

**KNOWLEDGE AND PERCEPTION OF PHYSIOTHERAPY  
AMONG RESIDENT DOCTORS IN UNIVERSITY OF BENIN  
TEACHING HOSPITAL, BENIN CITY, EDO STATE**

**BY**


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**A PROJECT SUBMITTED TO THE DEPARTMENT OF  
PHYSIOTHERAPY, SCHOOL OF BASIC MEDICAL  
SCIENCES, COLLEGE OF MEDICAL SCIENCES,  
UNIVERSITY OF BENIN IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE AWARD OF BACHELOR  
OF PHYSIOTHERAPY (B.PT) DEGREE**

**OCTOBER, 2025**

## CERTIFICATION

This dissertation by **Akande Miracle Oluwadamilola** 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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## **DEDICATION**

This dissertation is dedicated to God Almighty, my family and friends for their unending love, support and prayers.

## ABSTRACT

**Background:** Residency training is a supervised postgraduate medical program in Nigeria designed to prepare doctors for specialization. Resident doctors play a critical role in patient management and interdisciplinary collaboration, including aiding referral to rehabilitation services such as physiotherapy. However, evidence suggests that the utilization of physiotherapy services largely depends on physicians' awareness and perception of its role. Therefore, this study aimed to assess the knowledge and perception of physiotherapy among resident doctors in the University of Benin Teaching Hospital (UBTH), Benin City, Edo State.

**Methods:** A cross-sectional descriptive survey was conducted among 169 resident doctors in UBTH, selected using convenience sampling. Data were collected using a structured questionnaire adapted from validated instruments. The questionnaire assessed sociodemographic characteristics, knowledge of physiotherapy, perception of the profession, and factors influencing both. Data were analysed using the Statistical Package for Social Sciences (SPSS v26). Descriptive statistics including frequencies and percentages were used to summarize responses.

**Results:** Of the 169 participants, 62.1% were male and 49.1% were aged 31–45 years. Most respondents (89.9%) identified a degree as the qualification required to practice physiotherapy, and 59.8% reported five years of training. However, 74.0% believed that a doctor's referral was mandatory before patients could access physiotherapy. While 96.4% recognized physiotherapy as essential in rehabilitation and 60.9% considered it first-line management for musculoskeletal disorders, only 41.4% had personally consulted physiotherapists. Overall, 62.1% demonstrated satisfactory perception of physiotherapy, while 32.0% exhibited good perception. Key factors influencing knowledge and perception included clinical case outcomes (55.0%), interprofessional communication (55.0%), and research findings (46.2%).

**Conclusion:** Resident doctors in UBTH demonstrated good knowledge and largely positive perception of physiotherapy, although misconceptions about physiotherapy autonomy and limited awareness of practice settings persist. Strengthening undergraduate exposure, interprofessional education, and clinical collaboration may improve referral practices and enhance integration of physiotherapy in patient care.

**Keywords:** Physiotherapy, Knowledge, Perception, Resident doctors, UBTH

## ACKNOWLEDGEMENT

My appreciation goes to God Almighty for the successful completion of this work and for His protection and Guidance throughout my stay on this campus. Special thanks to my supervisor Prof. Jibril Mohammed, for his assistance and guidance during the course of this research. His mentorship was pivotal at every stage of my dissertation, may the good Lord reward you sir.

My sincere gratitude goes to the Head of Department, Dr. Mrs. C.O. Obaseki for her motherly love and care and to all my esteemed lecturers at the University of Benin's Department of Physiotherapy. Their profound impact on my academic growth cannot be overstated: Prof. K.I. Oke, Prof. O.A. Ezeukwu, Prof. J.O. Umunnah, Dr. Ekechukwu, Mr. R.E. Okhuaesuyi, Dr. S.O. Bolarinde, Dr. Mrs Aiyegbusi, Dr. Mrs Kubeyinje, Dr Adebisi and Dr. N. Oghumu, alongside the dedicated non-academic staff.

I am immensely grateful to the Head of the Department of Physiotherapy at the University of Benin Teaching Hospital, Mr. Taiwo Oyewumi, the Deputy Directors, Assistant Deputy Directors, Chief Physiotherapists, Coppers, Interns, and all members of the Physiotherapy Department, UBTH, for their support. I say thank you for all the clinical skills impacted.

I also give a special thanks to my wonderful parent Mr and Mrs Akande and my siblings Oluwaseun, Samuel, Favour, Praise for their words of advice, encouragement, prayers and financial support and help throughout my stay as a student of University of Benin, God bless you all. To my friends Mercy, Peace, Vivian and Toyin thanks for always been there and supporting me.

I also wish to express my gratitude to my group members and lovely coursemate. Thanks for being part of my success story and for making university years fun despite the stress.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of study

Residency is a postgraduate medical training in Nigeria is allowed only for graduates who have acquired the Bachelor of Medicine; Bachelor of Surgery (MBBS) or Bachelor of Dental Surgery (BDS) degrees, and are fully registered by the Medical and Dental Council of Nigeria to practice medicine/dentistry (Nwachukwu, 2019). The residency training program is a supervised specialist medical training, duration varying from specialty to specialty with a training period of 4 to 6 years for most specialties (Nwachukwu, 2019). Resident doctors work in hospital to continue their education and training in a specialized field of medicine (Gabriela, 2023). These resident doctors are expected to work as part of a multidisciplinary team, collaborating with other health care professionals such as physiotherapists, to provide comprehensive patient care (Nwachukwu, 2019).

Physiotherapy is a healthcare profession that helps individuals develop, maintain and restore maximum movement and functional ability throughout their lifespan (World physiotherapy 2017; Khalid et al., 2015). It refers to the use of physical modalities such as exercise, manual therapy, education, and electrophysical modalities/agents for the treatment of pain, improvement of mobility and function as well as prevention of further injury or disability (World physiotherapy 2017; Khalid et al., 2015). Generally, physiotherapy deals with various conditions affecting human function ranging from musculoskeletal, neurological, cardio-respiratory and sports-related injuries (Bolarinde et al., 2020). In the

present health-care landscape, physiotherapy plays a crucial role by fostering health, preventing and addressing diverse disorders that impede an individual's quality of life (Shimpi et al., 2014).

Physiotherapy is an autonomous profession and an essential component of a multidisciplinary approach. The World Physiotherapy proposes that physiotherapists can act as the first contact, assess patients, make a diagnosis, offer preventive advice, refer to other specialties, treat and provide health services ( World physiotherapy 2017)

The advent of multidisciplinary healthcare, where individuals from several complementary professions collaborate to care for the health requirements of the whole person, is one aspect of the evolving health care landscape (Odebiyi, et al.,2008). A key component of modern clinical care is teamwork, which is accomplished by appreciating and respecting the professional traits of other team members and understanding how their skills may improve patient care (Odebiyi, et al.,2008). In a multidisciplinary health-care system, physiotherapists work in community rehabilitation, post-operative rehabilitation, and specialized fields (Al-Elsa et al., 2016). However, the integration of physiotherapy within clinical practice often depends on the healthcare professional's knowledge and perceptions of its role in patient care (ShahAli et al., 2023). According to a research, medical professionals might not be fully aware of all physiotherapy services offered or how physiotherapy can benefit their patients (Odebiyi, et al., 2008).

Every career has a variety of specialized knowledge and abilities that are either distinct from those of other professions or have much greater development than they do.

