PERCEIVED INFLUENCE OF SELF-CARE PRACTICE ON QUALITY OF LIFE AMONG PATIENTS WITH ORTHOPAEDIC CONDITIONS IN A TERTIARY HEALTH INSTITUTION IN BENIN-CITY, EDO STATE

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OCTOBER, 2025

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF NURSING SCIENCE (BNSc)

FACULTY OF NURSING SCIENCES,

UNIVERSITY OF BENIN, BENIN CITY, EDO STATE.

OCTOBER, 2025

DECLARATION

This is to declare that this research project titled "**PERCEIVED INFLUENCE OF SELF-CARE PRACTICE ON QUALITY OF LIFE AMONG PATIENTS WITH ORTHOPAEDIC CONDITIONS IN A TERTIARY HEALTH INSTITUTION IN BENIN-CITY, EDO STATE**" will be carried out by EDOKPA EBALUNOSEN VERA. It is solely the result of my work except where acknowledged as being derived from other person (s) or resources.

MATRICULATION NUMBER: _____

FACULTY/SCHOOL: FACULTY OF NURSING SCIENCES, UNIVERSITY OF BENIN, BENIN CITY.

Signature: .....

Date: .....

CERTIFICATION

This is to certify that this project titled "**PERCEIVED INFLUENCE OF SELF-CARE PRACTICE ON QUALITY OF LIFE AMONG PATIENTS WITH ORTHOPAEDIC CONDITIONS IN A TERTIARY HEALTH INSTITUTION IN BENIN-CITY, EDO STATE**" will be carried out by **EDOKPA EBALUNOSEN VERA** with Matriculation Number **BMS2001213** in the Faculty of Nursing Sciences, University of Benin, under the supervision of **MRS. N. E. OYANA.**

MRS. N.E. OYANA _____

Project Supervisor Sign & Date

PROF. (MRS.) C. E. OMOROGBE _____

Head of Department (Med-Surg) Sign & Date

DEDICATION

This research project work is dedicated to the Almighty God for His never-ending mercies, to my dear parents, Mr. & Mrs. Patrick Edokpa

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ABSTRACT

This study aimed to assess the QoL and the level of dependency in Activities of Daily Living (ADL) among orthopedic patients. A descriptive cross-sectional survey was conducted on 88 orthopedic patients. Data were collected using a WHOQOL-BREF instrument and Barthel index. The mean scores for individual items and the overall Grand Means were calculated for analysis. The assessment revealed an overall moderate level of dependency in self-care practice (Grand Mean=2.01 on a 3-point scale, where 2.0 is the cut-off for moderate). Patients exhibited the highest dependency for tasks like Feeding and Bowel control (Mean=2.1), followed closely by bathing, grooming, and transfers (Mean=2.0). The overall QoL was also rated as moderate (Grand Mean=3.08 on a 5-point scale). Patients demonstrated strong psychological resilience, with the highest score recorded for acceptance of bodily appearance (Mean=3.22). Conversely, QoL was significantly eroded by psychological and social burdens, with the lowest scores observed for negative feelings (anxiety, depression) (Mean=2.85) and satisfaction with sex life (Mean=2.93). Furthermore, functional limitations regarding mobility (Mean=2.95) and pain interference (Mean=2.98) were identified as key physical constraints. Orthopedic patients maintain a moderate QoL despite significant emotional challenges and a reliance on assistance for daily needs. Clinical interventions must adopt a holistic approach, prioritizing mental health support to address anxiety and depression, alongside specialized functional support for highly dependent tasks like feeding and bowel care to maximize patient independence.

Keywords*: perceived influence, self-care, practices, quality of life, patients, orthopaedic condition*

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

With millions of cases each year, musculoskeletal disorders place a heavy load on the world's healthcare system (Gill et al., 2023). Musculoskeletal disorders contributed to the number of years that people worldwide lived with disabilities, according to a recent analysis of data from the Global Burden of Disease (GBD). Fractures accounted for 440 million people worldwide (26 million years of healthy life lost due to disability (YLDs)), followed by osteoarthritis (528 million people; 19 million YLDs), amputations (180 million people; 5.5 million YLDs), rheumatoid arthritis (18 million people; 2.4 million YLDs), and gout (54 million people; 1.7 million YLDs) (World Health Organization, WHO, 2022). People in all age groups and places, including Nigeria, are impacted by these conditions, which are a global concern (WHO, 2022). Here, frequent orthopaedic diseases such lumbar spondylosis, osteoarthritis, and fractures have a significant negative influence on patients' quality of life, resulting in mental distress, reduced mobility, chronic pain, and lost productivity (Aaron et al., 2022; Ruan et al., 2021).

Patients' mental health and recuperation may be significantly impacted by prolonged immobility and intensive therapy for orthopaedic diseases, which can lead to a dependence on others for everyday life tasks (Huang et al., 2022). This extended reliance may make it more difficult to return to pre-injury independence, preventing complete functional recovery and lowering quality of life in general. In order to reduce the risk of health issues, it is crucial to gradually integrate patients with orthopaedic diseases towards independence while encouraging self-care and self-management abilities (Martins et al., 2022). In this process, nurses are essential because they offer multifaceted, all-encompassing care that encourages complete

social engagement and the best possible healing results (Gutenbrunner et al., 2022). Numerous advantages of early integration have been demonstrated, such as shorter hospital stays, less surgical problems, enhanced patient satisfaction, and better quality of life (Aprisunadi et al., 2023). Nurses can empower patients to attain independence, lower the risk of problems, and improve overall recovery by encouraging early mobility, exercise, and education.

In particular, self-care is essential for improving quality of life (QoL) and maximizing health outcomes. In holistic healthcare, where emotional and social well-being are valued equally with physical rehabilitation, improving these patients' quality of life is crucial. Taking timely, intentional steps to protect and improve one's wellbeing is known as self-care. Self-care is made easier when people learn, adapt, gain abilities, and generate motivation to properly manage their health in a variety of circumstances, claim Isik and Fredland (2023). They can successfully manage their health, stop symptoms from getting worse, and steer clear of consequences related to pre-existing diseases by actively participating in learning and skill-building to support their own welfare in day-to-day living (Isik & Fredland, 2023). Nursing interventions are necessary to help and educate patients in attaining optimal self-care when they are unable to do so completely. Patients with orthopaedic diseases, who frequently need some degree of physical therapy and ongoing self-management of their illness, might benefit greatly from this paradigm, which focuses on empowering patients to regain independence in doing daily activities

Research has shown that self-care practices can help patients with a variety of conditions, such as bone cancer (Li et al., 2023), type 1 diabetes (Yaghobi et al., 2022), and chronic obstructive pulmonary disease (Reiszadeh et al., 2022), recover more quickly, improve their health, and improve their overall quality of life. There is a significant study gap despite the well-established advantages of self-care, especially when it comes to the subjective patient-centered

perspective on how these activities are thought to affect orthopaedic patients' quality of life. Furthermore, not much research has been done on this subject in low-resource environments like Nigeria, where healthcare issues and cultural factors may have an impact on self-care behaviors. Therefore, the purpose of this study is to examine how self-care behaviors are perceived to affect the quality of life of orthopaedic patients in a Nigerian tertiary institution, offering crucial information to guide nursing interventions and improve patient care.

1.2 Statement of the Problem

Orthopaedic patients frequently suffer from severe quality of life reductions, which can result in longer hospital admissions, more medical expenses, and a reduction in their level of functional independence. Even though self-care is crucial for managing orthopaedic diseases, many patients find it difficult to adopt and sustain self-care practices, which lowers their quality of life and has a negative impact on their physical and mental health.

Additionally, millions of people worldwide suffer from orthopedic diseases, making their burden a serious public health concern (Gill et al., 2023). The significant prevalence of musculoskeletal problems in Nigeria has been brought to light by numerous research. 95% of senior citizens who visited a geriatric clinic in a tertiary healthcare facility in Nigeria reported having musculoskeletal pain. The most often impacted joint was the knee (59.6%), which was followed by the neck (40.4%) and lower back (58.4%) (Bolarinde et al., 2023). Additionally, a high prevalence of musculoskeletal illnesses connected to the workplace has been documented in both public and private sectors across various worker populations (Adedoyin et al., 2022; Tabiti et al., 2025; Omojunikanbi et al., 2022). Notably, a large number of patients have restricted access to medical care and rehabilitation initiatives. Patients with orthopedic disorders consequently frequently suffer from poor health outcomes, such as reduced functional independence, limited mobility, and chronic pain.

Given these difficulties, it is critical to comprehend the extent of the issue. With millions of people impacted globally, the incidence of orthopaedic disorders is a serious concern (WHO, 2022). Orthopaedic disorders are very common in Nigeria, where many patients suffer from poor health outcomes and a lower quality of life (Turner & Duffy, 2022). Therefore, there are serious issues with failing to address the issue of inadequate self-care among individuals with orthopedic illnesses. Among the possible outcomes are longer hospital stays and higher medical expenses. Furthermore, a patient's general well-being may be significantly impacted by a decline in their functional independence and quality of life.

Self-care focuses on patient empowerment, empowering people to take an active role in their own health care. Even though self-care has been shown to be beneficial in managing chronic illnesses, less is known about how specifically it affects orthopaedic patients' reported quality of life, especially in countries with low resources like Nigeria. Therefore, the purpose of this study is to close this gap by examining how orthopaedic patients view the influence of their self-care routines on their quality of life.

These results will help healthcare professionals create focused therapies that support the psychological and social components of recovery in addition to meeting physical demands. Clinical practice and healthcare policy are two areas where this research may find use. The results might provide practitioners with evidence-based methods for adding instruction on self-care to rehabilitation programs. The findings may help policymakers decide how best to allocate funds and create programs for orthopaedic care services.

1.3 Objectives of the Study

The aim of the study is to examine the perceived influence of self-care practices and quality of life among patients with orthopaedic conditions. Specifically, it is set:

1. To identify the challenges faced by patients with orthopaedic conditions in practicing self-care.

2. To assess the current self-care practice among patients with orthopaedic conditions in selected tertiary health institutions.

3. Evaluate the quality of life across physical, psychological and social domains

4. To examine perceived influence of self-care practices on quality of life among patients with orthopaedic conditions in a tertiary health hospital.

1.4 Research Questions

The following research questions will be answered in this study:

1. What are the challenges and barriers faced by patients with orthopaedic conditions in practicing self-care?

2. What are the current self-care practices and experiences of patients with orthopaedic conditions in selected tertiary health hospital?

3. How do patients with orthopaedic conditions perceive their quality of life across physical, psychological and social domains?

4. What is the perceived influence of quality of life among patients with orthopaedic conditions in a selected tertiary health hospital?

1.5 Research Hypothesis

There is no significant relationship between self-care practices and quality of life among patients with orthopaedic conditions

1.6 Significance of the Study

For patients with orthopaedic disorders, this study is extremely important because it gives them the tools they need to take charge of their health by practicing good self-care. This study is to

improve patients' quality of life by examining the perceived impact of self-care practices on quality of life. This will reduce pain, increase functional capacity, promote mental health, shorten hospital stays, and lower overall healthcare costs.

The results of the study will also help family members by giving them important information on the requirements and self-care habits of their loved ones. Because of early independence, shorter hospital stays, and lower readmission rates, this knowledge will eventually enable earlier integration with family members by strengthening family-patient interactions through nurse-supported communication. The creation of evidence-based self-care programs will help nurses improve their abilities to support patients' autonomy and self-efficacy. Better health outcomes, fewer problems, and more patient satisfaction will result from improved nurse-patient interactions and communication. It enhances rehabilitative abilities and teamwork with physiotherapists and the medical staff.

The findings of the study will drive the creation of policies, practice standards, and resource allocation, guaranteeing better healthcare quality and efficient use of resources. With a focus on patient-centered care, nursing administrators will be prepared to make data-driven decisions. This study advances nursing knowledge and informs future research by validating and improving Orem's Self-Care Deficit Nursing Theory. The work fills a significant vacuum in the body of knowledge and may serve as a starting point for further investigation.

Integrating self-care theory and practice into nursing curricula will enhance nursing education and equip students to carry out evidence-based self-care initiatives. This will guarantee that nurses in the future are prepared to deliver patient-centered care.

By addressing inequalities in orthopaedic care and assisting healthcare systems in delivering patient-centered care, the study's conclusions will advance health equity. Better health outcomes, lower healthcare costs, and more efficient use of resources would all benefit society.

The importance of this study ultimately reaches the national level, influencing reform and healthcare policy. By improving the performance and efficacy of the healthcare system, the research will help achieve national healthcare quality and safety goals.

1.7 Scope of the Study

This study is to explore how patients with orthopaedic conditions in a tertiary healthcare facility—specifically, the University of Benin Teaching Hospital (UBTH) in Benin City, Edo State—perceive the impact of self-care practices on their quality of life. Self-care practices are the independent variable, and life quality is the dependent variable.

The study was carried out at UBTH, a significant referral facility in the area that offers patients with a range of musculoskeletal disorders complete medical care. Patients with orthopedic diseases receiving treatment in the UBTH orthopaedic unit make up the target population. Patients with orthopaedic disorders who are 18 years of age or older and undergoing treatment at UBTH are eligible to participate in the study. The study will not include patients who are unable of giving informed permission or who have cognitive problems.

1.8 Operational Definition of Terms

Perceived Influence: In this study, perceived influence refers to the patients with orthopaedic conditions' subjective experience and opinion regarding the influence of self-care practice on their quality of life

Self-Care Practice: In this study, self-care practice refers to the intentional actions taken by patients with orthopaedic conditions to maintain their own health and manage their conditions.

