowledge of the role of physiotherapy in mental health ($U=8058.000$, $p=0.790$). No significant difference was observed between male and female respondents regarding the attitude of the role of physiotherapy in mental health ($U=7269.000$, $p=0.085$). Furthermore, no significant difference was observed between male and female respondents regarding the perception of the role of physiotherapy in mental health ($U=7596.500$, $p=0.127$). The difference in the knowledge, attitude and perception among physiotherapy students and non-physiotherapy students were also assessed an it was reported that no significant difference in the knowledge of the role of physiotherapy in mental health between physiotherapy students and students of other departments ($U=7327.000$, $P=0.224$). There was a significant difference in the attitude towards mental health between physiotherapy students and students of other departments ($U=6091.000$, $P=0.002$). There was no significant difference in the perception of the role of physiotherapy between physiotherapy students and students of other departments ($U=7108.000$, $P=0.150$).

5.2 CONCLUSION

The study revealed there was an adequate knowledge on the role of physiotherapy, attitude towards mental health and a good perception of the role of physiotherapy in mental health among the respondents.

5.3 RECOMMENDATION

The study may have revealed an adequate knowledge on the role of physiotherapy, attitude towards mental health and a good perception of the role of physiotherapy in mental health among the respondents, however, there is need to further strengthen these findings and it is recommended that the role of physiotherapy be included in curriculums of all medical related courses and not just for physiotherapy curriculums alone.

5.4 IMPLICATION FOR FURTHER STUDY

One of the major limitations of this study was the paucity of literatures addressing the subject matter of the role of physiotherapy in mental health, hence it is important that further studies be conducted along these lines even among a broader population and not just final year clinical students.

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QUESTIONNAIRE FOR ASSESSMENT OF KNOWLEDGE ATTITUDE AND PERCEPTION OF THE ROLE OF PHYSIOTHERAPY IN MENTAL HEALTH:

Demographic profile of students:

AGE: 16-20 ☐ 21-24 ☐ 25-29 ☐ 30 AND ABOVE ☐

GENDER: MALE ☐ FEMALE ☐

DEPT: PST ☐ NUR ☐ MLS ☐ MED ☐ DEN ☐

HAD A PREVIOUS EXPERIENCE IN A MENTAL HEALTH FACILITY: YES ☐ NO ☐

Knowledge of physiotherapy in mental health:

Questions	Agree strongly	Agree slightly	neutral	Disagree strongly	Disagree slightly	Don't know
1. Most people with mental health problems want to have paid employment						
2. If a friend had a mental health problem, I know what advice to give them to get professional help						
3. Medication can be an effective treatment for people with mental health problems						
4. Psychotherapy (e.g. talking therapy or counselling) can be an effective treatment for people with mental health problems						
5. People with severe mental health problems can fully recover						
6. Most people with mental health problems go to a healthcare professional to get help						
Do you think each condition is a type of mental illness?						
7. Depression						
8. Stress						
9. Schizophrenia						

10. Bipolar disorder (manic depression)						
11. Drug/substance addiction						
12. Grief						
The following are roles of physiotherapy in mental health						
13. Informing individuals adequately about mental health						
14. Eliminate misconceptions about mental illness						
15. Refer necessary patients to specialised professionals in mental health and psychiatry						
16. Optimising well-being						
17. Empowering the individual by promoting functional movement						
18. Promoting movement awareness						
19. Promoting physical activity and exercises						

Mental illness: Clinicians' Attitude Scale:

Questions	Strongly agree	Agree	Somewhat disagree	Somewhat disagree	Disagree	Strongly disagree
i. I just learn about mental health when I have to, and would not bother reading additional material on it.						
ii. People with a severe mental illness can never recover enough to have a good quality of life.						
iii. Working in the mental health field is just as respectable as other fields of health and social care.						
iv. If I had a mental illness, I would never admit this to my friends because I would fear being treated differently.						
v. People with a severe mental illness are dangerous more often than not.						
vi. Health/social care staff know more about the lives						

	of people treated for a mental illness than do family members or friends.						
vii.	If I had a mental illness, I would never admit this to my colleagues for fear of being treated differently.						
viii.	Being a health/social care professional in the area of mental health is not like being a real health/social care professional.						
ix.	If a senior colleague instructed me to treat people with a mental illness in a disrespectful manner, I would not follow their instructions.						
x.	I feel as comfortable talking to a person with a mental illness as I do talking to a person with a physical illness.						
xi.	It is important that any health/social care professional supporting a person with a mental illness also ensures that their physical health is assessed.						
xii.	The public does not need to be protected from people with a severe mental illness.						
xiii.	If a person with a mental illness complained of physical symptoms (such as chest pain) I would attribute it to their mental illness.						
xiv.	General practitioners should not be expected to complete a thorough assessment for people with psychiatric symptoms because they can be referred to a psychiatrist.						
xv.	I would use the words 'crazy', 'nutter', 'mad' etc to describe to colleagues people with a mental illness who I have seen in my work.						
xvi.	If a colleague told me they had a mental illness, I						

would still want to work with them.						
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Perceptions of physiotherapy roles on mental health:

QUESTIONS	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
1. Do you think Physiotherapist have adequate knowledge to rehabilitate people living with mental health?					
2. Physiotherapy can be helpful in mental health?					
3. Physiotherapist can assess and diagnose mental health patients without the presence of a psychiatrist?					
4. The role of physiotherapy is important in the management of a mental health patient					
5. Mental health patients are too aggressive for physiotherapy management					
6. A mental health patient can be managed with only physiotherapy					
7. The role of physiotherapy in mental health is limited to infrared, bicycle ergometry and massage					