Knowledge of physiotherapy among medical practitioners helps with prompt and appropriate patient referral, which leads to better patient care (Shemjaz ,et al., 2016). A recent study has shown that doctors without a basic understanding of physiotherapy rarely or do not refer patients at all to physiotherapy (Odebiyi et al., 2010). This imply that their level of referral is directly related to the physician knowledge about the role and benefits of physiotherapy in health care system (Odebiyi et al., 2010)

The knowledge and perceptions of resident doctors about physiotherapy is critical in determining the extent to which they may utilize physiotherapy services in clinical practice because adequate knowledge about the importance and role of physiotherapy in health care system can potentially improve patient outcome, enhance recovery rate, reduce alliance on medication and reduce health care cost (Adegoke et al., 2021). This is because residents are often responsible in interdisciplinary collaboration, which includes seeking appropriate rehabilitation services like physiotherapy (Adegoke et al., 2021).When resident doctors understand physiotherapy's role and value, they are more likely to collaborate effectively with physiotherapists, leading to better care coordination and improved patient outcomes (Adegoke et al., 2021). In contrast, limited knowledge or undervaluing the profession can hinder collaboration, reduce communication, and exclude physiotherapists from key clinical decisions (Adegoke et al., 2021).

The profession of physiotherapy has experienced unprecedented growth as a result of contemporary techniques and evidence-based practice (Bolarinde et al.,2020). Despite the fact that physiotherapy profession has significantly grown and developed, there is still a

need to raise awareness among other medical professionals in key relevant areas, particularly among medical doctors who are undergoing specialization (Bolarinde et al.,2020). It is also vital to assess the existing knowledge and perception of physiotherapy among resident doctors in order to prepare efforts to increase the level of awareness of physiotherapy (Bolarinde et al.,2020).

## **1.2 Statement of the problem**

Despite the physiotherapy profession being crucial in rehabilitation of patients with a whole range of conditions including musculoskeletal, neurological and cardio pulmonary illness (Bolarinde et al.,2020). The practice of physiotherapy as a first contact profession is not common in Nigeria (Adegoke et al., 2021), hence the practice largely depends on referral of patients by medical practitioners. Research has shown that physicians tend to refer more patients to physiotherapists when they have more knowledge about physical therapy, recognize physiotherapists capabilities to diagnose and believe in the effectiveness of physical therapy intervention (Hendricks et al.,2003).

A study done by Odebiyi et al (2010) shows that doctors without a basic understanding of physiotherapy rarely or do not refer patients at all to physiotherapy. The implication of this is that there may be underutilization and misutilization of physiotherapy services by them, which could lead to poor patient outcome.

This ignorance and lack of understanding can result in delays or failure in the referral process, undermining the team effort between medical and physiotherapy professionals and weakening the effectiveness of patient rehabilitation. Given the central role resident doctors

play in clinical decision-making and patient management, their understanding and perceptions of physiotherapy are crucial to understand.

Furthermore, there is scarcity of research exploring the knowledge and perception of physiotherapy among resident doctors, therefore there is a pressing need to investigate the presence level of knowledge and perception of physiotherapy among residents' doctors in UBTH to identify educational needs, improve interdisciplinary collaboration, and enhance the integration of physiotherapy into patient care.

### **1.3 Research Questions**

1. What is the level of knowledge regarding the roles of physiotherapy among resident doctors in UBTH?
2. What is the level of perception of physiotherapy profession among resident doctors in UBTH?

### **1.4 Aim of the Study**

The aim of the study is to determine the level of knowledge and perception of physiotherapy among resident doctors in UBTH, Benin city, Edo state.

#### **1.4.1 Specific Objectives**

The specific objectives of this study are to:

1. To determine the level of knowledge regarding the role of physiotherapy among resident doctors in UBTH.

2. To determine the level of perception physiotherapy profession among resident doctors in UBTH.

3. To determine the factors influencing the knowledge and perception of physiotherapy among resident doctors in UBTH.

### **1.5 Significance of the Study**

1. **For Patient:** This study is important for the patient because a multidisciplinary approach can result in better overall health outcomes, more thorough care, quicker recovery, and prompt referrals if resident physicians are more knowledgeable about physiotherapy.

2. **For Resident Doctors:** The study will assist in identifying any misunderstandings or knowledge gaps that can prevent physiotherapy from being used effectively in clinical settings. This study will also reveal if physiotherapy is adequately integrated in the training of resident doctor.

3. **For Policy Makers and Health Care systems:** This study is important for policymakers because it identifies gaps in physicians' knowledge of physiotherapy, which could lead to changes in medical education and healthcare regulations. It can result in better resource allocation, a more comprehensive approach to patient care, and a better integration of physiotherapy into treatment regimens, all of which can improve healthcare outcomes and lower costs.

4. **Body of knowledge:** This study is significant as it adds data on the level of physiotherapy awareness among resident doctors, identifies knowledge gaps, and highlights

areas for further research.

### **1.6 Scope of the Study**

This study is delimited to :

1. Resident Doctors in the University of Benin Teaching Hospital, Benin City, Edo state.

### **1.7 Limitations of the study**

1. The data is based on a self reported questionnaire which may have introduced a potential for bias responses.

2. This study is confined to resident doctors in UBTH so finding

may not be generalizable to other hospitals or healthcare professionals in Nigeria or beyond.

### **1.8 Definition of Terms**

1. **Knowledge:** Knowledge refers to the understanding, awareness, or familiarity that a person has about something

2. **Perception:** It refers to the process by which individuals interpret and make sense of information from their environment

### **1.9 List of Abbreviation**

UBTH: University of Benin Teaching Hospital

RD: Resident Doctor

O &G: Obstetrician and Gynecologist



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Overview of Residency**

##### **2.1.1 History of residency**

Medical residency programs, which provided extra training in areas of personal interest, started out informally in the late 19th century (Kaputo, 2012). The first formal program was established at Johns Hopkins Hospital by Sir William Osler and William Stewart Halsted which signaled the transition to organized, institution-based training for medical specialisation (Kaputo, 2012).

The term "residence" got its origin because, in the 19th century, resident physicians lived in the hospital's dormitories where they were trained (Mathew 2017). In 1950s and 1960s, medical errors increased as a result of expanding patient populations and technological advancements which lead to residents assuming more responsibilities and continued to serve as the primary carers in hospital wards while faculty physicians became preoccupied with maintaining and fixing technology (Mathew 2017).

Residencies elsewhere then became formalized and institutionalized for the principal specialties in the early 20th century but they remained optional for general practitioners as a result, participation was limited mostly to those pursuing specialties (Howell et al., 2016).

Due to the fact that some physicians were allowed to immediately enter private practice after completing medical school, many physicians began enrolling in resident training

programs before the end of the 20th century (Howell et al., 2016). This was resulted from the majority of state and local governments demanding postgraduate training for at least a year prior to taking the medical licensing exam (Howell et al., 2016).

Over time, residency programs became mandatory for most medical graduates in the U.S with regulations introduced to improve training quality, patient safety, and physician well-being including efforts to address issues like sleep deprivation and overwork (Howell et al., 2016).

### **2.1.2 Qualification of Residency**

One must fulfill the requirements set by the West African College of Physicians (WACP) or Surgeons (WACS) and the National Postgraduate Medical College of Nigeria (NPMCN) in order to be eligible for medical residency training in Nigeria (Nwachukwu, 2019).

The following are the basic requirements for residency in Nigeria

- i. A medical Degree (MBBS) from a recognized university who is fully registered with the MDCN of Nigeria.
- ii. A valid full license to practice medicine in Nigeria.
- iii. Completion of National Youth Service Corps.
- iv. Must have passed the Primary Examination of either NPMCN or WACP/WACS.