Self-Care Deficit: In this study, self-care deficit refers to the gap between the patient's self-care needs and their ability to perform self-care activities

Quality of Life (QoL): In this study, quality of life refers to multidimensional concept encompassing physical, psychological, social, and functional well-being.

Patients with Orthopaedic Conditions: In this study, patients with orthopaedic conditions are defined as individuals admitted to the orthopaedic or neurology ward with a primary diagnosis related to musculoskeletal conditions, and to the neurology ward with a primary or secondary diagnosis related to musculoskeletal or neurological conditions that require orthopaedic care and neurological conditions with musculoskeletal manifestations

CHAPTER TWO

LITERATURE REVIEW

The goal of this literature review is to present a thorough summary of the corpus of research on how patients with orthopaedic diseases assess the impact of self-care practices on their quality of life. In order to guide the creation of a study that explores the perceived impact of self-care on quality of life in patients with orthopaedic disorders at a tertiary healthcare facility in Benin City, the goal of this review is to locate, evaluate, and synthesize the pertinent literature. This literature evaluation will be divided into three stages—conceptual, theoretical, and empirical—in order to accomplish this goal.

A descriptive literature review will be carried out during the conceptual phase to investigate the definitions, ideas, and frameworks pertaining to quality of life and self-care practices. This stage will lay the groundwork for comprehending the main ideas and language employed in the research. A critical literature review will be carried out in the theoretical phase to investigate the theoretical foundation supporting the connection between quality of life and self-care. Orem's Self-Care Deficit Theory will be the main topic of this phase.

In order to synthesize the results of previous studies on patients with orthopaedic conditions' knowledge and practice of self-care, the difficulties they encounter, their quality of life, and the perceived relationship between self-care practice and quality of life among patients with orthopaedic conditions in a tertiary health institution in Benin City, a critical literature review will be carried out during the empirical phase.

2.1 Conceptual review

This section presents a review of the concepts related to self-care, self-care practice and quality of life, as they pertain to patients with orthopaedic conditions.

2.1.1 Self-Care

In order to achieve, preserve, or promote optimal health and well-being, self-care is described as the capacity to take care of oneself by self-awareness, self-control, and self-reliance (Martínez et al., 2021). It entails people actively taking charge of their own health, covering topics like self-management, disease prevention and control, health promotion, rehabilitation, including palliative care, and caring for dependents (WHO, 2024). Even though the idea of self-care is not new, it wasn't until the late 20th century that it was clearly defined, as chronic diseases became more prevalent and people realized they needed to take greater responsibility for their own health (Martínez et al., 2021). Furthermore, support systems were established and people were urged to actively participate in their own health management as communities welcomed independence. This change has brought attention to how crucial it is to give patients the information they need to make decisions about their care.

Concepts like self-efficacy, self-management support, self-care agency, and self-management are all closely related to self-care (Sist et al., 2022). An individual's capacity to manage oneself, follow one's own wishes, and continue everyday activities is referred to as self-care agency (Yoshimura et al., 2021). Age, gender, marital status, reading level, and geographic region all have an impact on the degree of self-care agency (Noohi et al., 2022).

With life expectancy rising globally (WHO, 2022), self-management has emerged as a key tactic for enhancing quality of life, successfully treating chronic illnesses, and lessening the financial burden of those illnesses (Hale et al., 2024). The techniques people employ to control

the symptoms, course of treatment, physical and psychological effects, and lifestyle adjustments linked to chronic illness are referred to as self-management (van Dogen, 2022). Healthcare providers can maximize self-management assistance by working together with patients, which will ultimately improve health and quality of life outcomes (Timmermans et al., 2024). Time restrictions, nurses' knowledge and abilities, and patient-specific elements like motivation and individual requirements are some of the characteristics that systematic reviews have shown to be important in the successful implementation of self-management assistance (Noordman et al., 2024; Tharani et al., 2021).

The fundamental goal of nurses is to help patients develop self-efficacy, which must be taken into account while analyzing their behavior in promoting self-management (Otter et al., 2021). Self-efficacy is the belief in one's own capacity to feel, think, motivate, and act in order to modify a specific habit (Shorey & Lopez, 2021). Higher self-efficacy individuals are more likely to set and be dedicated to lofty goals. Higher self-efficacy was linked to significantly lower body mass index (BMI) and improved persistence to physical activity and quitting smoking, even under difficult conditions, according to research by Kalantzi et al. (2024). This emphasizes the importance of self-efficacy in influencing the modification and maintenance of health-related behaviors (Kalantzi et al., 2024).

In conclusion, self-care refers to a person's capacity to take part in health-promoting activities, keep an eye on their symptoms, and work with medical professionals to gather knowledge and acquire the skills they need to maintain their health (Sist et al., 2022).

2.1.2 Self-care Practice

WHO (2024) states that self-care interventions include activities and resources that promote self-care and enhance personal wellbeing. While self-care actions involve embracing healthy habits, lifestyle choices, and practices that promote overall wellness, these interventions include

evidence-based medications, devices, diagnostics, and digital tools that can be accessed outside of traditional healthcare settings, with or without professional supervision (WHO, 2024). Physical activity, food consumption, medication management, weight control, blood pressure monitoring, and psychological monitoring are the key self-care maintenance activities among patients with chronic diseases, according to Riegel et al. (2021). Recognizing the importance of self-care interventions in improving health systems, the World Health Organization (WHO, 2024) recommended the WHO Guideline on Self Care Interventions for Health and Well-Being, which takes a holistic approach to each person's care, considering their unique circumstances, needs, and desires throughout their life course, as well as their living environment. Diabetes, heart failure, and inflammatory arthritis are among the conditions for which there are guidelines (Davis et al., 2022; Jaarsma et al., 2021 & Nikiphorou et al., 2021). The importance of nurse-led self-care interventions has been shown in more and more research, particularly for those with chronic illnesses like heart failure (Audulv et al., 2025). Thorough evaluations and analyses have repeatedly demonstrated that these therapies improve confidence and self-care practices, lessen depressive symptoms, boost general quality of life, reduce anxiety, and lighten the burden of symptoms (Huang et al., 2022; Huang et al., 2024).

According to Moseng et al. (2024), some suggestions for self-care interventions and actions for patients with orthopaedic conditions include keeping a healthy weight, walking aids, appropriate footwear, assistive devices, and adaptations at home and at work to reduce pain and increase participation; information, education, and advice on self-management strategies; and an exercise program of appropriate dosage with progression tailored to their physical function, preferences, and available services.

2.1.3 Quality of Life

Quality of life (QoL) is described by the WHO as a person's view of their place in life in relation to their objectives, expectations, standards, and worries as well as the culture and value systems in which they live (Cai et al., 2021). It is a crucial metric for evaluating health, particularly in light of rising life expectancy and the resulting rise in the prevalence of chronic illnesses (Kaur & Kaur, 2023). According to Cai et al. (2021), quality of life (QoL) is a complex interaction and balance between an individual's perception of their internal state and their perception of their interactions with others, such as their partner, friends, and so on. A person's self-perceived quality of life is influenced by a variety of factors, including their values and beliefs, past experiences, and restrictions in everyday activities.

Global definitions cover all facets of quality of life and may include concepts like happiness, welfare in all spheres of life, and general life satisfaction (Głowacka et al., 2024). Personal health (physical, mental, and spiritual), relationships, education, employment, social standing, wealth, freedom, autonomy in making decisions, social belonging, and physical surroundings are all common aspects of quality of life (QoL) (Teoli & Bhardwai, 2023). Numerous elements, such as social circumstances, mental health, and physical health, influence quality of life. QoL may be negatively correlated with several chronic illnesses, physical and cognitive deficits, polypharmacy, and psychological morbidity (Bai et al., 2023) They represent a disruption in the human body's physical processes, impacting psychological, social, and spiritual domains (Krawczyk–Suszek et al., 2024). On the other hand, those lower QoL levels are closely linked to negative health outcomes, which can lead to a vicious cycle that eventually lowers life expectancy (Liu et al., 2023). According to a study by Liu et al. (2023), a number of psychological traits, including optimism, thankfulness, social support, and independence in day-to-day living, have a favorable impact on quality of life. People with the same resources, as

well as people from different socioeconomic backgrounds and generations, can have different quality of life (Ledinski Fičko et al., 2022).

The notion of Quality of Life (QoL), which includes the aspects of social, psychological, and physical health, is the source of the Health-Related Quality of Life (HRQoL) (Zheng et al., 2021). Feelings of HR-QoL are conditioned by functional, medical, mental, and individual constraints of the ability to manage with the disease, as well as coping with dysfunctions (Krawczyk – Suszek et al., 2024). The elements of self-perceived well-being that are connected to or impacted by the existence of illness or treatment are known as HRQoL (Ledinski Fičko et al., 2022). QoL is different from health-related quality of life, a public health metric that examines the relationship between health and QoL (Kaur & Kaur, 2023). The measurement of health-related quality of life (HRQOL) is increasingly important for estimating health outcomes (Oluchi et al., 2021). The technologies for evaluating overall quality of life and its components are developing quickly these days. Questionnaires currently available to measure quality of life can be divided into two categories: generic surveys intended for the general population and tools that are for disease-specific populations (Laviña, 2024). Some of the questionnaires used in existing literature are 36 items Short Form Health Survey (SF-36), The World Health Organisation Quality of Life (WHOQOL); The European Quality of Life (EURO- QOL) and the Euro-QoL 5 Dimensions (EQ-5D) (Ledinski Fičko et al., 2022). These questionnaires do not capture the symptoms and side effects specific to chronic diseases. On the other hand, quality of life is evaluated in patients with particular diseases using questionnaires such as the Diverticulitis Quality of Life Questionnaire (DV-QOL) for symptomatic diverticular disease (Barzi et al., 2024) and the Cambridge Pulmonary Hypertension Outcome Review (CAMPHOR) for hypertension (Liu et al., 2023). The choice of instrument depends on the reason for measurement, the primary concepts of interest, and the purpose of the study (Ledinski Fičko et al., 2022).

2.2. Theoretical Review

The Orem's Self-Care Deficit Theory was used in this investigation. The Self-Care Deficit Theory was created by the groundbreaking American nurse Dorothea Orem between 1959 and 2001. With the ultimate goal of encouraging people to take charge of their own self-care, Orem's methodology is based on the idea that empowering patients to take charge of their health is crucial (Fereidooni et al., 2024). According to Bergman et al. (2016), the four fundamental ideas of self-care theory are self-care, self-care agency, self-care requisites, and therapeutic self-care demand. Self-care refers to intentional steps people take to support and preserve their general well-being over the course of their life (Fereidooni et al., 2024). Selfcare agency is the capacity to carry out these self-care activities, and it can be used either alone or with help from others (Yoshimura et al., 2021). While the majority of adults are self-sufficient, certain people may need assistance, such as newborns or those with disabilities or illnesses. The precise actions done to meet self-care demands and guarantee general wellbeing are referred to as self-care requisites (Yip, 2021). These requirements can be divided into three groups (Berman et al., 2016):

1. Maintaining intake and elimination of food, water, and air; striking a balance between relaxation, solitude, and social connection; avoiding risks to life and well-being; and encouraging normal human functioning are all examples of universal self-care requirements that are shared by all humans.
2. Requirements for developmental self-care are the outcome of maturity or are linked to circumstances or occurrences, including adjusting to a shift in one's body image or dealing with the death of a loved one.

3. Deviation from health: Requirements for self-care arise from illness, injury, or disease or its treatment, such as obtaining medical help, completing recommended treatments, and learning to cope with the consequences of illness or treatment.

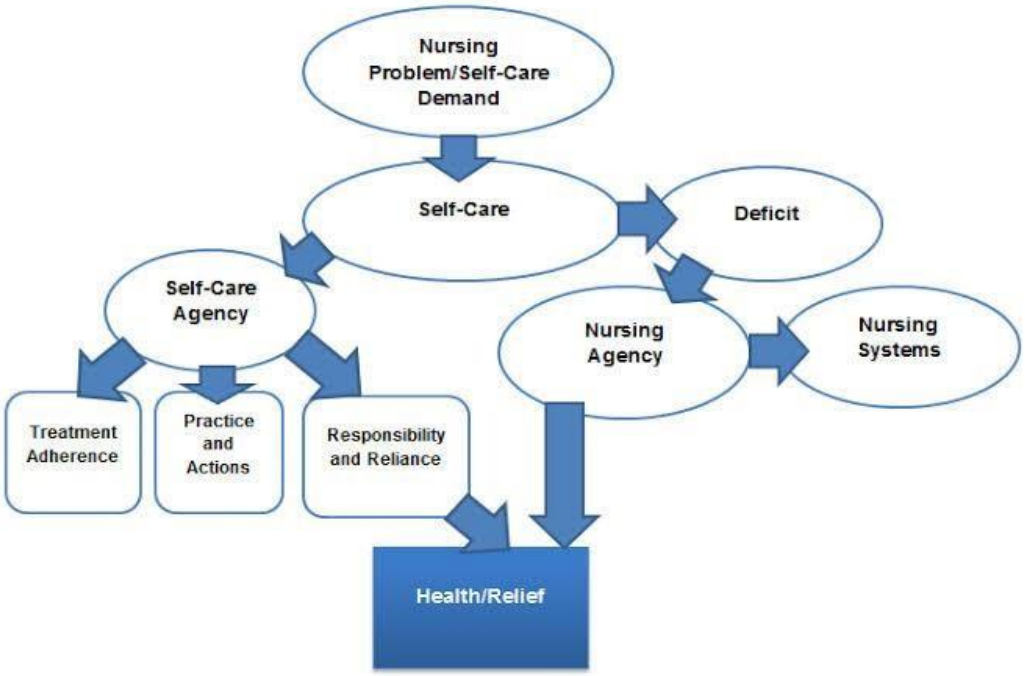
All of the tasks required to meet one's self-care requirements are included in the therapeutic self-care demand, which is primarily about preserving one's health and wellbeing (Tanaka, 2022). However, a self-care deficit arises when a person's capacity for self-care is inadequate to meet these expectations. This deficiency may result from conditions including disease, trauma, developmental difficulties, or a lack of resources and assistance (Maruca, 2023). Nursing interventions are required in these situations to help close the gap and encourage the person's self-care practices.

