PHYSIOTHERAPY TREATMENT SATISFACTION OF PATIENTS WITH CHRONIC MUSCULOSKELETAL PAIN IN TWO MAJOR HOSPITALS IN BENIN CITY

BY

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CERTIFICATION

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

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DEDICATION

This project is dedicated to God Almighty and to my family, who stood by me with their love support and prayers.

ABSTRACT

Background: Chronic musculoskeletal (MSK) pain poses a significant healthcare challenge, affecting millions of individuals worldwide and imposing significant burdens on both patients and healthcare systems. Physiotherapy plays a role in the management of Musculoskeletal pain, despite the role played there remain a scarcity of information regarding patient satisfaction specifically in the domain of physiotherapy within the Nigerian context

Aim: The aim of the study was to determine the level of satisfaction of patients with chronic musculoskeletal pain with physiotherapy treatment in two major hospitals in Benin City.

Methods: It was a cross sectional design study where 46 Respondents (female=27, male=19) were recruited via simple random sampling technique. Patient satisfaction with outpatient physiotherapy treatment was assessed using a validated multidimensional physiotherapy outpatient satisfaction scale (PTOPS) questionnaire. Descriptive statistics of frequency, percentage, mean and standard deviation were used to summarized data while inferential statistics of Mann Whitney U and Kruskal Wallis test was used to determine the differences in satisfaction scores between sociodemographic variables. The significance level was set at < 0.05.

Results: The most common site of chronic MSK pain was low back pain 19 (41.3%). The 'PTOPS' questionnaire categorised and scored satisfaction items under four domains, Enhancer, Detractor, Location and Cost. The mean score ± S.D, for each domain were: 'Enhancer' 40.93 ± 4.03; 'Detractor' 27.65 ± 6.25; 'Location' 22.26 ± 4.80; 'Cost' 19.67 ± 2.44." Majority of the Respondents reported an overall general satisfaction score (110.52 ± 5.70). Male (median=115.00) had a higher level of satisfaction compared to female (median=108.00), however there was no significant difference in satisfaction score across age, educational status, marital status, and socioeconomic status ($p = >0.05$)

Conclusion: The study found high satisfaction levels among patients with chronic musculoskeletal pain undergoing physiotherapy treatment in Benin City hospitals. Although satisfaction levels varied by gender, there were no significant variations in satisfaction based on education, age, or socioeconomic statuss.

Keywords: Musculoskeletal pain, patient satisfaction, outpatient, physiotherapy.

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CHAPTER ONE

INTRODUCTION

Background of study

Chronic musculoskeletal pain poses a significant healthcare challenge, affecting millions of individuals worldwide and imposing significant burdens on both patients and healthcare systems (El-Tallawy *et al.*, 2021). The World Health Organization (WHO) reports that approximately 20–33 % of the global population, equivalent to 1.75 billion individuals, suffer from one out of the various forms of chronic musculoskeletal pain (WHO, 2022). Musculoskeletal (MSK) pain includes both acute and chronic pain that affects bones, muscles, ligaments, tendons, and even nerves and the pain associated with MSK disorders represents a widespread medical and socioeconomic concern on a global scale (Smith *et al.*, 2014). Chronic MSK pain significantly worsens during daily activities, often leading to increased reliance on medication, frequent sick leave, and disability pensions and this condition considerably diminishes the overall quality of life experienced by affected individuals (El-Tallawy *et al.*, 2021).

Physiotherapy is a healthcare profession that encompasses the assessment of patients through the application of physical tests, aimed at identifying injuries and assessing their severity and it is dedicated to delivering curative and rehabilitative services, harnessing the potential of physical agents and modalities to facilitate recovery and enhance overall well-being (Oke, 2004; Oke and Kubeyinje, 2013). Physiotherapy is a cornerstone in the multidisciplinary approach to managing MSK pain, aiming to alleviate pain, improve function, and enhance the overall quality of life for afflicted individuals (Trulsson-schouenborg *et al.*, 2021).

In Nigeria, physiotherapy services are primarily offered in secondary and tertiary healthcare facilities, while primary health centers typically have limited or no provision of such care (Mbada *et al.*, 2019). The practice of first contact physiotherapy, where patients seek care directly from physiotherapists without prior referral, is not common. Instead, physiotherapists often rely on referrals from physicians and other healthcare practitioners (Odebiyi *et al.*, 2016). However, there is still an avenue for first-line access, as some patients opt to self-refer or are recommended by family members and friends, bypassing the need for a referral from another healthcare professional (Odole *et al.*, 2023).