After which one can apply to a teaching or specialist hospital that is accredited for their desired specialty (Nwachukwu, 2019).

### **2.1.3 Duration of Medical Residency specialty**

In Nigeria, the National Postgraduate Medical College of Nigeria (NPMCN) regulates the standard duration of medical residency training based on specialty. The training is broken into two stages:

1. Junior Residency (Part I)
2. Senior Residency (Part 2)

These time frames are designed to ensure thorough training, including clinical practice, research, and teaching obligations (Nwachukwu, 2019). Residents who successfully complete the part 1 program are eligible to take the Part 2 Fellowship Examination, after which they can be appointed as consultants in their chosen specialties (Nwachukwu, 2019).

The table below shows the minimum duration for various specialties in residency

<b>SPECIALIZATION</b>	<b>JUNIOR RESIDENCY</b>	<b>SENIOR RESIDENCY</b>
<b>Internal Medicine</b>	24 months	36 months
<b>O &amp; G</b>	30 months	36 months
<b>Pediatrics</b>	24 months	36 months
<b>Ophthalmology</b>	24 months	36 months
<b>Family Medicine</b>	24 months	36 months
<b>Psychiatry</b>	24 months	36 months
<b>Orthopedic</b>	30 months	36 months
<b>Surgery</b>	24 months	36 months
<b>Cardiothoracic Surgery</b>	24 months	48 months
<b>Neurosurgery</b>	24 months	48 months

It is crucial to note that, while these are the minimal durations, real training times may differ depending on individual growth and institutional circumstances (Nwachukwu, 2019).

#### **2.1.4 Work Schedule of Resident Doctors**

A study done by (Balogun et al, (2022) attributed the lack of official regulation of the work hours of RDs in Nigeria as the likely reason why the work hours is significantly higher than the 48-hour and 80-hour limits recommended by the EWTD and ACGME respectively (Cappuccio et al., 2009 ; Grabski et al., 2020) because their study reported a mean duty hour of 107 hours per week.

Their study also discovered that surgical residents worked significantly longer hours than non-surgical residents (Balogun et al., 2022). The higher physical demand, including long theatre hours, of surgical specialties has been cited as a reason why they are less attractive to women within the African setting (Balogun et al., 2022).

## **2.2 Overview of Physiotherapy in Healthcare**

### **2.2.1 History and evolution of Physiotherapy**

Physiotherapy has evolved significantly from its ancient origins to a modern, evidence-based healthcare profession (Wharton1991). Physicians like Hippocrates and later Galenus, are believed to have been the first practitioners of physiotherapy, advocating massage, manual therapy techniques and hydrotherapy to treat people in 460 B.C (Wharton1991). The earliest documented origins of actual physiotherapy as a professional group date back to Per Henrik Ling “Father of Swedish Gymnastics” who founded the Royal Central Institute of Gymnastics (RCIG) in 1813 for massage, manipulation, and exercise (Wharton1991). In 1887, PTs were given official registration by Sweden’s National Board of Health and Welfare, after that other countries followed suit. Treatment through the 1940s primarily consisted of exercise, massage, and traction (Wharton 1991). Manipulative procedures to the spine and extremity joints began to be practiced, especially in the British Commonwealth countries, in the early 1950s (McKenzie 1998) (McKenzie 2002). The growing need for soldier rehabilitation during and after World Wars led to the formal recognition of physiotherapy (Cory 2004). The profession became more standardized in 1951 with the establishment of international organizations such as the World Confederation for Physical Therapy (WCPT 2021). Today, it is a dynamic, evidence-based field focused on patient-centered care across various healthcare conditions ( WCPT 2021).

### **2.2.2 Roles and Responsibilities of Physiotherapist**

Physiotherapists play an important role in restoring movement and functional independence following injury, illness, disability, or surgery (World Physiotherapy, 2017; Khalid et al., 2015). They are healthcare professionals trained to assess, diagnose, and manage movement dysfunction using evidence-based therapeutic approaches (Melnick, 2016).

The major responsibilities of physiotherapist include :

1. Assessing patients to diagnose physical problems related to injury, illness, or disability (Melnick et al., 2016).

2. Developing personalized treatment plans using exercises, manual therapy, and other modalities like electro-therapy, hydrotherapy, thermo-therapy, cryotherapy etc (Khalid et al., 2015).

3. Promoting mobility and functional independence through rehabilitation (World Physiotherapy, 2017).

4. Educating patients and caregivers on managing conditions and preventing further injury (Padhan & Mohapatra, 2023).

5. Collaborating with other healthcare professionals to ensure comprehensive care (Thomas et al., 2014).

6. Monitoring progress and adjusting treatments as needed.

7. Maintaining accurate records and documenting patient progress.

8. Engaging in continuous professional development and staying updated with new research

and practices (World Physiotherapy, 2017).

### **2.2.3 Physiotherapy in treatment, health prevention, promotion and rehabilitation**

Physiotherapy has a wide range of applications, including the diagnosis, treatment, evaluation, and prevention of physical impairments and disabilities (Melnick et al., 2016 ; Shimpi et al., 2014). Physiotherapists treat musculoskeletal, neurological, and cardiopulmonary disorders using a range of methods, such as manual therapy, electrotherapy, therapeutic exercises, and education (Melnick et al., 2016). They assist patients in regaining function and increasing their mobility through their work in pain management, chronic disease management, post-trauma and post-surgical rehabilitation (Melnick et al., 2016).

In prevention, physiotherapist teach people about good posture, body mechanics and ergonomics which aim to prevent injuries and the development of chronic illnesses (Padhen et al., 2023). They also design lifestyle changes and exercise regimens that support musculoskeletal health and prevent impairments particularly in high-risk groups (Padhan et al ., 2023).

In promotion, physiotherapists participate in community programs and campaigns that increase awareness of the advantages of regular exercise, injury prevention, and wellness, physiotherapists help promote health by promoting physical activity and healthy behaviors across all age groups and communities (Padhen et al., 2023). By encouraging a proactive approach to health, physiotherapy helps lower the prevalence of lifestyle-related diseases

like obesity, diabetes, and cardiovascular conditions (Padhen et al., 2023).

In rehabilitation,

Physiotherapy is crucial in rehabilitation in order to help patients regain function, independence and return to daily activities or work following an illness, surgery, or injury. (Melnick et al., 2016). Physiotherapists aid in the recovery from neurological conditions, orthopedic surgeries, and chronic illnesses by creating customized rehabilitation programs that incorporate strength training, balance exercises, and functional activities (Melnick et al., 2016)

### **2.3 Specialty areas in physiotherapy**

According to World Physiotherapy (2017) and News-Medical (2022), physiotherapy has several specialty areas aimed at addressing specific patient populations and healthcare conditions.

#### **2.3.1 Musculoskeletal**

Musculoskeletal physiotherapy, also known as orthopedic physiotherapy, focuses on disorders affecting muscles, bones, ligaments, tendons, and joints (News-Medical, 2022). It involves the management of conditions such as low back pain, osteoarthritis, sports injuries, neck pain, and fractures through exercise therapy, manual therapy, and functional rehabilitation (Khalid et al., 2015).

#### **2.3.2 Cardiorespiratory**

Cardiorespiratory physiotherapy deals with conditions affecting the heart and lungs, including asthma, chronic obstructive pulmonary disease, pneumonia, and post-surgical cardiothoracic conditions (News-Medical, 2022). The primary goals include improving breathing efficiency, increasing exercise tolerance, enhancing airway clearance, and improving cardiovascular endurance (World Physiotherapy, 2017).