Comprehensive support systems, partial support systems, and instructional support systems can all make use of the nursing interventions for self-care deficits that have been addressed (Maruca, 2023). The Orem's Deficit in Self-Care Three interconnected theories make up the theory of nursing:

1. Theory of Self-Care: This theory highlights how crucial it is for people to take deliberate steps to preserve their own physical and mental health.
2. Theory of Self-Care Deficit: This theory highlights circumstances in which a person (or their caregiver) is unable of providing proper self-care because of restrictions or incompetence, necessitating nursing intervention. In addition to explaining why nursing is required, Orem's self-care deficit theory outlines five ways to help people: acting or doing for, leading, teaching, supporting, and creating an environment that enhances the person's capacity to fulfill demands both now and in the future.
3. Nursing Systems Theory: The cooperative interaction between a nurse and their client is explained by this notion. When a client's need for assistance with self-care surpasses their

capacity to do so on their own, nursing care is started. Three kind of nursing systems are distinguished by Orem. In all three nursing systems—wholly compensatory, somewhat compensatory, and supportive educational—the five strategies for addressing self-care deficits can be applied.

FIGURE 2.1: OREM'S SELF-CARE DEFICIT THEORY



Application of Orem's Self-Care Deficit Theory to the Study

A thorough framework for comprehending the intricate connections between self-care practices, difficulties, and quality of life in patients with mobility-limiting illnesses is offered by Dorothea Orem's Self-Care Deficit Theory (SCDT). Healthcare professionals can better understand patients' self-care requirements and limitations by using SCDT, which will help them plan focused interventions that will help patients reach their best possible health outcomes. Understanding patients' self-care practices and limitations is crucial, according to Orem's hypothesis. By using SCDT, medical professionals can determine the obstacles that patients encounter in fulfilling their self-care requirements, including a lack of information or abilities,

restricted physical mobility, and emotional or psychological difficulties. Patients with spinal cord injuries, for example, can need help with everyday life tasks including clothing, washing, and controlling urine and bowel movements. The ability of patients to engage in self-care activities is the main focus of Orem's idea. Healthcare professionals can use SCDT to evaluate patients' present self-care behaviors, such as their capacity to manage their disease and symptoms, engage in self-care methods and approaches, and carry out activities of daily living. This evaluation can assist in pinpointing areas in which patients might need more guidance or instruction to improve their capacity for self-care.

According to Orem's view, the capacity for self-care is associated with general well-being and life satisfaction. Healthcare professionals can investigate how patients' self-care behaviors affect their physical, mental, and social well-being by using SCDT. Patients who are capable of taking care of themselves on their own, for instance, could feel more satisfied with life generally and participate in more activities and relationships. According to Orem's idea, taking care of oneself is essential to preserving one's health and wellness. Healthcare professionals can examine how patients' self-care behaviors affect their quality of life by using SCDT. Examining how self-care skills impact quality of life, which self-care behaviors are most closely associated with quality of life, and how medical professionals can assist patients in creating efficient self-care routines are some examples of ways to do this.

To sum up, Orem's Self-Care Deficit Theory offers a useful framework for comprehending the intricate connections among individuals with mobility-limiting diseases, self-care practices, and problems and quality of life. Healthcare professionals can better understand patients' self-care requirements and limitations by using SCDT, which will help them plan focused interventions that will help patients reach their best possible health outcomes.

2.3 Empirical Review

2.3.1 Challenges to Self-Care Practices in Patients with Orthopaedic Conditions

Given that many patients with orthopaedic diseases need help with everyday tasks, research has shown how important self-care behaviors are for these individuals (Ozveren et al., 2021). According to a study, just 6.30% of senior patients were completely independent with regard to their daily activities, while 68.7% were moderately dependent on others and 25% were completely dependent (Mohammed et al., 2022). Abu-Baker et al. (2021) conducted another study with the goal of determining the quality of life (QOL), self-care skills, and associated factors in people with spinal cord injury (SCI). The physical and environmental categories scored the highest, with approximately 55.3% of participants reporting a modest reliance on others to support their ability to take care of themselves, 48.0% reporting an excellent quality of life, and 65.8% being content with their health following SCI. The difficulties in incorporating self-care into patient care, however, have been brought to light by some research. Health professionals may not know what self-care choices are available or the variety of self-care methods and resources they could recommend (Narasimhan et al., 2023). The workplace may not offer the resources needed or may even discourage the people-centered strategies needed for productive task-sharing; for instance, reporting systems frequently overlook initiatives to promote self-care. Health professionals may find it uncomfortable to trust that patients can take care of their own health and to transfer care that would otherwise be given by or under their supervision. The dual facilitator/barrier role of health personnel is well-emphasized in this study. It does not, however, critically analyze the constraints of self-care, operational definitions, or patient viewpoints. Patients with orthopaedic issues may find it extremely difficult to take care of themselves due to a lack of knowledge, which can exacerbate

problems and unfulfilled requirements during the healing process. Numerous research support this topic, such as Patel et al. (2021), who investigated the demands and challenges of patients after unicompartmental knee arthroplasty (UKA) using a short-term mixed-methods study. In a similar vein, Larsson et al. (2022) interviewed patients undergoing day surgery in a semistructured manner with the goal of determining the difficulties they encountered throughout the recovery phase following surgery. In order to investigate the difficulties and requirements for self-management that patients face after orthopaedic surgery, Halding et al. (2021) also combined qualitative interviews with a survey. These studies have repeatedly shown how difficult it is for patients to get and remember crucial information regarding postoperative self-management. For example, studies have revealed that patients frequently have trouble remembering the material given during preoperative sessions, and they might not have enough time to ask questions (Larsson et al., 2022). Inadequate information might also make patients feel unprepared to manage their illness, customize activities, and manage discomfort (Halding et al., 2021; Patel et al., 2021). Information is sometimes disjointed, ambiguous, and challenging to understand, underscoring the necessity of precise, succinct, and patient-centered communication to promote efficient self-care. Consistent results from several approaches (mixed-methods, interviews, and surveys) that reveal important problems like fragmented communication and poor knowledge retention are its main strength. However, the inadequate investigation of the underlying reasons lacks crucial depth.

Another obstacle to self-care is fatigue and pain. In the clinic, 78.8% of patients reported feeling fatigued from the entire surgery process, 64.6% reported having trouble taking care of themselves, and 8% reported having trouble eating or cooking. At home, these rates were 26.5%, 50.4%, and 18.6%, respectively, according to a study conducted to ascertain the issues and care dependency levels of patients who had orthopaedic surgery in the clinic following the procedure and at home during the first month of discharge (Akyazı & Kissal, 2025). The kind

of orthopedic surgery or intervention may have a major effect on a patient's ability to take care of themselves and carry out daily care duties. Research showing that individuals after various orthopedic procedures exhibit differing degrees of self-care abilities lends credence to this idea. For example, Durgun et al. (2022) discovered that patients who had spine and prosthesis surgeries (such as knee, hip, and shoulder surgeries) tended to need more help with everyday care tasks, while patients who had trauma injuries (such as lacerations and hand-foot trauma) and meniscus injuries were more self-sufficient in their care. In a similar vein, Jiang et al. (2021) found that patients with paraplegia and partial spinal cord injuries were more independent in their daily living tasks, which leads to a higher quality of life.

A quasi-experimental study assessing nursing recommendations for self-care in patients with external skeletal fixation was carried out by Morsy et al. in 2021. Their findings showed a strong correlation between sociodemographic characteristics and self-care outcomes, with higher education levels linked to better practical performance and male gender to greater knowledge. These results imply that the age, education, and occupation of patients may have a significant impact on their capacity for self-care. On the other hand, contradicting data from Akyazı and Kissal (2025) revealed no statistically significant associations between care reliance and age, gender, education level, presence of chronic diseases, availability of caregivers, BMI, medication use, or nutritional knowledge. This disparity emphasizes the necessity of more research into potential moderating factors that could account for these inconsistent results among patient groups.

2.3.2 Practice of Self Care among Patients with Orthopaedic Conditions

One of the most important aspects of orthopaedic patients' recuperation and rehabilitation is their understanding and use of self-care. According to research, individuals with orthopaedic diseases frequently struggle to manage their conditions, including mobility exercises, wound

care, and pain management (Halding et al., 2021; Patel et al., 2021). Even though self-care is crucial for attaining the best results, research has repeatedly shown that people with orthopaedic disorders have insufficient self-care habits and knowledge gaps. For example, a study conducted in 2022 by Mohammed et al. revealed that senior people who have had hip replacement surgery have inadequate self-care knowledge. According to the data, just 17.90% of the elderly patients in the study had strong knowledge, while the majority (72%) had inadequate knowledge. Similarly, Halding et al. (2021) found that patients undergoing orthopaedic surgery had poor self-care behaviors as a result of receiving insufficient information about wound care and pain management.

84.8% of research participants had an inadequate level of knowledge regarding the first knowledge domain (patients' knowledge about an external fixator), according to the results of a study that sought to assess self-care management among participants with external fixators (Abdou et al., 2024). Furthermore, 97.0% of participants said they knew too little about the second knowledge domain. 57.6% of the individuals had inadequate wound-pin site care behaviors when it came to self-care activities. Additionally, 87.9% and 93.9% of the participants, respectively, performed neurovascular assessments and isometric exercises in a poor manner. Regarding the relationship between sociodemographics and general knowledge, there was a relationship between patients' general knowledge and their marital status, age, educational attainment, and smoking behaviors. Alternatively, a cross-sectional survey conducted by Lai et al. (2021) to evaluate health self-management knowledge, attitudes, and practices (KAP) among patients with osteogenesis imperfecta (OI) in China revealed that more than half (50–60%) of patients were aware of the primary symptoms of OI and how to treat complications related to OI. almost 60–70% of patients were comparatively competent to take appropriate action regarding OI management, and almost 80% of patients demonstrated a favorable attitude concerning their disease management. Higher educated patients perform

better in practice, while male patients demonstrated superior knowledge. According to these results, patients' knowledge and self-care behaviors are substantially correlated with sociodemographic traits as age, education, and occupation (Morsy et al., 2021). Although the reviewed studies show a solid empirical basis for describing patients with orthopaedic disorders' knowledge and behaviors about self-care, taken as a whole, they are unable to demonstrate how these practices directly affect patients' quality of life (QOL) results.

2.3.3 Perceived Quality of Life among Patients with Orthopaedic Conditions

Orthopaedic populations' Quality of Life (QoL) evaluations show a variety of results that are significantly impacted by the patient's unique profile and treatment stage. A helpful baseline is provided by a recent study by Alharbi et al. (2022), which assessed QoL in 215 post-operative orthopaedic patients (mostly young males, 30.2% aged 18-30). With an overall mean physical health score of 51.1 (SD 11.8) and a mental health score of 47.7 (SD 11.2) (on a 0-100 scale), their results show a moderate general quality of life. This implies that although physical health improves somewhat following surgery, mental health issues continue. The cross-sectional methodology and restricted generalizability to other populations are among the study's drawbacks. In stark contrast, even though total knee replacement (TKR) surgery is a final orthopaedic operation, the study by Mandour et al. (2022), which evaluated individuals 1-6 months following TKR surgery, found that the majority (63%) had an unacceptable quality of life. In contrast to the overall post-operative group examined by Alharbi et al., this divergence highlights the acute functional burden and pain encountered during the early post-operative rehabilitation period, which considerably reduces perceived quality of life. The Physical Functioning domain had the highest percentage of good QoL, followed by the Mental Health domain, according to Mandour et al. (2022). This suggests that the initial functional gain is a major source of patient satisfaction, even if overall QoL remains low because of lingering pain

or dependence. The mean physical health domain score of 181 patients with knee and hip arthritis (OA) was only 37.98 in a contrasting study by Divintha et al. (2025), suggesting a comparatively low quality of life in this crucial area. On the other hand, their mean score in the social relationships domain was higher, at 49.76. This discrepancy is frequent when mobility problems and chronic pain directly impair physical quality of life, although social support systems frequently sustain higher social and environmental domain scores. The study also emphasizes the impact of comorbidities, which Alharbi et al. (2022) found to be associated with lower QoL scores (e.g., 60.2% with hypertension). In addition, a study by Rizzo et al. (2022) that assessed the quality of life (QoL) of 134 patients with osteoporosis revealed worse ratings in the domains of social and physical function. Crucially, a high body mass index (BMI) and a high FRAX score (increased risk of fragility fracture) were the primary factors linked to QoL impairment. This highlights the fact that prognostic variables and systemic problems that indicate future disability influence orthopaedic patients' quality of life in addition to their present discomfort. Extensive empirical evidence indicates that psychological elements have a crucial impact, surpassing the importance of merely physical and joint-level causes. While advanced age, female sex, elevated BMI, and comorbidities are important physical determinants, psychological and pain-related factors had an equal impact, according to a review by Shetty et al. (2024), which examined quality of life following total knee arthroplasty. These include central sensitization, kinesiophobia (the fear of movement), depression, anxiety, and pain catastrophizing. The idea that patient well-being is a multifaceted construct that is greatly impacted by behavioral and psychological coping mechanisms has a solid empirical basis thanks to this extensive body of study. Although the studies mentioned have limited sample sizes or are carried out in certain communities outside of Nigeria, the evaluated studies provide a solid empirical basis. This indicates that more research is required to determine how self-care

behaviors are believed to affect the quality of life for Nigerian patients with orthopaedic diseases.