### **2.3.3 Neurology**

This area deals with rehabilitation of patients recovering from neurological condition such as stroke, cerebral palsy. The goal is to improve movement, function, and quality of life for individuals with conditions that impact the brain, spinal cord, peripheral nerves, or muscles (News- Medical 2022).

### **2.3.4 Pediatric**

This area deals with dealing of physiotherapy services to infants, children and adolescents with various developmental, neuromuscular, skeletal, or respiratory conditions. The goal is to promote optimal physical development, improve movement, and enhance the child's functional abilities (News- Medical 2022).

### **2.3.5 Women's Health**

Women ' s health physiotherapy focuses on health conditions affecting women across different life stages including pregnancy, postpartum recovery, menopause, and aging

(World Physiotherapy, 2017). It addresses pelvic floor dysfunction, prenatal and postnatal care, urinary incontinence, and other reproductive health conditions.

a focusses on conditions related to the female reproductive system and pelvic floor muscles (News- Medical 2022).

### **2.3.6 Community Health**

This area focuses on community-level disability management, illness prevention, and health promotion by offering easily accessible, culturally relevant physical therapy services outside of hospitals. It seeks to enhance the general well-being of populations (News-Medical 2022).

## **2.4 Interdisciplinary in Healthcare**

### **2.4.1 Definition**

Interdisciplinary is a collaborative approach where healthcare professionals from various disciplines integrate their expertise to develop and implement a shared, patient-centered care plan (World Health Organization, 2010).

### **2.4.2 Importance**

Interdisciplinary collaboration in healthcare is essential for delivering high-quality, patient-centered care.

This collaborative approach helps improves patient outcomes, strengthens communication

between healthcare providers and lead to a efficient use of resources (Scott et al., 2017). Collaboration not only help in physical health but also emotional and social needs of patients which is especially important in managing chronic diseases and complex conditions (D'Amour et al., 2005). Interdisciplinary teams also reduce medical errors through shared decision-making and clear communication between healthcare professionals (World Health Organization 2010).

### **2.4.3 Physiotherapy in an Interdisciplinary Team**

Physiotherapists collaborate with a wide range of healthcare professionals to enhance patient outcomes, optimize care delivery, and ensure a well-rounded approach to rehabilitation and health management (Thomas et al., 2014). Physiotherapists expertise in movement, rehabilitation, and exercise therapy makes them invaluable in managing various conditions (Thomas et al., 2014).

The integration of physiotherapy within interdisciplinary healthcare teams plays a critical role in providing comprehensive, holistic, and patient-centered care (Thomas et al., 2014).

For instance, in stroke rehabilitation, physiotherapists work alongside neurologists, speech therapists, and occupational therapists to create a customized rehabilitation plan, the physiotherapist focuses on restoring mobility and optimizing function, while the other team members address speech, cognitive function, and daily living skills. This collaborative approach ensures that all aspects of the patient's recovery are addressed, leading to improved outcomes.

## **2.5 Importance of collaboration between physiotherapist and Resident Doctors**

RD focus on diagnosis and medical treatment while physiotherapists specialize in restoring movement and function (Thomas et al., 2014). Collaboration between these two healthcare professionals ensures that medical and rehabilitation needs of the patient are addressed leading to a more comprehensive care plan and better patient outcome (Thomas et al., 2014). Also, effective collaboration improves communication, reduces delay in the commencement of rehabilitation, and lowers hospital length of stays (Thomas et al., 2014). It also prevents other complications like muscle atrophy, pressure sores, contractures, deep vein thrombosis by allowing timely mobilization. Ultimately this collaboration enhances patient satisfaction, safety and recovery (Thomas et al., 2014).

## **2.6 Need for Inter-professional knowledge and collaboration.**

In order to provide safe, effective, and patient-centered care, inter professional knowledge and collaboration are becoming more and more crucial in the healthcare industry because no single professional can satisfy every patient's needs on their own (Reeves et al., 2017; Kenny et al., 2016). Inter-professional knowledge helps healthcare professionals better understand each other's roles and know when to invite or refer other healthcare professionals for specialty management which helps lower medical errors, reduce complications and improve clinical outcomes (Reeves et al., 2017; Kenny et al., 2016).

Fostering a collaborative, patient-centered approach requires an understanding of the roles played by allied healthcare professionals, including social workers, occupational therapists, speech therapists, dietitians, and physical therapists because whether through managing nutrition, promoting mental health, aiding with social determinants of health or facilitating

rehabilitation each of these specialists contributes significantly to bettering patient outcomes (Seaton et al., 2021).

Therefore, in order to meet the demands of contemporary healthcare systems, it is not only advantageous but also essential to train healthcare workers in inter professional knowledge.

## 2.7 Empirical Review of Literature

<b>Author(s)/Year/Country</b>	<b>Title of the study</b>	<b>Research design</b>	<b>Objective of the study</b>	<b>Result</b>
Anieto et al., 2019. Nigeria	Knowledge and Perception of Physiotherapy among Clinical Students in Various Health Care Disciplines of a Nigerian College of Medicine and Health Sciences.	Cross sectional study	To investigate health sciences student knowledge and perception of physiotherapy to enable the planning of a relevant interdisciplinary curriculum that includes all clinical students.	A low level of knowledge of physical modalities and treatment procedures utilized by physiotherapists was observed. A positive perception of physiotherapy was observed. Classroom lectures was identified as the most common source of knowledge of physiotherapy.
Eva 2023. Bangladesh	Knowledge on Physiotherapy among the intern doctors of Dhaka Medical College Hospital	Cross sectional study	To determine the level of knowledge on physiotherapy among the MBBS medical interns.	The study showed that 69.00% participants had average level of knowledge about physiotherapy, 12.00% participants had poor knowledge and 19.00% had good knowledge.
Lee & Sheppard 1988. Australia	An investigation into medical students knowledge and perception of	Cross sectional study	To determine final year medical students knowledge and perception of physiotherapy services within South Australia and to identify any	Medical students generally had a high level of knowledge about physiotherapy, despite receiving little formal education on the subject during their undergraduate courses.

	physiotherapy services.		need for further education about physiotherapy within the undergraduate medical course.	Their primary source of knowledge was through clinical exposure
Odebiyi et al., 2008. Nigeria	Knowledge and perception of physiotherapy by final year medical student of a Nigerian University	Cross sectional study	To assess the level of knowledge and perception of physiotherapy by the final year medical students of the College of Medicine of University of Lagos about physiotherapy.	Both male and female medical students demonstrated above-average knowledge and a fair perception of physiotherapy. However, a significant gender difference was observed in their level of knowledge about the field.
Varghese et al., 2012. India	Knowledge and perception of physiotherapy by final year students of various health care professions.	Cross sectional study	This study was designed to evaluate the perception of the physiotherapy profession by the final year students of various health care professions and also to find out the extent of their knowledge of physiotherapy services.	53.1% of the respondents had good perception of physiotherapy and 88.8% of the respondents demonstrated lack of knowledge of physiotherapy.

## **2.8 Summary of Empirical Review**

In Nigeria, research has shown that there is good perception of physiotherapy among Clinical student (Anieto et al.,2019 ; Odebiyi et Al,2008) although the research done by Anieto et al, (2019) shows that there is a low level of knowledge of the physical modalities and treatment procedure used by physiotherapists while the research done by Odebiyi et al,(2008) shows that there is an above average knowledge of physiotherapy among clinical students.

In India, the research done by Varghese et al, (2012) shows that there is a good perception of physiotherapy (53.1%) and a poor knowledge of physiotherapy ( 88.8%) among student in various health care professions.

In Australia, the research done by lee & Sheppard (1988) shows that medical student have a high level of knowledge about physiotherapy and their source of knowledge mostly came through clinical exposures.

In Bangladesh, the research done by Eva (2023) shows that 69% of the participants (Doctor Intern) have a good knowledge of physiotherapy.

## **CHAPTER THREE**

### **MATERIALS AND METHODS**

#### **3.1 Materials**

##### **3.1.1 Population**

The research population of this study comprised of all residents doctors undergoing their residency in University of Benin Teaching Hospital, Benin City, Edo state.

##### **3.1.2 Inclusive Criteria**

The following individuals were included in the study;

1. All male and female registered resident doctors currently practicing in University of Benin Teaching Hospital, Benin city, Edo state.
2. Participants who gave consent to be involved in the research.

##### **3.1.3 Exclusive Criteria**

The following individuals were excluded from the study;

1. Resident Doctors who were not trained in Nigeria.
2. Resident Doctors who came for posting from other institutions.
3. Participant who did not give their informed consent.

##### **3.1.4 Instrument**

The data collection instrument that was used for the purpose of this study was a questionnaire adapted from the previous study of Lee and Sheppard (1998) and Odebiyi et al, (2008). The questionnaire had close ended questions with the first section of the questionnaire focusing on the demographic assessment of the respondents such as age, gender, department of residence,

years of residence. The second section consists of questions on the knowledge of Physiotherapy. The third section of the questionnaire were questions to which the respondents were asked to tick options related to each question, this section was related to the perception of Physiotherapy. The fourth section of the questionnaire consist of questions to determine the factors influencing their knowledge and perception of physiotherapy

#### **3.1.4.1 Reliability of the questionnaire**

#### **3.1.4.2 Validity of the questionnaire**

### **3.2 Method**

#### **3.2.1 Research Design**

This study is a cross-sectional descriptive research survey design to assess knowledge and perception of physiotherapy profession among resident doctors in University of Benin Teaching Hospital.

#### **3.2.2 Sampling Technique**

The sampling technique that was used in this study was a convenience sample technique.

#### **3.2.3 Sample Size**

The sample size of the study was calculated using an online sample size calculator available at: (<http://sampsizе.sourceforge.net/iface/index.html>)

The population size was estimated based on the number of Resident Doctors in UBTH.

Assumptions:

Precision = 5.00 %

Prevalence = 50.00 %

Population size = 300

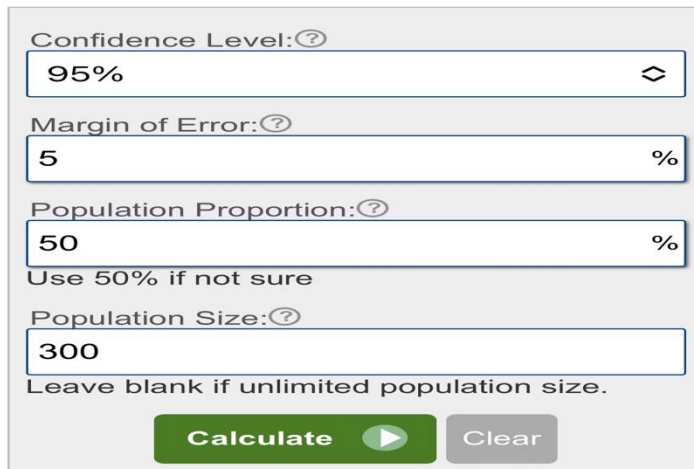
95% Confidence Interval specified limits [ 45% - 55% ]

(These limits equal prevalence plus or minus precision)

## Result

Sample size: **169**

This means 169 or more measurements/surveys are needed to have a confidence level of 95% that the real value is within  $\pm 5\%$  of the measured/surveyed value.



The image shows a sample size calculator interface with the following fields and values:

- Confidence Level: 95%
- Margin of Error: 5%
- Population Proportion: 50% (with a note: "Use 50% if not sure")
- Population Size: 300 (with a note: "Leave blank if unlimited population size.")

At the bottom, there are two buttons: "Calculate" (with a play icon) and "Clear".

Therefore, the estimated sample size for this study is 169

### 3.2.4 Ethical Considerations

Ethical approval was sought and obtained from the Health Research Ethics Committee of the University of Benin Teaching Hospital (UBTH) in accordance with institutional guidelines before the commencement of the study. Participation will be voluntary and participants are at

liberty to declined.

### **3.2.5 Procedure for Data Collection**

Ethical approval was sought and obtained from the Health Research Ethics Committee of the University of Benin Teaching Hospital (UBTH) in accordance with institutional guidelines. Resident Doctors who fit my study inclusion criteria were given the study information form through their WhatsApp which explain the procedure, purpose and importance of this study after receiving their consent to partake in the research, the study questionnaire was administered to the participants using a google link that was generated for this study purpose while some were given the research questionnaire during their clinical seminars and completed questionnaire were retrieved on the same day.

### **3.2.6 Data Analysis**

The data obtained from this study was analyzed using the Statistical Package for Social Science (version 26;SPSS Inc., Chicago, IL, USA). Descriptive Statistics was employed (frequencies and percentages) to summarize data obtained on the knowledge and perception of Physiotherapy among the participants (Resident Doctors).

## **CHAPTER FOUR**

### **RESULTS**

#### **4.1 Introduction**

The primary aim of this study was to determine the level of knowledge and perception of physiotherapy among resident doctors in UBTH, Benin city, Edo state. A total of 169 resident doctors in UBTH, Benin city, Edo state were recruited for this study

##### **4.1.1 Sociodemographic variable of the participants**

Out of the one hundred and sixty-nine participants that were recruited, 105(62.1%) were male and 64(37.9%). 83(49.1%) of the respondents were between the ages of 31-45years. 89(52.7%) were single and 79(46.7%) were married. 37(21.9%) of the respondents were in internal medicine department and 34(20.1%) were O&G. 42(24.9%) were in the 3<sup>rd</sup> year of the residency program, 35(20.7%) were in their 5<sup>th</sup> year as shown in table 1.

**Table 1: Sociodemographic variable of the participants**

<b>Variable</b>	<b>Frequency</b>	<b>percentages</b>
<b>Gender</b>		
Female	64	37.9
male	105	62.1
<b>Age</b>		
25-30	66	39.1
31-45	83	49.1
46 and above	20	11.8
<b>Marital status</b>		
Married	79	46.7
Single	89	52.7
Widowed	1	0.6
<b>Department</b>		
Family medicine	25	14.8
Internal medicine	37	21.9
O&G	34	20.1
Paediatrics	32	18.9
Surgery	41	24.3
<b>Year of residency</b>		
Year 1	27	16.0
Year 2	35	20.7
Year 3	42	24.9
Year 4	14	8.3

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Year 5	35	20.7
Above 5years	16	9.5

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### **4.1.2 Knowledge of physiotherapy**

152(89.9%) of the respondents reported that a degree is the qualification required to become a practicing physiotherapist. 101(59.8%) reported that it takes 5years of training to become a practicing physiotherapist. 125(74.0%) of the respondents reported that a patient need a referral from a doctor before seeing a physiotherapist as shown in 2a

95(56.2%) of the respondents reported that physiotherapist work in the hospital, 35(20.7%) reported that physiotherapist work in rehabilitation center as shown in table 2b.