2.3.4 Perceived Influence of Self Care Practices and the Quality Of Life of Patients with Orthopaedic Conditions

Wojcieszek et al. (2023) examined the effect of behavioral resources, particularly optimism and self-efficacy, on the perception of quality of life in patients with osteoarthritis in the knee in a cross-sectional study. There were 300 participants in the trial, 150 of whom were gonarthrosis patients and 150 of whom were healthy controls. According to the study's findings, gonarthrosis patients' optimism and self-efficacy were substantially lower than those of healthy controls ($p < 0.001$). Additionally, the findings demonstrated a strong negative relationship between dispositional optimism ($r = -0.318$; $p < 0.001$) and the degree of impairment in lower limb joints and self-efficacy ($r = -0.239$; $p = 0.003$). This implies that those with more severe osteoarthritis in their knees typically have lower levels of optimism and self-efficacy. Additionally, the study discovered that more positive evaluations of one's own health ($p < 0.001$) and quality of life ($p < 0.001$) were linked to higher levels of optimism and self-efficacy. More specifically, in the psychological ($p = 0.044$), social ($p < 0.001$), and environmental ($p < 0.001$) domains, a greater sense of self-competence was associated with a higher quality of life. Furthermore, a propensity for optimism was linked to a better social quality of life perception ($p < 0.001$). Abu-Baker et al. (2021) looked into the quality of life (QOL) and capacity for self-care of 152 people with spinal cord injuries (SCI) in Jordan. According to the study, 55.3% of participants said they needed help with everyday life tasks and that they were moderately dependent on others to sustain their capacity for self-care. The physical and environmental domains had the highest QOL scores, with 48.0% of participants reporting satisfactory QOL.

Interestingly, 65.8% of subjects expressed satisfaction with their post-SCI health. Important determinants of QOL and self-care skills were also found in the study. Higher self-care capacity was strongly predicted by having paraplegia or an incomplete injury. Furthermore, higher QOL was strongly predicted by being male, having a higher level of education, incomplete damage, paraplegia, and not having a pressure injury ($p < 0.000$). A key component of postoperative care is early mobilization, especially for patients having surgery on the hips and lower extremities. The impact of early mobilization on postoperative outcomes in this cohort was investigated in a recent study by Aprisunadi et al. (2023). The research highlighted the advantages of early mobilization by analyzing 16 studies that were published between 2019 and 2021. The fact that early mobilization can improve quality of life—a crucial component of patient care—was one of the main conclusions. According to the analysis, early mobilization has a number of important benefits, such as a shorter hospital stay, fewer postoperative problems, improved walking ability, less discomfort, and a lower readmission rate. These advantages highlight how crucial it is to include early mobilization in postoperative care planning.

In their study of 392 individuals with severe spinal cord injuries, Jiang et al. (2021) discovered a strong link between quality of life and the ability to take care of oneself. Patients with greater independence in daily living activities tended to have higher quality of life, according to the study, which evaluated patients' independence in daily living activities and their overall quality of life. In particular, individuals with paraplegia ($P=0.041$) and partial spinal cord injuries ($P=0.045$) had greater independence in daily living tasks, which was connected to a higher quality of life.

2.4 Summary of Literature Review

The foundation for a greater comprehension of the ideas of self-care, self-care practice, and quality of life is laid by the literature study, which offers a thorough analysis of these concepts. A theoretical framework and review that explores the theoretical foundations of Orem's Self-Care Deficit Theory comes next. The empirical review looks at previous studies on the difficulties patients have when it comes to self-care, self-care practices among patients with orthopaedic conditions, patient quality of life, and the connection between self-care practices and quality of life among patients with orthopaedic complications. Even though the literature assessment is thorough, there is a sizable gap in the empirical study. There is an urgent need for more research in this field because none of the papers that were reviewed concentrated on individuals with orthopaedic disorders in Edo State, Nigeria. By investigating the self-care experiences and quality of patients with orthopaedic diseases in Nigeria, specifically in Benin City, Edo State, this study seeks to close this knowledge gap and offer insightful information to future research, policymakers, and healthcare professionals.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter will be discussed under the following subheadings: research design, research setting, target population, sample size, sampling technique, instrument for data collection, validity of instruments, reliability of instruments, ethical consideration, method of data collection and method of data analysis.

3.1 Research Design

A cross sectional study was used to assess the perceived influence of self-care practice on the quality of life among patients with orthopaedic conditions in a tertiary health institution in Benin. A cross- sectional study is a type of observational research that involves the analysis of data that allows efficient data collection, enables comparison across different patient groups, offers immediate insight, and serves as an initial exploration of potential associations.

3.2 Research Setting

This study was carried out among patients receiving treatment in the orthopaedic unit in University of Benin Teaching Hospital, Edo state. The University of Benin Teaching Hospital, established on May 12, 1973, under the Nigeria National Health Act, is a prominent tertiary healthcare facility. It is the sixth first-generation teaching hospital in Nigeria and was created to

complement the University of Benin, offering secondary and tertiary care services. Situated along the Benin-Lagos expressway in Egor Local Government Area of Edo State, the hospital comprises various departments and units, including the infant welfare clinic, in vitro fertilization unit, nursing services, pharmaceutical services, radiological services, intensive care unit, and other medical facilities.

The Orthopaedics and Trauma (O&T) unit at the University of Benin Teaching Hospital (UBTH) originated in the 1970s as a subset of the Surgery department. It gained autonomy as a full-fledged Orthopaedics department in 1985 under Prof. F.A. Orhewere's leadership. However, due to the migration of senior staff, the department merged with Surgery in 1990. This merger lasted until August 2007, when the UBTH management and UNIBEN Senate reinstated the O&T department, renaming it Orthopaedics and Traumatology. The revamped department now comprises three units: Orthopaedics and Traumatology, Accident and Emergency (general traumatology), and Plastic Burns and Reconstruction.

The O & T unit enjoys an ultra-modern bay system ward at the new A& E complex with 30 beds each for male and female patients respectively.

3.3 Target Population

The target population for this study consists of immobilized patients admitted to the orthopaedic ward and neurology ward with musculoskeletal conditions, specifically those that are 48 hours post-operative following orthopaedic surgery. A total number of 100 patients in this category received care from the orthopaedic and neurology unit of the hospital in a period of three months from January to March, 2025 (Admission Records).

3.4 Sample Size Determination

The Taro Yamane's formula was used to calculate the sample size.

Formula =N/(1+N(e)2.

Where n = required sample, N= population under study, e= margin error which is 0.05 at 95% confidence level, and 1= constant

Using Taro Yamane's formula: n = 100 / (1 + 100 * 0.05^2)

n ≈ 80

In order to cater for attrition or non-response, 10% provision was made.

Giving the final sample size of 88 patients.

3.5 Sampling Technique

The sampling technique that was used for the study is convenience sampling technique, which is a method of selecting participants for a research study based on their easy accessibility and convenience to the researcher. Convenience sampling was chosen due to its practicality and ease of implementation. Given the constraints of time, resources, and accessibility to the target population, convenience sampling allows for the selection of participants who are readily available and accessible to the researcher within the study setting.

Inclusion criteria

1. Admitted to the orthopaedic ward or neurology ward with primary or secondary diagnosis related to musculoskeletal conditions
2. Patients on immobilization devices
3. 48 hours post-operative following orthopaedic surgery IV. Age 18 years or older.
4. Patients who willingly agree to take part in the study by providing informed consent
5. Patients who can understand English and Pidgin

3.6 Instrument for Data Collection

The instruments for data collection includes the Barthel Index instrument and a modified World Health Organization Quality of Life- BREF (WHOQOL-BREF) scale. The Barthel index (Table 1) is a scale that measures disability or dependence in activities of daily living of patients including ten indices: feeding, bathing, grooming, dressing, bowel control, bladder control, toilet use, transfers, mobility, and stairs. The Barthel Index instrument was used by Ruan et al. (2021) in a randomized clinical trial to assess the effect of Orem's selfcare model on the quality of life, complications and mental health of elderly hip fracture patients and so found to be useful for this study.

The WHOQOL-BREF) scale was designed by the World Health Organization (WHO) in 1998. This universal research tool is used for subjective assessment of QoL in healthy individuals, in people with ailing health, and in those undergoing various treatments. The short version of the questionnaire assesses physical functioning, mental functioning, social relations and general lifestyle. This tool was used by Pawik et al. (2021) in a quasi-experimental study to assess the quality of life in in patients with varying degrees of lower leg shortness who had undergone treatment by the Ilizarov method, compared to a healthy control group and so, found to be useful for this study.

The instrument for data collection in this context is a structured questionnaire designed to measure the perceived influence of self-care practice on quality of life among patients with orthopaedic conditions. The questionnaire is divided into five main sections to ensure comprehensive data capture:

SECTION A: Sociodemographic Characteristics. This comprises of 9 questions and is designed to collect basic participant information like age, gender, ethnicity, education, occupation, and details about their orthopaedic condition and diagnosis duration.

SECTION B: Challenges faced by Patients with Orthopaedic Conditions in Practicing Self-Care in a Tertiary Institution in Benin City, Edo State. This comprises of 8 questions. It employs a Likert-type scale with four response options, assigned numerical values as follows: 1 =Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree. A higher total score indicates that the patient perceives a greater number or intensity of challenges in practicing self-care.

SECTION C: Current Self-Care Practices among Patients with Orthopaedic Conditions in a Tertiary Health Institution in Benin City, Edo State. This comprises of 11 questions. A three point ordinal scale (Independent, Some Assistance Needed, Fully Dependent) is used to assesses the level of independence in daily self-care activities**.** A higher total score signifies a greater level of independence in performing self-care activities, while a lower score indicates higher dependence.

SECTION D: Perceived Quality of Life among Patients with Orthopaedic Conditions in a Tertiary Health Institution in Benin City, Edo State. It evaluates the patient's perceived well-being across physical, psychological, social, and environmental domains using a 5-point Likert scale with five response options: 1 = Not at all, 2 = Not much, 3 = Moderately, 4 = Very much / A great deal / Good, 5 = Extremely / Completely / Very good. A higher overall score indicates better perceived quality of life.

SECTION E: Perceived Influence of Self-Care Practice on Quality of Life among Patients with Orthopaedic Conditions in a Tertiary Health Institution in Benin City, Edo State. This comprises of 10 questions. It measures how patients believe their self-care activities impact their quality of life using a 4-point Likert scale with four response options: 1 = Strongly Disagree, 2 =Disagree,3 = Agree, and 4 = Strongly Agree. A higher total score suggests that

the patient perceives a stronger positive influence of their self-care practices on their quality of life

3.7 Validity of Instrument

The validity of the research instrument was crucial to ensure that it accurately measures the intended constructs. Validity indicates how accurately a tool assesses the concept or phenomenon it is designed to measure (Andersson et al., 2024). Validity of the questionnaire and instruments was established through face and content validity criteria by the supervisor and experts in the self-care and orthopaedic field.

Face validity refers to the extent to which a test or measurement tool appears to measure what it is supposed to measure, based on a superficial examination. It is the most basic and least scientific form of validity assessment, relying on subjective judgment rather than empirical testing. This can be assessed by presenting the questionnaire to a small group of experts or potential respondents. They evaluate if the questions or items seem relevant, clear, and appropriate for the construct being measured.

Content involves a comprehensive review by a panel of subject matter experts. The experts were provided with the instrument and a predefined conceptualization of the construct's domains and sub-domains (derived from extensive literature review). They critically assessed each item's relevance to the construct, its representativeness of the construct's entire content universe, and identified any crucial dimensions that may be missing. Based on their feedback, necessary corrections was made to enhance the instrument's validity.

3.8 Reliability of Instrument

Reliability of instrument can be thought of as consistency. A reliable measurement is one that yields consistent results over time, across different measurement tools, and among various

observers (Andersson et al., 2024). To test for reliability of the instrument, corrected version of the instrument was given to few participants that have similar characteristics to the study population but were not included in the study. The reliability coefficient was calculated using Cronbach's alpha (r) to measure the internal consistency and construct validity of the instrument. The Cronbach's alpha values for the instrument were expected to be between 0 to 1. Value close to 1 represents high reliability while value close to 0 represents low reliability which may be due to temporary factors. The result of the reliability test was 0.71 indicating that the instrument is reliable.

The application of assessing the reliability of an instrument in research is crucial for several reasons:

1. **Consistency of Measurements:** Reliability ensures that the instrument consistently measures what it's intended to measure over time and across different conditions. This consistency is essential for meaningful and accurate research results.
2. **Validity Support:** A reliable instrument is a foundation for establishing validity. Researchers often use reliability as evidence that their instrument is measuring the intended construct. If a measure is not reliable, it is unlikely to be valid.
3. **Comparability:** Reliability allows for comparisons within and across studies. When an instrument is reliable, you can confidently compare results from different groups, time points, or research settings.
4. **Reduced Measurement Error:** High reliability reduces measurement error, making research findings more robust and trustworthy. It helps to distinguish real differences from random variability.