33(19.5%) of the respondents reported that chest percussion is a treatment given by physiotherapist. 39(23.1%) reported massage, 26(15.4%) reported manipulation 12(7.1%) reported ultrasound as treatments given by physiotherapist as shown in table 2c

Regarding the source of the knowledge of physiotherapy, 103(60.9%) reported clinical experience, 23(13.6%) reported consultation with a physiotherapist, 15(8.9%) reported literature as shown in table 2d

**Table 2a: Knowledge of physiotherapy**

<b>Questions</b>	<b>Frequency</b>	<b>Percentages</b>
<b>What qualification do you think is required to become a practicing physiotherapist</b>		
Certificate	11	6.5
Degree	152	89.9
Diploma	6	3.6
<b>How many years of training do you think are required to become a practicing physiotherapist</b>		
3	13	7.7
4	39	23.1
5	101	59.8
6	16	9.5
<b>Does a patient need a referral from a doctor before seeing a physiotherapist</b>		
No	44	26.0

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Yes	125	74.0
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**Table 2b: Knowledge on the settings physiotherapist work**

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<b>Settings</b>	<b>Frequency</b>	<b>Percentages</b>
<b>Hospital</b>	95	56.2
<b>Private clinics</b>	16	9.5
<b>Rehabilitation centers</b>	35	20.7
<b>Sports clinic</b>	13	7.7
<b>Sports club</b>	10	5.9

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**Table 2c: Knowledge on the treatment given by physiotherapist**

<b>Treatment</b>	<b>Frequency</b>	<b>Percentages</b>
<b>Chest percussion</b>	33	19.5
<b>Gait training</b>	36	21.3
<b>Hydrotherapy</b>	7	4.1
<b>manipulation</b>	26	15.4
<b>Massage</b>	39	23.1
<b>Postural drainage</b>	4	2.4
<b>Ultrasound</b>	12	7.1
<b>Weight training</b>	12	7.1

**Table 2d: Sources of knowledge**

<b>Sources</b>	<b>Frequency</b>	<b>Percentages</b>
<b>Clinical experience</b>	103	60.9
<b>Consultation with a physiotherapist for treatment</b>	23	13.6
<b>Family/friends who is a physiotherapist</b>	15	8.9
<b>Lectures</b>	13	7.7
<b>Literature</b>	15	8.9

### **4.1.3 Perception of physiotherapy**

84(49.7%) of the respondents reported that they are familiar with physiotherapy, and 163(96.4%) thinks physiotherapy is essential in rehabilitation. 103(60.9%) of the respondents considered physiotherapy as a first-line treatment in management of musculoskeletal disorders. 80(47.3%) of the respondents occasionally interact with physiotherapist. 109(64.5%) of the respondents reported that they would not have considered physiotherapy (as a course) as an option to medicine. Only 71(41.4%) of the respondents have consulted to physiotherapy for advice or treatment for themselves out of which 44(26.0%) were very pleased with the treatment as shown in table 3a.

85(50.3%) of the respondents strongly agreed that physiotherapy is a progressive profession. 80(47.3%) of the respondents agreed that physiotherapists are generally very professional and competent. 82(48.5%) agreed that physiotherapists are involved in new and innovative research. 86(50.9%) agreed that physiotherapist offer effective treatment. 77(45.6%) of the respondents agreed that physiotherapists are capable of diagnosing the condition they treat as shown in table 3b

Overall, 105(62.1%) of the respondents had satisfactory perception of physiotherapy, while 54(32.0%) had good perception of physiotherapy as shown in table 3c

**Table 3a: Perception of physiotherapy**

<b>Questions</b>	<b>Frequency</b>	<b>Percentages</b>
<b>Which one of the following statements most closely describes you</b>		
I am not familiar with physiotherapy at all	3	1.8
I know physiotherapy exists but don't know what a Physiotherapist does	6	3.6
I am somewhat familiar with physiotherapy	84	49.7
I am familiar with physiotherapy	76	45.0
<b>Do you think physiotherapy is essential in rehabilitation</b>		
No	6	3.6
Yes	163	96.4
<b>Would you consider physiotherapy as a first-line treatment in management of musculoskeletal disorders</b>		
No	66	39.1

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Yes	103	60.9
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**How often do you interact with  
physiotherapist**

Frequently	35	20.7
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Occasionally	80	47.3
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Rarely	52	30.8
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Not at all	2	1.2
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**Would you have considered physiotherapy  
(as a course) as an option to medicine**

No	109	64.5
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Yes	60	35.5
-----	----	------

**Have you ever consulted a physiotherapist  
for treatment/advice for yourself**

No	99	58.6
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Yes	70	41.4
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**If yes, were you satisfied with the treatment you received**

Yes, very pleased with the treatment	44	26.0
Adequate treatment though could have been better	14	8.3
Concerned with some aspects of treatment	11	6.5
Completely dissatisfied with treatment	1	0.6

Table 3b

	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
Physiotherapy is a very progressive profession	85(50.3%)	63(37.3%)	19(11.2%)		2(1.2%)
Physiotherapists are generally very professional and competent	63(37.3%)	80(47.3%)	20(11.8%)	2(1.2%)	4(2.4%)
Physiotherapy has an important role in teaching public health	67(39.6%)	67(39.6%)	25(14.8%)	7(4.1%)	3(1.8%)
Physiotherapist are involved in new and innovative research	52(30.8%)	82(48.5%)	32(18.9%)	2(1.2%)	1(0.6%)
Physiotherapists are readily available to doctors	37(21.9%)	66(39.1%)	37(21.9%)	21(12.4%)	8(4.7%)
Physiotherapists are well qualified	49(29.0%)	90(53.3%)	25(14.8%)	3(1.8%)	2(1.2%)
Physiotherapists are caring to their patients	47(27.8%)	4(2.4%)	31(18.3%)	4(2.4%)	3(1.8%)
Physiotherapists are mainly interested in making money	14(8.3%)	26(15.4%)	61(36.1%)	45(26.6%)	23(13.6%)

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Physiotherapist offer effective treatment 43(25.4%) 86(50.9%) 31(18.3%) 5(3.0%) 4(2.4%)

Physiotherapists are capable of diagnosing the condition they treat 27(16.0%) 77(45.6%) 50(29.6%) 9(5.3%) 6(3.6%)

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**SA= STRONGLY AGREE, A=AGREE, U=UNDECIDED, D=DISAGREE, SD=STRONGLY DISAGREE**

**Table 3c: Total perception**

<b>Perception</b>	<b>frequency</b>	<b>Percentages</b>
<b>Good</b>	54	32.0
<b>Satisfactory</b>	105	62.1
<b>Poor</b>	10	5.9

#### **4.1.4 Factors influencing the knowledge and perception of physiotherapy**

Regarding the factors affecting the knowledge and perception of physiotherapy among the respondents, 93(55.0%) agreed on clinical case outcome involving physiotherapy, 93(55.0%) agreed on Inter-professional communication, 63(37.3%) agreed on Undergraduate exposure to physiotherapy, 51(30.2%) agreed on training from senior consultant and 78(46.2%) agreed on research article or journal findings as shown in table 4.