3.9 Method of Data Collection

During the collection of data, consent was collected from patients in orthopaedic wards after explaining to them the reason for the research. The researcher administered a total of eighty eight (88) copies of the questionnaire to participants that met the inclusion criteria in the wards. The researcher was present to provide explanations and assistance during completion, ensuring comprehension among participants with diverse educational backgrounds. This practice aimed to mitigate any potential misunderstanding of terminology and promote accurate responses. Data collection lasted for a period of two weeks.

3.10 Method of Data Analysis

Descriptive statistics such as mean, standard deviations, and percentages were utilized to address the research questions. The hypothesis was tested using Chi-Square to ascertain the degree of relationship between variables and determine significant differences between variables at a 0.05 level of significance. Data was analyzed using the Statistical Package for the Social Sciences (SPSS) version 26.0.

3.11 Ethical Consideration

Ethical guidelines are vital to safeguard the well-being, dignity, and rights of individuals involved in research (Hasan et al., 2021). Permission to carry out the study was obtained from the Health Research Ethics Committee of University of Benin Teaching Hospital, Benin City, Edo State. Privacy is one of the most important aspects of human life and thus, privacy was not abused, during the conduct of the research. The code of ethics serves the purpose of safeguarding the rights of individuals who participate in research. These include:

Voluntary Participation: Respondents were not forced into participating in the research project.

Privacy: Privacy was maintained during the filling of the questionnaires, hence no names were requested.

Avoidance of plagiarism: Other studies used were properly acknowledged.

Maintenance of Confidentiality: The respondents' names were withheld, and information given was not divulged to others but rather treated with utmost secrecy, strictly for academic purposes.

CHAPTER FOUR

ANALYSIS OF DATA

This chapter deals with the representation of data collected regarding the perceived influence of self-care practices and quality of life among patients with orthopaedic conditions in a tertiary Health Institution in Benin City. A total of 88 questionnaires were distributed to patients admitted to the orthopaedic ward and neurology ward with musculoskeletal conditions and were properly filled and valid for data analysis, giving a response rate of 100%.

4.1 Socio-demographic Characteristics of Respondents

Table 4.1: Socio-demographic Characteristics of Respondents (n = 88)

Variable	Frequency (n=88)	Percent
Age		
<20	7	8.0
20–24	11	12.5

25–29	13	14.8
30–34	17	19.3
35 years and above	40	45.4
Gender		
Male	39	44.3
Female	49	55.7
Religion		
Christianity	63	71.6
Islam	17	19.3
Traditional	8	9.1
Ethnicity		
Yoruba	13	14.8
Hausa	7	8.0
Igbo	15	17.0
Benin	27	30.7
Esan	11	12.5
Others	15	17.0
Marital Status		
Single	29	33.0
Married	41	46.6
Divorced	9	10.2
Widow(er)	9	10.2
Level of Education		
Primary	10	11.4
Secondary	18	20.5

Tertiary	34	38.6
Postgraduate	12	13.6
No Formal Education	14	15.9
Occupation		
Unemployed	19	21.6
Self-employed	27	30.7
Government employed	15	17.0
Private sector employed	17	19.3
Retired	10	11.4
Type of Orthopaedic Condition		
Diagnosed		
Fracture (femur, tibia, humerus, etc.)	31	35.2
Osteoarthritis	19	21.6
Disc herniation/spinal stenosis	12	13.6
Stroke-related musculoskeletal issues	9	10.2
Bone infection (osteomyelitis)	8	9.1
Others (e.g., scoliosis, soft tissue injury)	9	10.2

Table 4.1 shows the socio-demographic characteristics of the 88 respondents. The majority (45.4%) were aged 35 years and above, while smaller proportions were aged 30–34 (19.3%), 25–29 (14.8%), 20–24 (12.5%), and below 20 (8.0%). Females comprised 55.7% of the sample, while males made up 44.3%. Most respondents were Christians (71.6%), followed by Muslims (19.3%) and those practicing traditional religion (9.1%). Ethnically, the Benin group was the most represented (30.7%), followed by Igbo (17.0%), Yoruba (14.8%), Esan (12.5%), Hausa (8.0%), and others (17.0%). In terms of marital status, 46.6% were married, 33.0% single,

while 10.2% each were either divorced or widowed. Educational attainment varied, with the largest group having tertiary education (38.6%), followed by secondary (20.5%), no formal education (15.9%), postgraduate (13.6%), and primary education (11.4%). Regarding occupation, 30.7% were self-employed, 21.6% unemployed, 19.3% worked in the private sector, 17.0% were government-employed, and 11.4% were retired. Concerning orthopaedic diagnoses, fractures were the most common condition reported (35.2%), followed by osteoarthritis (21.6%), disc herniation or spinal stenosis (13.6%), stroke-related musculoskeletal issues (10.2%), bone infections such as osteomyelitis (9.1%), and other conditions like scoliosis and soft tissue injuries (10.2%).

4.2 Answering Research Questions

4.2.1 Research Question 1: What are the Challenges and Barriers Faced by Patients with Orthopaedic Conditions in Practicing Self-Care?

Table 4.2: Challenges Faced in Practicing Self-Care

Items	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Remark
I experience physical pain that makes it difficult for me to perform self-care activities.	31 (35.2)	29 (33.0)	17 (19.3)	11 (12.5)	2.9	High
I find it hard to practice self-care due to lack of mobility.	27 (30.7)	30 (34.1)	18 (20.5)	13 (14.8)	2.8	High
Lack of knowledge about proper self-care techniques affects my ability to manage my condition.	24 (27.3)	33 (37.5)	16 (18.2)	15 (17.0)	2.8	High

I often feel emotionally stressed, which affects my motivation to engage in self-care.	26 (29.5)	28 (31.8)	19 (21.6)	15 (17.0)	2.7	High
I do not receive enough support from family or caregivers to assist with my self-care activities.	21 (23.9)	26 (29.5)	23 (26.1)	18 (20.5)	2.6	High
I find it difficult to understand healthcare instructions regarding self-care.	19 (21.6)	27 (30.7)	25 (28.4)	17 (19.3)	2.5	High
Lack of encouragement from healthcare providers affects my commitment to practicing self-care.	20 (22.7)	31 (35.2)	21 (23.9)	16 (18.2)	2.6	High
			Grand Mean		**2.7**	**High**

Mean Cut-off = 2.5

Table 4.2 shows that the highest reported challenge faced in practicing self-care among orthopaedic patients was experiencing physical pain, with a mean score of 2.9. This was followed by difficulty due to lack of mobility and lack of knowledge about proper self-care techniques, both with a mean of 2.8. Emotional stress affecting motivation had a mean of 2.7, while lack of support from family or caregivers and lack of encouragement from healthcare providers both recorded a mean of 2.6. The least reported challenge was difficulty in understanding healthcare instructions, with a mean of 2.5. The grand mean was 2.7, indicating a generally high level of challenges faced in practicing self-care.

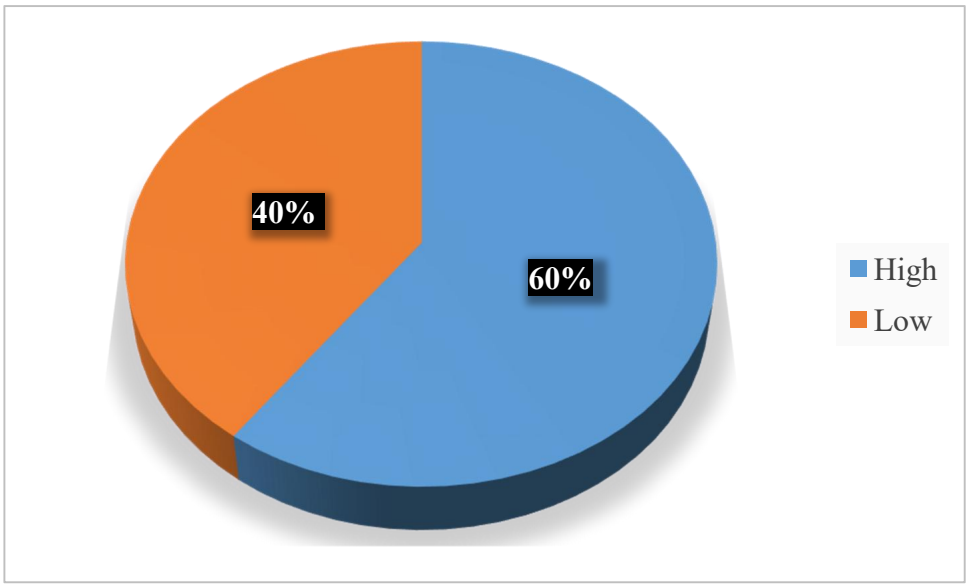


Figure 4.1: Pie Chart showing Challenges faced in Practicing Self-Care

Figure 4.1 presents the challenges faced by orthopaedic patients in practicing self-care. A majority of the respondents 53 (60%) reported experiencing high levels of challenges, while 35 (40%) indicated low levels of difficulty.

4.2.2 Research Question 2: What is the Current Self-Care Practice of Patients with Orthopaedic Conditions in a Selected Tertiary Health Institution?

Table 4.3: Current Self-Care Practice among Orthopaedic Patients

ITEMS	Independent	Some assistance needed	Fully dependent	Mean	Remark
Feeding	28 (31.8)	39 (44.3)	21 (23.9)	2.1	Moderately dependent
Bathing	23 (26.1)	41 (46.6)	24 (27.3)	2	Moderately dependent
Grooming	27 (30.7)	38 (43.2)	23 (26.1)	2	Moderately dependent
Dressing	26 (29.5)	40 (45.5)	22 (25.0)	2	Moderately dependent

Bowel control	29 (33.0)	37 (42.0)	22 (25.0)	2.1	Moderately dependent
Bladder control	25 (28.4)	39 (44.3)	24 (27.3)	2	Moderately dependent
Toilet use	24 (27.3)	40 (45.5)	24 (27.3)	2	Moderately dependent
Transfers (bed to chair and back)	22 (25.0)	41 (46.6)	25 (28.4)	2	Moderately dependent
Mobility on level surfaces	24 (27.3)	42 (47.7)	22 (25.0)	2	Moderately dependent
Mobility on stair case	20 (22.7)	43 (48.9)	25 (28.4)	1.9	Dependent
		Grand Mean	**2.01**		

Mean Cut-off = 2.0

Table 4.3 shows that the highest mean scores for current self-care practice among orthopaedic patients were in feeding and bowel control, both with a mean of 2.1. This was followed by bathing, grooming, dressing, bladder control, toilet use, transfers, and mobility on level surfaces, all with a mean of 2.0. The lowest mean was recorded for mobility on staircases, with a mean of 1.9. The grand mean indicates that patients are generally moderately dependent in their self-care practice.

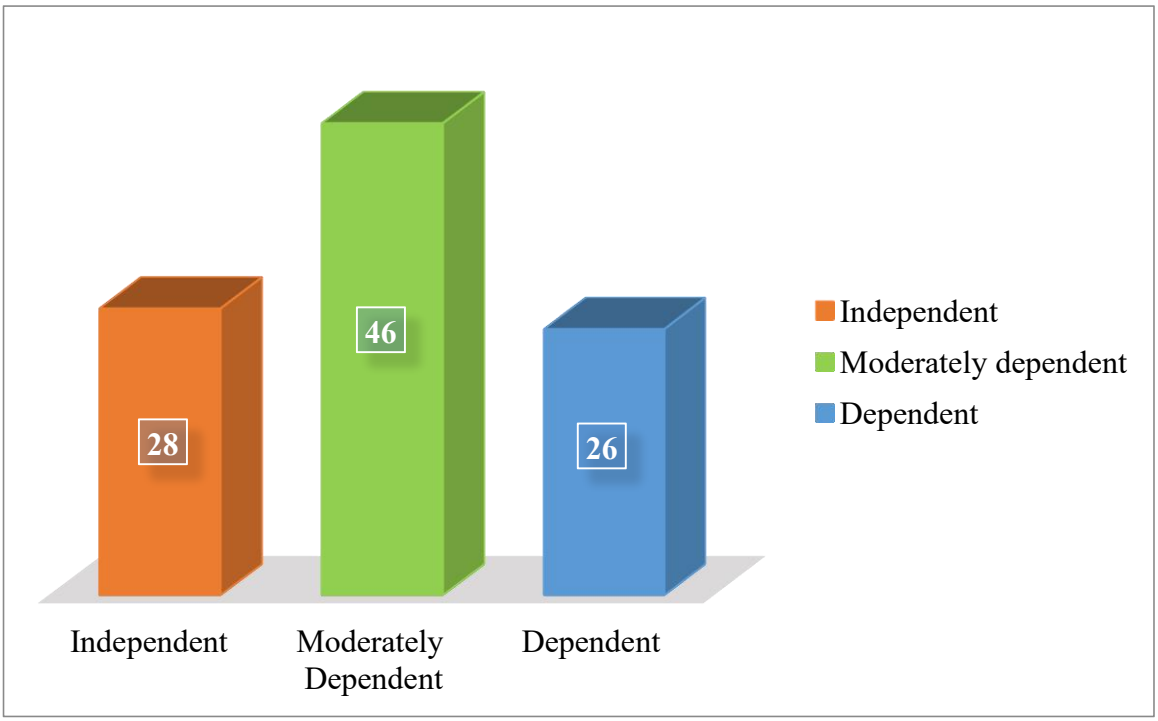


Figure 4.2: Bar Chart showing Current Self-Care Practice among Orthopaedic Patients

Figure 4.2 illustrates the current self-care practice among orthopaedic patients. About 25 (28%) of respondents reported being independent in their self-care, while 40 (46%) were moderately dependent. A smaller proportion, 23 (26%), identified as fully dependent.

4.2.3 Research Question 3: How do Patients with Orthopaedic Conditions Perceive Their Quality Of Life across Physical, Psychological and Social Domains?

Table 4.4: Assessment of Quality of Life

ITEMS	Not at all	Not much	Moderately	Very much	Extremely	**Mean**	**Remark**

Physical domain							
How much do you feel that pain prevents you from doing what you need to do?	14(16)	19(22)	23(26)	19(22)	13(15)	2.98	Moderate
How much do you need medical treatment to function in your daily life?	12(14)	18(20)	21(24)	20(23)	17(19)	3.14	Moderate
Do you have enough energy for everyday life?	10(11)	17(19)	25(28)	21(24)	15(17)	3.16	Moderate
How satisfied are you with your health?	11(12)	16(18)	23(26)	23(26)	15(17)	3.17	Moderate
How satisfied are you with your ability to perform daily living activities?	13(15)	17(19)	24(27)	22(25)	12(14)	3.03	Moderate
How well are you able to get around?	15(17)	18(20)	23(26)	20(23)	12(14)	2.95	Moderate
Psychological domain							
How much do you enjoy life?	12(14)	17(19)	24(27)	19(22)	16(18)	3.11	Moderate
How well are you able to concentrate?	11(12)	16(18)	25(28)	21(24)	15(17)	3.15	Moderate
How much are you able to accept your bodily appearance?	10(11)	17(19)	22(25)	22(25)	17(19)	3.22	Moderate
How satisfied are you with	13(15)	16(18)	26(30)	20(23)	13(15)	3.05	Moderate

yourself?							
How often do you have negative feelings (e.g., blue mood, despair, anxiety, depression)?	16(18)	20(23)	25(28)	15(17)	12(14)	2.85	Moderate
To what extent do you feel life to be meaningful?	12(14)	15(17)	23(26)	23(26)	15(17)	3.16	Moderate
Social domain							
How satisfied are you with your personal relationships?	13(15)	18(20)	23(26)	19(22)	15(17)	3.06	Moderate
How satisfied are you with your sex life?	15(17)	19(22)	24(27)	17(19)	13(15)	2.93	Moderate
How satisfied are you with the support you get from your friends?	12(14)	16(18)	25(28)	21(24)	14(16)	3.10	Moderate
General quality of life and environment							
How would you rate your overall quality of life?	11(12)	15(17)	23(26)	23(26)	16(18)	3.20	Moderate
How satisfied are you with the conditions of your living place?	12(14)	17(19)	22(25)	20(23)	17(19)	3.15	Moderate
How available is the information you need in daily life?	14(16)	16(18)	25(28)	19(22)	14(16)	3.03	Moderate

How satisfied are you with your access to health services?	13(15)	18(20)	23(26)	20(23)	14(16)	3.05	Moderate
How safe do you feel in your daily life?	11(12)	15(17)	23(26)	23(26)	16(18)	3.20	Moderate
				Grand Mean 3.08			Moderate

Mean Cut-off = 3.0

Table 4.4 shows that the highest mean score of 3.22 was recorded for "How much are you able to accept your bodily appearance?", closely followed by 3.20 for both "How would you rate your overall quality of life?" and "How safe do you feel in your daily life?". These scores reflect notable psychological resilience and security perceptions. Other high scores (means 3.14−3.17) were observed in items related to health satisfaction, energy, and feeling life to be meaningful, confirming that the patients possess robust non-physical coping resources. The lowest mean score of 2.85 was observed for "How often do you have negative feelings (e.g., blue mood, despair, anxiety, depression)?", indicating that emotional distress is the most significant area of QoL deficit. This is immediately followed by 2.93 for "How satisfied are you with your sex life?", highlighting the significant impact of orthopaedic conditions on intimacy. The next lowest score, 2.95, was for "How well are you able to get around?", confirming that mobility limitation and pain interference (2.98) are the primary physical constraints preventing higher QoL. The overall assessment of Quality of Life (QoL) registers a Grand Mean of 3.08.

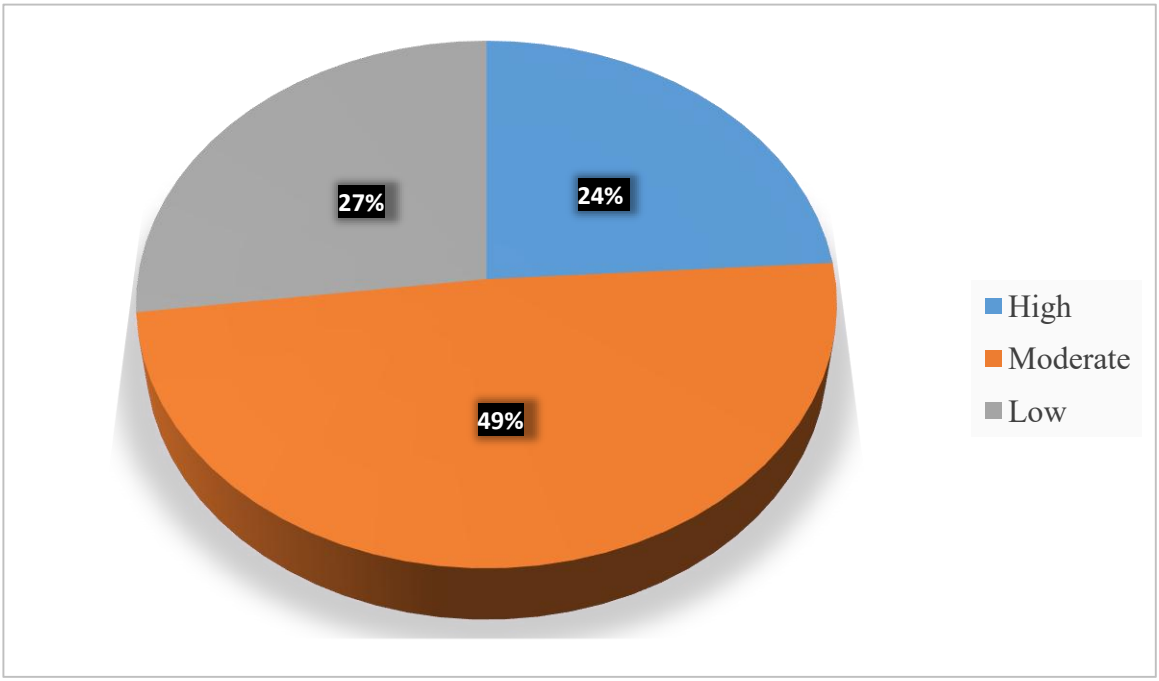


Figure 4.3: Pie Chart Showing Assessment of Quality of Life

Figure 4.3 presents the assessment of quality of life among respondents using a pie chart. Nearly half 43 (49%) rated their quality of life as moderate, 21 (24%) assessed it as low, while 24 (27%) perceived it as high.

4.2.4 Research Question 4: What is the Perceived Influence of Self-Care Practice on Quality Of Life among Patients with Orthopaedic Conditions in a Selected Tertiary Health Hospital?

Table 4.5: Perceived Influence of Self-Care Practice On Quality Of Life

Statements	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Remark
Practicing self-care helps me manage my pain better.	28 (32)	31 (35)	17 (19)	12 (14)	2.9	Positive
Regular self-care activities improve my physical	30 (34)	27 (31)	18 (20)	13 (15)	2.8	Positive

strength and mobility.						
Engaging in self-care reduces my dependence on others for daily activities.	26 (30)	29 (33)	20 (23)	13 (15)	2.8	Positive
Self-care practices improve my emotional well-being.	27 (31)	30 (34)	19 (22)	12 (14)	2.8	Positive
My ability to perform self-care activities improves my confidence in managing my health.	29 (33)	28 (32)	18 (20)	13 (15)	2.8	Positive
Self-care activities help me to enjoy life more despite my condition.	31 (35)	26 (30)	19 (22)	12 (14)	2.9	Positive
Engaging in self-care practices makes me feel more independent.	30 (34)	29 (33)	17 (19)	12 (14)	2.9	Positive
I feel that self-care practice has significantly improved my overall quality of life.	28 (32)	30 (34)	18 (20)	12 (14)	2.8	Positive
Self-care practices have helped me cope better with my orthopaedic condition.	27 (31)	31 (35)	19 (22)	11 (13)	2.8	Positive
			Grand Mean		**2.8**	**Positive**

Mean Cut-off = 2.5

Table 4.5 shows that the highest mean score of 2.9 was recorded for the items: “Practicing self-care helps me manage my pain better,” “Self-care activities help me to enjoy life more despite my condition,” and “Engaging in self-care practices makes me feel more independent.” This was followed by a mean of 2.8 for the items: “Regular self-care activities improve my physical strength and mobility,” “Engaging in self-care reduces my dependence on others for daily activities,” “Self-care practices improve my emotional well-being,” “My ability to perform self-care activities improves my confidence in managing my health,” “I feel that self-care practice has significantly improved my overall quality of life,” and “Self-care practices have helped me cope better with my orthopaedic condition.” The grand mean was 2.8.

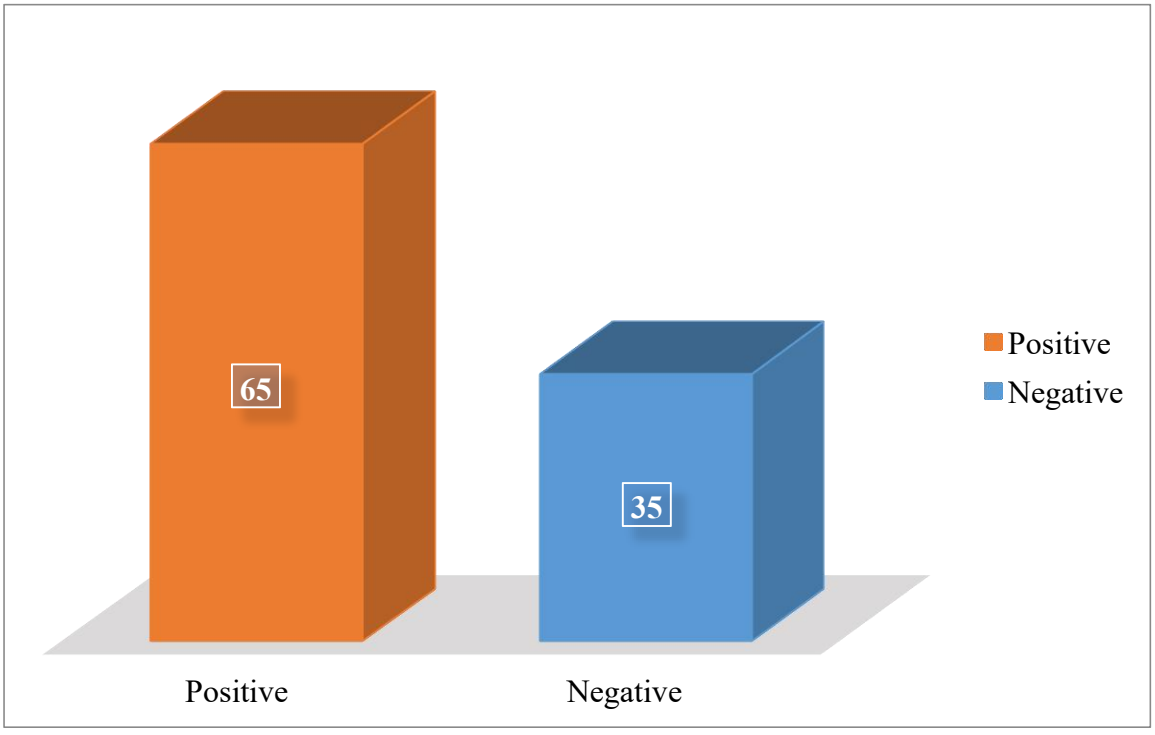


Figure 4.4: Bar Chart Showing Perceived Influence of Self-Care Practice on Quality Of Life

Figure 4.4 illustrates the perceived influence of self-care practices on quality of life among respondents. A majority (65%) reported a positive influence, while 35% perceived the influence as negative.

4.3 Hypothesis Testing

There is no significant relationship between self-care practices and quality of life among patients with orthopaedic conditions.

Table 4.6: Relationship between Self-Care Practices and Quality of Life among Patients with Orthopaedic Conditions

	Quality of life			**Test Statistics (χ^2)**	**df**	**P value**	**Decision**
	High	**Moderate**	**Low**				
	21(24.0)	43(49.0)	24(27.0)	10.70402	2	0.005	**Rejected**
Self-care Practice	43(48.9)	21(23.9)	24(27.3)				
	Independent	**Moderately dependent**	**Dependent**				

Table 4.6 presents the relationship between self-care practices and quality of life among patients with orthopaedic conditions. The Chi-square test result ($\chi^2 = 10.70$, df = 2, p = 0.005) indicates a statistically significant association between self-care practices and perceived quality of life. The null hypothesis was therefore rejected. Patients who were independent in self-care reported higher levels of quality of life, while those who were dependent were more likely to report moderate or low quality of life. This suggests that greater self-care independence is associated with better perceived quality of life among patients with orthopaedic conditions.

CHAPTER FIVE

DISCUSSION OF FINDINGS

This chapter discusses the major findings of the research compared with the literature reviewed, the implications for nursing, summary, conclusion, recommendations and suggestions for further studies.