**Table 4: Factors influencing the knowledge and perception of physiotherapy**

<b>Questions</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
Clinical case outcome involving physiotherapy	31(18.3%) )	93(55.0%) )	36(21.3%) )	7(4.1%)	4(2.4%)
Inter-professional communication	31(18.3%) )	93(55.0%) )	36(21.3%) )	7(4.1%)	2(1.2%)
Undergraduate exposure to physiotherapy	20(11.8%) )	63(37.3%) )	65(38.5%) )	19(11.2%) )	2(1.2%)
Personal experience as a patient	15(8.9%)	52(30.8%) )	51(30.2%) )	35(20.7%) )	16(9.5%) )
Training from senior consultant	15(8.9%)	51(30.2%) )	75(44.4%) )	23(13.6%) )	5(3.0%)
Research article or journal findings	23(13.6%) )	78(46.2%) )	47(27.8%) )	13(7.7%)	8(4.7%)

## CHAPTER FIVE

### DISCUSSION, CONCLUSION, RECOMMENDATIONS AND IMPLICATIONS

#### 5.1 Discussion

The present study assessed the knowledge and perception of physiotherapy among resident doctors in the University of Benin Teaching Hospital (UBTH).

The sociodemographic data revealed that there were more male resident doctors (62.1%) than females. This may be as a result of the general gender imbalance in medical residency programs in Nigeria, where more males tend to pursue and complete residency training. Similar findings were reported by Ebi *et al.* (2021) who noted that gender disparities exist in postgraduate medical training.

The finding that the majority of respondents (49.1%) were aged between 31–45 years suggests that most participants were at the peak of their residency training years. This agrees with Gabriela (2023), who reported that residency typically occurs during early to mid-adulthood (Nwashilli, 2020).

With respect to knowledge of physiotherapy, the study revealed that most respondents (89.9%) correctly identified a degree as the qualification required for physiotherapy practice, while 59.8% indicated that five years of training was required. This indicates that the majority had basic knowledge of physiotherapy training, which is encouraging. However, the finding that 74% believed a referral from a doctor was mandatory before

patients could access physiotherapy suggests persistent misconceptions about physiotherapy autonomy. This disagrees with the position of World Physiotherapy (2017), which emphasizes physiotherapists as autonomous first-contact practitioners. The misconception may be due to the prevailing Nigerian healthcare structure where physiotherapists mainly receive patients through referrals.

The study also found that most respondents (56.2%) associated physiotherapists primarily with hospital settings, while fewer recognized roles in rehabilitation centers, sports clinics, or community health. This limited scope of knowledge is consistent with the report of Oyeyemi *et al.* (2017), which found that many doctors in Nigeria had restricted awareness of the diverse settings in which physiotherapists operate. The possible reason may be insufficient exposure to physiotherapy roles during undergraduate training.

Regarding treatment modalities, massage (23.1%) and gait training (21.3%) were most frequently identified, while fewer respondents mentioned hydrotherapy (4.1%) or ultrasound (7.1%). This narrow view reflects partial knowledge of physiotherapy interventions and aligns with Akodu, Akinfeleye and Nwajueboe. (2018), who noted that medical professionals often underestimate the breadth of physiotherapy practice. This may be as a result of limited interprofessional collaboration and lack of structured education about physiotherapy in medical curricula.

In terms of perception, the overwhelming majority (96.4%) agreed that physiotherapy is essential in rehabilitation, and 60.9% recognized it as first-line management in musculoskeletal disorders. This indicates a largely positive perception of physiotherapy.

These findings corroborate Chendake and Srinivasan (2024), who reported that medical professionals with better clinical exposure tend to acknowledge physiotherapy's value in rehabilitation.

However, only 41.4% of respondents had personally consulted a physiotherapist for treatment, with 26% reporting very satisfactory outcomes. This suggests that while perception was generally positive, personal utilization of physiotherapy services was relatively low. This may be due to over reliance on self-management or lack of awareness about physiotherapy's role in personal health.

Furthermore, more than half (62.1%) of respondents had a satisfactory perception of physiotherapy, while 32% had a good perception. This is encouraging but still leaves room for improvement, especially given that 5.9% reported poor perception. Similar results were found in Odole, Odunaiya and Ajadi. (2019), who emphasized the need for structured interprofessional education to strengthen awareness of physiotherapy.

With respect to influencing factors, clinical case outcomes (55%) and interprofessional communication (55%) were most frequently identified as determinants of knowledge and perception. This finding shows the importance of teamwork and shared clinical experience in shaping resident doctors' views about physiotherapy. Undergraduate exposure (37.3%) and research articles (46.2%) were less frequently acknowledged, which may reflect gaps in early training and limited engagement with physiotherapy-related literature. This agrees with Akinpelu *et al.* (2011), who noted that medical professionals' knowledge of physiotherapy is shaped more by workplace interactions than by formal education.

## 5.2 Conclusion

This study revealed that while resident doctors at UBTH demonstrated adequate knowledge about physiotherapy training and its essential role in rehabilitation, misconceptions still exist regarding physiotherapy autonomy, scope of practice, and treatment modalities. Overall, the perception of physiotherapy was satisfactory good, reflecting recognition of physiotherapy's importance in patient care. However, utilization of physiotherapy services by resident doctors themselves was relatively low. Factors such as interprofessional communication and clinical case outcomes were central in shaping knowledge and perceptions.

## 5.3 Recommendations

1. **Curriculum strengthening:** Medical training institutions should integrate interprofessional education modules to provide medical students and residents with structured exposure to physiotherapy roles.
2. **Awareness campaigns:** Physiotherapists should organize seminars and workshops targeted at resident doctors to address misconceptions and promote physiotherapy autonomy.
3. **Collaboration:** Hospitals should encourage joint ward rounds and interdisciplinary case discussions involving physiotherapists and doctors to improve collaboration.
4. **Policy intervention:** The Nigerian health system should promote physiotherapy as a first-contact profession, aligning with global best practices.
5. **Self-referral awareness:** Doctors should be educated on the importance of encouraging patients to access physiotherapy directly where appropriate.

## 5.4 Implications for Further Study

1. Further research should explore knowledge and perception of physiotherapy among consultants and other healthcare **professionals** in UBTH to enable a broader understanding of interdisciplinary dynamics.
2. Longitudinal studies are needed to evaluate how exposure to physiotherapy during residency training influences future referral patterns and collaboration.
3. A qualitative study could provide deeper insights into barriers to physiotherapy utilization among doctors themselves.

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## **APPENDIX 1**

### **INFORMED CONSENT FORM**

**Title of the Study:** Knowledge and Perception of Physiotherapy among Resident Doctors in University of Benin Teaching Hospital, Benin city, Edo state.

**Investigator:** Akande Miracle Oluwadamilola

**Supervisor:** Prof Jibril Mohammed

**Financial Sponsorship:** This research project is self-sponsored

**Purpose of the research:** The purpose of the research is to determine the level of knowledge and perception of physiotherapy among residents doctors in University of Benin Teaching Hospital.

#### **Procedures and protocol involved in the study**

You are politely approached to respond to an interviewer-administered questionnaire interview.

This questionnaire would be only used for research purpose and will determine the level of knowledge and perception of physiotherapy among resident doctors in University of Benin Teaching Hospital

#### **Compensation**

There will be no financial compensation for participating in this study.

#### **Voluntary participation**

Please note that your participation in this research is entirely voluntary. No form of discrimination will be meted to you, should you decide not to participate in this study; You are entirely free to change your mind and stop participating even if you agreed earlier.

### **Side Effects**

There is no anticipated adverse effect associated with participating in this study.

### **Benefits**

The purpose of the research is to assess the level of knowledge and perception of physiotherapy among resident doctors in University of Benin Teaching Hospital.

### **Confidentiality**

All information and data obtained in the course of this study will be treated confidentially.

The names of the participants will not be written on the questionnaire and all information collected will be encoded in a file in my personal computer and passworded. Thereafter the questionnaire will be shelved and locked in my personal document cabinet.