5.1. Discussion of Major Findings

The study assessed the perceived influence of self-care practices and quality of life among patients with orthopaedic conditions in a tertiary Health Institution in Benin City. The sociodemographic characteristics of the study participants reveal diverse representation across various demographic variables. The age distribution shows that the majority of respondents (45.4%) were 35 years and above, followed by those aged 30-34 years (19.3%). This age pattern aligns with previous studies such as Alharbi et al. (2022), though their study had a younger predominant age group of 18-30 years. Gender distribution indicated a slightly higher proportion of female participants (55.7%) compared to males (44.3%). This finding contrasts with the study by Alharbi et al (2022), which reported 82.3% male participants, but aligns more closely with Divintha et al. (2025), where females constituted 63.5% of the sample. Educational background analysis showed that most participants (38.6%) had tertiary education, while 15.9% had no formal education. This educational distribution is particularly relevant given the findings of Morsy et al. (2021) that higher education levels were associated with improved practical performance in self-care activities. However, it contrasts with Akyazı and Kissal (2025), which found no significant relationship between education level and care dependency. Regarding occupation, self-employed individuals constituted the largest group (30.7%), followed by unemployed participants (21.6%). This occupational distribution may influence self-care practices and quality of life outcomes, though existing literature shows mixed findings on the

relationship between employment status and self-care abilities. The most common orthopaedic condition among participants was fracture (35.2%), followed by osteoarthritis (21.6%). This distribution partially aligns with the study by Durgun et al. (2022), which examined various orthopaedic conditions including trauma injuries and prosthesis surgeries. The prevalence of these conditions is significant as different orthopaedic conditions require varying levels of self-care ability, as noted in their research. Marital status data showed that married individuals formed the largest group (46.6%), followed by single participants (33.0%). Religious and ethnic distributions showed predominance of Christianity (71.6%) and Benin ethnicity (30.7%), reflecting the local demographic context. These factors may influence cultural approaches to self-care and healthcare-seeking behaviors. These demographic characteristics provide important context for understanding the study population and interpreting the findings related to self-care practices and quality of life. The diverse representation across various demographic variables suggests that the findings may be applicable to a broad range of orthopaedic patients, though specific subgroup analyses might reveal important variations in self-care practices and outcomes.

5.1.1 Challenges faced by Patients with Orthopaedic Conditions in Practicing Self-care

The findings revealed significant challenges faced by orthopaedic patients in practicing self-care, with 60% of respondents reporting high levels of difficulties. This aligns with previous research by Mohammed et al. (2022), which found that 68.7% of elderly patients were partially dependent on others for daily activities. Physical pain emerged as the most significant challenge (Mean = 2.9), with 68.2% of respondents agreeing or strongly agreeing that pain impedes their self-care activities. This finding corresponds with the study by Akyazı and Kissal (2025), which reported that 78.8% of patients experienced fatigue post-surgery, affecting their ability to perform self-care activities. Limited mobility was identified as the second major challenge (Mean = 2.8), with 64.8% of respondents indicating difficulty. This finding supports the study by Durgun et al.

(2022), which found that patients undergoing prosthesis surgeries required more assistance with daily care tasks due to mobility restrictions. Knowledge deficits regarding proper self-care techniques (Mean = 2.8) affected 64.8% of respondents, echoing findings from Mohammed et al. (2022) where 72% of elderly patients demonstrated poor knowledge about self-care. Similarly, Abdou et al. (2024) reported that 84.8% of patients had unsatisfactory knowledge about external fixator care. Emotional stress and its impact on self-care motivation (Mean = 2.7) was reported by 61.3% of respondents. This psychological aspect aligns with the findings of Shetty et al. (2024) that psychological factors, including anxiety and depression, significantly impact patient outcomes. Limited support from family/caregivers (Mean = 2.6) and healthcare providers (Mean = 2.6) were also notable challenges. This corresponds with the observation by Narasimhan et al. (2023) that healthcare workers might be unaware of available self-care options or fail to provide adequate support. Difficulty understanding healthcare instructions (Mean = 2.5) affected 52.3% of respondents, supporting the findings of Larsson et al. (2022) that patients often struggle to recall and interpret preoperative information. The overall grand mean of 2.7 indicates a high level of challenges across all dimensions, suggesting that orthopaedic patients face multiple, interconnected barriers to effective self-care. These findings emphasize the need for comprehensive support systems and interventions to address both physical and psychosocial challenges in self-care management.

5.1.2 Current Self-Care Practice among Patients with Orthopaedic Conditions

The findings regarding current self-care practice among orthopaedic patients revealed varying levels of dependence across different activities of daily living. Overall, 46% of patients were moderately dependent, 28% were independent, and 26% were fully dependent. These proportions align with the findings of Mohammed et al. (2022), which reported that 68.7% of elderly patients were partially dependent, though the current study shows a slightly lower rate of

complete dependence compared to their reported 25%. Feeding emerged as the activity with the highest level of independence (Mean = 2.1), with 31.8% of patients able to feed themselves independently. This was followed by bowel control (Mean = 2.1), where 33% of patients reported independence. These findings partially contrast with Akyazı & Kissal (2025), who reported that 18.6% of patients had difficulty with eating/cooking activities at home. Mobility related activities showed significant dependence levels. Stair mobility demonstrated the highest level of dependence (Mean = 1.9), with only 22.7% of patients being independent. This aligns with the findings of Durgun et al. (2022) that patients undergoing prosthesis surgeries required more assistance with mobility-related tasks. Basic self-care activities such as bathing (Mean = 2.0), grooming (Mean = 2.0), and dressing (Mean = 2.0) showed moderate dependence levels, with approximately 26-30% of patients being independent in these activities. This corresponds with the study by Abdou et al. (2024), which found that 57.6% of participants had unsatisfactory practices in self-care activities. Transfer abilities (Mean = 2.0) and mobility on level surfaces (Mean = 2.0) showed similar patterns, with about 25-27% of patients being independent. This finding aligns with Abu-Baker et al. (2021), who reported that 55.3% of participants reported moderate dependence on others for self-care activities. Bladder control and toilet use (both Mean = 2.0) showed moderate dependence levels, with approximately 28% of patients being independent. These findings support the broader literature on functional independence in orthopaedic patients, particularly the observations of Jiang et al. (2021) about varying levels of independence in activities of daily living. The overall pattern of moderate dependence across most activities (Grand Mean = 2.0) suggests that while complete dependence is not prevalent, most patients require some level of assistance in their daily activities. This finding is particularly significant in light of the research by Lai et al. (2021), which found that 60-70% of patients were relatively able to manage their condition, though the current study suggests a higher level of assistance needs. These results emphasize the importance of targeted interventions to improve

independence in self-care activities, particularly in areas showing higher dependence levels such as mobility on stairs and transfers. The findings also highlight the need for continued support and rehabilitation programs to enhance patients' self-care capabilities.

5.1.3 Quality of Life across Physical, Psychological and Social Domains

The findings reveal that 49% of respondents reported moderate quality of life, 24% high, and 27% low, suggesting that nearly half the patient population manages to maintain a central level of well-being despite their orthopaedic conditions. This distribution is consistent with numerous studies on chronic musculoskeletal diseases that place the average QoL at a reduced or moderate baseline, reflecting the burden of the condition. For instance, Alharbi et al.'s (2022) finding of a mean physical health score of 51.1 (SD 11.8) translates to a moderate QoL when scaled to a 0-100 range. The physical domain findings showed consistently moderate mean scores (Mean = 2.95-3.17) across various aspects, indicating persistent but manageable physical challenges. Pain management and its impact on daily activities (Mean = 2.98) remained a significant concern, with the moderate score reflecting the chronic nature of orthopaedic pain. This aligns with Alharbi et al.'s (2022) findings that physical health is the domain most impacted by orthopaedic conditions. Satisfaction with health and daily living activities (Mean = 3.03-3.17) was rated moderately, contrasting with Divintha et al.'s (2025) study which reported lower physical health domain scores (37.98 on a 100-point scale), suggesting that the patients in the current study have achieved a better functional adaptation. The psychological domain demonstrated mean scores ranging from 2.85-3.22, indicating a generally moderate psychological status. Particularly strong results were seen in concentration ability (Mean = 3.15) and feeling life to be meaningful (Mean = 3.16), suggesting good cognitive and existential coping mechanisms. These findings support Wojcieszek et al.'s (2023) research linking higher self-efficacy to better psychological outcomes in chronic pain patients. Negative emotions (Mean = 2.85) showed the lowest score in this

domain, reflecting Shetty et al.'s (2024) observations about the persistent impact of psychological factors like anxiety and depression on QoL due to the uncertainty and pain associated with the conditions. Social relationships and support systems showed consistently moderate mean outcomes (Mean = 2.933.10). Sexual life satisfaction scored lowest (Mean = 2.93), a common finding in populations suffering from pain and mobility restrictions. These results partially align with Abu-Baker et al.'s (2021) findings where social domains received favorable scores, though the current study's mean scores are lower, suggesting that while formal social support may be present, intimate relationships often suffer due to physical limitations.

Overall quality of life ratings were consistently moderate (Mean = 3.03-3.20) in the final domain, with particularly strong scores in safety perception and living conditions (Mean = 3.20). This corresponds with Mandour et al.'s (2022) findings where 62% of patients reported good quality of life post-surgery, emphasizing the protective role of a secure environment and access to health services (Mean = 3.05). These findings align with but also extend beyond previous research, suggesting that while orthopaedic conditions present significant challenges, many patients achieve satisfactory quality of life through self-care adaptation strategies and support systems. The results emphasize the importance of comprehensive care approaches addressing both physical and psychosocial aspects of patient well-being

5.1.4 Perceived Influence of Self-Care Practices on Quality of Life among Patients with Orthopaedic Conditions

The findings revealed a predominantly positive perception of self-care's influence on quality of life, with 65% of respondents reporting a positive impact. This aligns with Abu-Baker et al.'s (2021) study, which found that 48% of participants reported good quality of life, with 65.8% expressing satisfaction with their health management. Pain management through self-care emerged as a significant positive influence (Mean = 2.9), with 67% of respondents agreeing that

self-care helps them manage pain better. This finding corresponds with Wojcieszek et al.'s (2023) research, which demonstrated that higher levels of self-efficacy in self-care were associated with better quality of life outcomes, particularly in pain management. The impact of self-care on independence (Mean = 2.9) was strongly endorsed by 67% of respondents, and its contribution to life enjoyment despite medical conditions (Mean = 2.9) was supported by 65% of participants. These findings align with Jiang et al.'s (2021) study, which found a significant correlation between independence in activities of daily living and quality of life among patients with traumatic injuries. Physical strength and mobility improvements through self-care (Mean = 2.8) were reported by 65% of respondents. This supports Aprisunadi et al.'s (2023) findings on the benefits of early mobilization and self-care practices in improving physical outcomes and quality of life. Reduced dependence on others (Mean = 2.8) and improved emotional well-being (Mean = 2.8) were both positively rated by 63-65% of respondents. This aligns with Abu-Baker et al.'s (2021) findings where higher selfcare ability predicted better quality of life outcomes across multiple domains. The impact on health management confidence (Mean = 2.8) and overall quality of life (Mean = 2.8) was positively perceived by 65-66% of respondents. This corresponds with Mandour et al.'s (2022) study, which found that 62% of patients reported good quality of life after implementing selfcare practices. Improved coping with orthopaedic conditions through self-care (Mean = 2.8) was endorsed by 66% of respondents. This finding supports Shetty et al.'s (2024) research on the importance of physical and psychological factors in determining quality of life outcomes. The overall positive perception (Grand Mean = 2.8) across all dimensions suggests that self-care practices significantly contribute to improved quality of life among orthopaedic patients. This comprehensive positive impact aligns with previous research demonstrating the multifaceted benefits of self-care practices on physical, emotional, and social well-being. These findings emphasize the importance of promoting and supporting self-care practices among orthopaedic patients as a crucial component of improving

their overall quality of life. The results also suggest that self-care interventions should be designed to address multiple aspects of patient well-being, from physical functionality to emotional health and independence.

5.2 Implications of Findings for Nursing

The findings from this study have important implications for nursing practice, particularly in the care of patients with orthopaedic conditions. Nurses play a critical role in promoting selfcare practices and enhancing the quality of life of patients. The challenges identified—such as physical pain, limited mobility, emotional stress, knowledge deficits, and inadequate support—highlight the multifaceted needs of orthopaedic patients. Nurses must be equipped to address not just the physical needs of these patients but also their psychological and educational requirements.

One of the key implications is the need for nurses to provide tailored education that empowers patients with the knowledge and skills required for effective self-care. This includes teaching proper techniques for wound care, mobility, and pain management. Nurses must also assess each patient’s level of dependence and provide individualized interventions aimed at improving functional independence, especially in activities where patients showed moderate to high levels of dependence, such as mobility and personal hygiene.

Moreover, the emotional and psychological aspects of care cannot be overlooked. Nurses should be trained to recognize signs of emotional distress, such as anxiety or depression, and offer appropriate support or referrals to mental health services. Establishing a therapeutic nurse-patient relationship can significantly boost patients' motivation and adherence to self-care routines.

Family and caregiver involvement is also essential. Nurses should engage with caregivers, providing them with guidance and support to ensure they can assist patients effectively. This collaborative approach can reduce caregiver burden and improve patient outcomes.

5.3 Summary

The findings from this study have important implications for nursing practice, particularly in the care of patients with orthopaedic conditions. Nurses play a critical role in promoting self-care practices and enhancing the quality of life of patients. The challenges identified—such as physical pain, limited mobility, emotional stress, knowledge deficits, and inadequate support—highlight the multifaceted needs of orthopaedic patients. Nurses must be equipped to address not just the physical needs of these patients but also their psychological and educational requirements.

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5.4 Conclusion

This study has shed light on the self-care practices and challenges faced by patients with orthopaedic conditions. It revealed that while some patients are able to perform basic self-care tasks independently, many experience varying degrees of dependence, especially in areas requiring mobility, physical strength, or emotional resilience. These limitations often stem from pain, reduced mobility, lack of knowledge, and inadequate support systems.

The findings underscore the crucial role nurses play in supporting these patients, not only through physical care but also by providing education, emotional support, and advocacy. By understanding the unique challenges faced by orthopaedic patients, nurses can develop targeted interventions that promote independence, improve self-care abilities, and enhance overall quality of life. Ultimately, addressing the needs of orthopaedic patients requires a holistic and patient-centered approach that combines clinical expertise, compassionate care, and effective communication. With the right support, patients can be empowered to take greater control of their health and recovery journey.

5.5 Limitations of the Study

Despite the valuable insights gained from this research, several limitations should be acknowledged. First, the study was conducted within a single healthcare facility, which may limit the generalizability of the findings to other settings or populations. The experiences and self-care practices of patients with orthopaedic conditions in different hospitals or regions may vary due to differences in resources, staffing, and institutional policies.

Secondly, the study relied heavily on self-reported data, which is subject to recall bias and social desirability bias. Participants may have overestimated or underestimated their level of independence or the challenges they faced in order to present themselves in a more favourable light.

5.6 Recommendations

Based on the findings of this study, several recommendations are proposed to improve the independence in self-care among patients with orthopaedic conditions and to guide nursing practice and policy development.

• Healthcare facilities should prioritize patient education as a core component of orthopaedic care. Nurses should be trained and empowered to deliver consistent, clear, and practical self-care instructions tailored to the individual needs of patients. This includes guidance on mobility, hygiene, nutrition, and the use of assistive devices.

• More resources should be allocated to ensure the availability of support systems, such as physical therapists and occupational therapists, who can work collaboratively with nurses to support patient recovery and promote independence. Early and continuous rehabilitation interventions should be integrated into the patient's care plan.

• Institutional policies should encourage the involvement of family members or caregivers in the self-care process. Providing them with the necessary knowledge and skills can enhance the patient's ability to manage their care effectively at home after discharge.

• The development and implementation of follow-up programs can help monitor the progress of patients with orthopaedic conditions and provide continued support, thereby reducing the risk of complications and readmissions.

• Further research should be encouraged, particularly studies that focus on the long-term outcomes of nursing interventions aimed at promoting self-care independence in patients with orthopaedic conditions. These efforts will contribute to a more holistic and effective approach to orthopaedic care, ultimately improving patient outcomes and satisfaction.

5.7 Suggestions for Further Studies

This study has provided valuable insight into the role of nurses in promoting independence in self-care among orthopaedic patients; however, there remains a need for further research to deepen understanding and broaden the scope of findings.

• Future studies could explore the long-term effects of nursing interventions on the self-care abilities of orthopaedic patients post-discharge, as this would provide a more comprehensive understanding of patient outcomes beyond the hospital setting. Additionally, comparative studies between different healthcare institutions or regions could reveal how varying nursing practices, resources, and policies impact patient independence.

• Research focusing on the specific challenges nurses face in implementing self-care education for patients with orthopaedic conditions would also be beneficial. Such studies could inform the development of targeted training programs and institutional support mechanisms.

• Moreover, there is a need to investigate the perspectives of patients with orthopaedic conditions themselves regarding the support they receive from nurses. Understanding their experiences and satisfaction levels could help refine patient-centered care strategies.

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APPENDIX I

UNIVERSITY OF BENIN (UNIBEN) BENIN CITY, EDO STATE

FACULTY OF NURSING SCIENCES

Dear Respondent,

I am a student of the above-named institution conducting a study on the topic "**PERCEIVED INFLUENCE OF SELF-CARE PRACTICE ON QUALITY OF LIFE AMONG PATIENTS WITH ORTHOPAEDIC CONDITIONS IN A TERTIARY HEALTH INSTITUTION IN BENIN-CITY, EDO STATE"** This questionnaire contains five sections; the first is a demographic profile for a questionnaire on the topic, followed by four sections that are structured towards finding answers to the specified research topic. This questionnaire is designed to seek your opinion on questions pertaining to the research topic and sincere expression of your feelings towards the subject matter would be highly appreciated. Participation

in the research is voluntary and information would be kept confidential. Thank you for your willingness to participate.

_____

Researcher Signature

Edokpa Ebalunosen Vera

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

Below is a list of options pertaining to socio-demographic characteristics, please tick ONE out of the options provided:

1. Age: <20 ( ), 20-24 ( ), 25-29 ( ), 30-34 ( ), 35years and above ( )
2. Gender: Male ( ), Female ( )
3. Religion: Christianity ( ), Islam ( ), Traditional ( )
4. Ethnicity: Yoruba ( ), Hausa ( ), Igbo ( ), Benin ( ), Esan(), Others (please specify)
5. Marital Status: single ( ), Married ( ), Divorced ( ), widow (er) ( )
6. Level of Education: primary ( ), Secondary ( ), Tertiary ( ), post grads ( ), No formal education ()
7. Occupation: Unemployed ( ), Self-employed (), Government employed ( ), private sector employed ( ), Retired
8. What type of orthopaedic condition were you diagnosed with? Fracture ( ) Joint replacement ( ) Spinal ( ) others (specify) _____
9. Duration since diagnosis/surgery: 0-1month( ), 2-3 months ( ), 4-6 months ( ), more than 6 months

Section B: Challenges Faced in Practicing Self-Care

Instruction: Please indicate your level of agreement with each statement. (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree)

S/n	Item	Strongly agree	Agree	Disagree	Strongly disagree
1	I experience physical pain that makes it difficult for me to perform self-care activities.				
2	I find it hard to practice self-care due to lack of mobility.				
3.	Lack of knowledge about proper selfcare techniques affects my ability to manage my condition.				
4.	I often feel emotionally stressed, which affects my motivation to engage in self-care.				
6.	I do not receive enough support from family or caregivers to assist with my self-care activities.				
7.	I find it difficult to understand healthcare instructions regarding selfcare.				
8	Lack of encouragement from healthcare providers affects my commitment to practicing self-care.				

SECTION C: Current Self-Care Practices Among Orthopaedic Patients

Below is a list of questions related to the level of assistance needed by orthopaedic patients with their self care practices in a tertiary institution. Please kindly tick one option:

S/N	**Activity**	**Independent**	**Some Assistance Needed**	**Fully Dependent**
1	Feeding			

2	Bathing			
3	Grooming			
4	Dressing			
5	Bowel control			
6	Bladder control			
7	Dressing			
8	Toilet use			
9	Transfers (bed to chair and back)			
10	Mobility on level surfaces			
11	Mobility on stair case			

SECTION D: Assessment of Quality of Life

Instructions:

Please respond to each statement according to how you have felt during the last two weeks.

(Response options: 1 = Not at all, 2 = Not much, 3 = Moderately, 4 = Very much / A great deal / Good, 5 = Extremely / Completely / Very good)

1. Physical Domain

S/N	Statements	1	2	3	4	5
1	How much do you feel that pain prevents you from doing what you need to do?					
2	How much do you need medical treatment to function in your daily life?					

3	Do you have enough energy for everyday life?					
4	How satisfied are you with your health?					
5	How satisfied are you with your ability to perform daily living activities?					
6	How well are you able to get around?					

2. Psychological Domain

S/N	Statements	1	2	3	4	5
1	How much do you enjoy life?					
2	How well are you able to concentrate?					
3	How much are you able to accept your bodily appearance?					
4	How satisfied are you with yourself?					
5	How often do you have negative feelings (e.g., blue mood, despair, anxiety, depression)?					
6	To what extent do you feel life to be meaningful?					

3. Social Domain

S/N	Statements	1	2	3	4	5
1	How satisfied are you with your personal relationships?					
2	How satisfied are you with your sex life?					
3	How satisfied are you with the support you get from your friends?					

4. General Quality of Life and Environment

S/N	Statements	1	2	3	4	5
1	How would you rate your overall quality of life?					
2	How satisfied are you with the conditions of your living place?					
3	How available is the information you need in daily life?					
4	How satisfied are you with your access to health services?					
5	How safe do you feel in your daily life?					

SECTION E: Perceived Influence of Self-Care Practice on Quality of Life

Instruction:

Please indicate the extent to which you agree or disagree with the following statements about your self-care practices and their influence on your quality of life.

S/N	Statements	Strongly agree	Agree	Disagree	Strongly disagree
1	Practicing self-care helps me manage my pain better.				
2	Regular self-care activities improve my physical strength and mobility.				
3	Engaging in self-care reduces my dependence on others for daily activities.				
4	Self-care practices improve my emotional well-being.				
6	My ability to perform self-care activities improves my confidence in managing my health.				
7	Self-care activities help me to enjoy life more				

	despite my condition.				
8	Engaging in self-care practices makes me feel more independent.				
9	I feel that self-care practice has significantly improved my overall quality of life.				
10	Self-care practices have helped me cope better with my orthopaedic condition.				

RELIABILITY OF INSTRUMENT

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.71	0.70	46

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I experience physical pain that makes it difficult for me to perform self-care activities.	53.4931	15.077	-.047	.701
I find it hard to practice self-care due to lack of mobility.	54.1111	15.302	.204	.210
Lack of knowledge about proper self-care techniques affects my ability to manage my condition.	53.4167	15.126	-.061	.185

I often feel emotionally stressed, which affects my motivation to engage in self-care.	87.3188	27.590	-.123	.099
I do not receive enough support from family or caregivers to assist with my self-care activities.	87.4813	26.138	.053	.092
I find it difficult to understand healthcare instructions regarding self-care.	53.4931	15.077	-.047	.565
Lack of encouragement from healthcare providers affects my commitment to practicing self-care.	53.2986	14.141	.055	.196
Feeding (level of assistance)	86.3000	24.714	.114	.081
Bathing (level of assistance)	82.2313	27.034	-.044	.071
Grooming (level of assistance)	87.4625	26.917	-.043	.080
Dressing (level of assistance)	53.4931	15.077	-.047	.165
Bowel control (level of assistance)	87.2313	27.034	-.044	.078
Bladder control (level of assistance)	87.3188	27.590	-.123	.099
Toilet use (level of assistance)	87.3188	27.590	-.123	.099
Transfers (bed to chair and back) (level of assistance)	87.4813	26.138	.053	.092
Mobility on level surfaces (level of assistance)	53.4931	15.077	-.047	.165
Mobility on stair case (level of assistance)	87.4500	25.582	.125	.071
How much do you feel that pain prevents you from doing what you need to do?	87.3188	27.590	-.123	.099
How much do you need medical treatment to function in your daily life?	87.4813	26.138	.053	.092
Do you have enough energy for everyday life?	87.3188	27.590	-.123	.099
How satisfied are you with your health?	87.4813	26.138	.053	.092
How satisfied are you with your ability to perform daily living activities?	86.3000	24.714	.114	.081
How well are you able to get around?	82.2313	27.034	-.044	.071
How much do you enjoy life?	87.4625	26.917	-.043	.080
How well are you able to concentrate?				
How much are you able to accept your bodily appearance?	87.6438	27.325	-.076	.081
How satisfied are you with yourself?	87.5938	26.658	.058	.077

How often do you have negative feelings (e.g., blue mood, despair, anxiety, depression)?	87.3188	27.590	-.123	.099
To what extent do you feel life to be meaningful?	87.4813	26.138	.053	.092
How satisfied are you with your personal relationships?	86.2813	26.719	-.064	.095
How satisfied are you with your sex life?	86.3500	25.675	.024	.090
How satisfied are you with the support you get from your friends?	86.3000	24.714	.114	.081
How would you rate your overall quality of life?	82.2313	27.034	-.044	.071
How satisfied are you with the conditions of your living place?	87.4625	26.917	-.043	.080
How available is the information you need in daily life?	86.3000	24.714	.114	.081
How satisfied are you with your access to health services?	82.2313	27.034	-.044	.071
How safe do you feel in your daily life?	87.4625	26.917	-.043	.080
Practicing self-care helps me manage my pain better.	87.3188	27.590	-.123	.099
Regular self-care activities improve my physical strength and mobility.	86.3000	24.714	.114	.081
Engaging in self-care reduces my dependence on others for daily activities.	82.2313	27.034	-.044	.071
Self-care practices improve my emotional well-being.	87.4625	26.917	-.043	.080
My ability to perform self-care activities improves my confidence in managing my health.	82.2313	27.034	-.044	.071
Self-care activities help me to enjoy life more despite my condition.	87.4625	26.917	-.043	.080
Engaging in self-care practices makes me feel more independent.	87.3188	27.590	-.123	.099
I feel that self-care practice has significantly improved my overall quality of life.	87.4813	26.138	.053	.092
Self-care practices have helped me cope better with my orthopaedic condition.	87.5938	26.658	.058	.077

How available is the information you need in daily life?	87.3188	27.590	-.123	.099
Comment: The reliability analysis using Cronbach's Alpha, yielding a result of 0.71, for the overall scale. Additionally, the Cronbach's Alpha of 0.52 when the items are standardized. These values suggest a good level of internal consistency among the items in this scale.				