### **CONTACT INFORMATION**

AKANDE MIRACLE OLUWADAMILOLA

PROJECT STUDENT

Email: [miracleakande760@gmail.com](mailto:miracleakande760@gmail.com)

Ethics and Research Committee

University of Benin Teaching Hospital

Benin City.

Phone Number: 07011406914

### **CERTIFICATE OF CONSENT**

I have read the above information (or it has been read to me). I had the opportunity to ask questions about it and the questions were answered to my satisfaction.

I consent voluntarily to take part as a participant in this study

I do not consent to participate in this study.

Signature of participant: \_\_\_\_\_

Date: \_\_\_\_\_

## APPENDIX 2

### RESEARCH QUESTIONNAIRE

#### SECTION I: DEMOGRAPHIC INFORMATION

*(Please indicate your answer in the boxes provided)*

**1.Age:** 25-30 [ ] 31-45 [ ] 46 and above [ ]

**2.Sex:** Male [ ] Female [ ]

**3.Marital status:** Single [ ] Married [ ] Divorced [ ] Widowed [ ]

**4.Department:** Family Medicine [ ] Internal Medicine [ ] O&G [ ] Pediatrics [ ]  
Community medicine [ ] Surgery [ ] Psychiatry [ ] Radiology [ ] Pathology [ ]  
Dentistry [ ] Anesthesiology [ ]

**5.Year of Residency:** Year 1 [ ] Year 2 [ ] Year 3 [ ] Year 4 [ ] Year 5 [ ] Above 5years [ ]

#### SECTION II: KNOWLEDGE OF PHYSIOTHERAPY

**1.What qualification do you think is required to become a practicing physiotherapist?**

(a)Certificate [ ] (b) Diploma [ ] (c) Degree [ ]

**2.How many years of training do you think are required to become a practicing physiotherapist?**

(a) 3 years [ ] (b) 4 years [ ] (c) 5 years [ ] (d) 6 years [ ]

**3.Does a patient need a referral from a doctor before seeing a physiotherapist?**

(a)Yes [ ] (b) No [ ]

**4.In which of the following setting(s) do you think a physiotherapist may work?**

*(Please do not assume that all options provided are correct (you may tick more than one)*



**1. Which one of the following statements most closely describes you?**

I am not familiar with physiotherapy at all [  ]

I know physiotherapy exists but don't know what a Physiotherapist does [  ]

I am somewhat familiar with physiotherapy [  ]

I am familiar with physiotherapy [  ]

**2. Do you think physiotherapy is essential in rehabilitation**

(a) YES [  ]                      (b) NO [  ]

**3. Would you consider physiotherapy as a firstline treatment in management of musculoskeletal disorders**

(a) YES [  ]                      (b) NO [  ]

**4. How often do you interact with physiotherapist?**

(a) Frequently [  ]    (b) Occasionally [  ]    (c) Rarely [  ]    (d) Not at all [  ]

**5. Would you have considered physiotherapy (as a course) as an option to medicine?**

(a). Yes [  ]                      (b) No [  ]

**6. Have you ever consulted a physiotherapist for treatment/advice for yourself?    (a).**

Yes [  ]    (b) No [  ]

**7. If yes, were you satisfied with the treatment you received?**

Yes, very pleased with the treatment [  ]

Adequate treatment though could have been better [  ]

Concerned with some aspects of treatment [  ]

Completely dissatisfied with treatment [  ]

**8. To what extent would you agree with the following statements (choose as appropriate)**

(a) Strongly agree [ ] (b) Agree [ ] (c) Undecided [ ] (d) Disagree [ ] (e) Strongly disagree [ ] (f) Don't know [ ]

		A	B	C	D	E	F
A	Physiotherapy is a very progressive profession						
B	Physiotherapists are generally very professional and competent						
C	Physiotherapy has an important role in teaching public health						
D	Physiotherapist are involved in new and innovative research						
E	Physiotherapists are readily available to doctors						
F	Physiotherapists are well qualified						
G	Physiotherapists are caring to their patients						
H	Physiotherapists are mainly interest in making money						
i	Physiotherapist offer effective treatment						
J	Physiotherapists are capable of diagnosing the condition they treat						

**SECTION IV: FACTORS INFLUENCING THE KNOWLEDGE AND PERCEPTION OF PHYSIOTHERAPY**

To what extent would you agree with the following statements have influenced your knowledge and perception of physiotherapy (choose as appropriate )

(a) Strongly agree [ ] (b) Agree [ ] (c) Neutral [ ] (d) Disagree [ ] (e) Strongly disagree [ ]

		<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>A</b>	Clinical case outcome involving physiotherapy					
<b>B</b>	Interprofessional communication					
<b>C</b>	Undergraduate exposure to physiotherapy					
<b>D</b>	Personal experience as a patient					
<b>E</b>	Training from senior consultant					
<b>F</b>	Research article or journal findings					

# APPENDIX 3

## ETHICAL APPROVAL

**HEALTH RESEARCH ETHICS COMMITTEE (HREC)**

**UNIVERSITY OF BENIN TEACHING HOSPITAL**  
P.M.B. 1111 BENIN CITY NIGERIA Telephone: 052-600418 Website: ubth.org

**CHIEF MEDICAL DIRECTOR** Prof. Darlington E. Obaseki  
E-mail: darlobaseki@gmail.com

**DIRECTOR OF ADMINISTRATION** Jim Uwadie, Esq

**CHAIRMAN** Prof. (Mrs.) Antoinette N. Ofili

**HREC OFFICE:**  
Committee email: ubthresearchethics@gmail.com  
Registration Number: NHREC-UBTH-HREC/24/12/2022B

**PROTOCOL NUMBER:** ADM/E 22/A/VOL.VII/2025/102

**PROPOSAL TITLE:** "KNOWLEDGE AND PERCEPTION OF PHYSIOTHERAPY AMONG RESIDENT DOCTORS IN UNIVERSITY OF BENIN TEACHING HOSPITAL BENIN CITY, EDO STATE"

**PRINCIPAL INVESTIGATOR(S):** AKANDE MIRACLE OLUWADAMILOLA

**DEPARTMENT/INSTITUTION:** DEPARTMENT OF PHYSIOTHERAPY, SCHOOL OF BASIC MEDICAL SCIENCES UNIVERSITY OF BENIN, BENIN CITY, EDO STATE

**DATE CONSIDERED:** JULY 14<sup>TH</sup>, 2025

**DECISION OF THE COMMITTEE:** APPROVED


*THIS APPROVAL DATES 14/7/2025 TO 13/7/2026. IF THERE IS DELAY IN STARTING THE RESEARCH, PLEASE INFORM THE HREC SO THAT THE DATES OF APPROVAL CAN BE ADJUSTED ACCORDINGLY*

**REMARK:**


**CHAIRMAN:** PROF. (MRS) A.N. OFILI

**SUPERVISOR (S):** PROF. MOHAMMED JIBRIL

**DECLARATION BY INVESTIGATOR(S):**  
**PROTOCOL NUMBER** (please quote in all enquiries)  
Note that no participant accrual or activity related to this research may be conducted outside of these dates. All informed consent forms used in this study must carry the HREC assigned number and duration of HREC approval of the study. In multiyear research, endeavor to submit your annual re-port to the HREC early in order to obtain renewal of your approval and avoid disruption of your research. No changes are permitted in the research without prior approval by the HREC except in circumstances outlined in the Code. The HREC reserves the right to conduct compliance visit your research site without previous notification

**SIGNATURE & DATE:** 

Signature & Date.....

 **ubthresearchethics@gmail.com**

Registration Number: NHREC/24/01/202