Patient satisfaction refers to the extent to which the patients perceive that their needs and expectations are met by the services provided (Debono and Travaglia, 2009). In the evolving landscape of healthcare, where patient-centered approaches have gained prominence, patient satisfaction has risen to prominence as a pivotal measure of care quality (Kittelson *et al.*, 2020). The perspectives of patients regarding their healthcare experiences hold intrinsic significance for clinicians (Wagner and Bear, 2009) and this constitute one of the three fundamental pillars of evidence-based physiotherapy practice (Hush and Alison, 2011). Patient satisfaction with physiotherapy care serves as important feedback on the quality of healthcare provided to patients by the clinicians (Odole *et al.*, 2023). It offers valuable feedback to physiotherapists, allowing them to assess their services and identify areas that may require improvement (Hills and Kitchen, 2007).

Patient satisfaction with physiotherapy care has been shown to be a significant predictor of patients' return visits for physiotherapy service (Boshoff and Gray, 2004). Previous study by Odumodu *et al.* (2020) reported that almost all 97.9% the Respondents reported being satisfied or very satisfied with their overall experience in the physiotherapy clinics while Odole *et al.*

(2023) reported that 49.0% and 7.8% of the Respondents reported excellent and fair satisfaction, respectively, with physiotherapy in the management of chronic mechanical neck pain. Prior studies have also shown that sociodemographic factors such as gender, age and marital status have influence on the level of satisfaction with physiotherapy service. Gender may play a mediating role in determining the level of patient satisfaction, with studies suggesting that females tend to report higher levels of satisfaction compared to males (Hills and Kitchen, 2007). Moreover, patient satisfaction serves as a key factor influencing patients' cooperation and adherence to prescribed treatment regimens (Xesfingi and Vozikis, 2016). Additionally, research suggests that the level of satisfaction can be influenced by marital status, with married individuals often reporting higher levels of contentment compared to their single, divorced, or widowed counterparts (Odumodu *et al.*, 2020). Furthermore, there appears to be an age-related discrepancy in patient satisfaction, with older individuals tending to express greater satisfaction than their younger counterparts (Casserley-Feeney *et al.*, 2008). Odole *et al.* (2023) study found no significant relationship between age, gender and marital status with level of satisfaction of physiotherapy services. This shows the multifaceted impact of patient satisfaction on various aspects of healthcare delivery and patient outcomes.

1.2 Statement of the Problem

The shift towards patient-centered healthcare has elevated patient satisfaction as a pivotal measure of care effectiveness (Edgman-Levitan and Schoenbaum, 2018). However, in countries like Nigeria and many other developing nations, the perspectives and level of satisfaction of patients, who are the recipients of care, are often overlooked in assessments of healthcare service quality (Obi *et al.*, 2018). Additionally, there remains a scarcity of information regarding patient satisfaction specifically in the domain of physiotherapy within the Nigerian context (Danazumi

et al. in 2019). This emphasizes the importance of conducting thorough investigations in this domain to gain a deeper understanding and effectively address the levels of patient satisfaction during physiotherapy treatment in Nigeria. Hence, the aim of the study was to examine the level of satisfaction of patients with chronic musculoskeletal pain with physiotherapy treatment in two major hospitals in Benin City.

1.3 Research questions

The following questions were raised to guide this study:

i. What is the level of patient satisfaction with physiotherapy treatment for chronic musculoskeletal pain?

ii. What is the relationship between age and level of satisfaction with physiotherapy treatment for chronic musculoskeletal pain?

iii. What is the relationship between gender and level of satisfaction with physiotherapy treatment for chronic musculoskeletal pain?

iv. What is the relationship between marital status and level of satisfaction with physiotherapy treatment for chronic musculoskeletal pain?

v. What is the relationship between education level and level of satisfaction with physiotherapy treatment for chronic musculoskeletal pain?

vi. What is the relationship between location of pain and level of satisfaction with physiotherapy treatment for chronic musculoskeletal pain?

1.3 Aim of study

The aim of study was to determine the level of satisfaction of patients with chronic musculoskeletal pain with physiotherapy treatment in two major hospitals in Benin City.

1.3.1 Specific objectives

i. To evaluate patient satisfaction levels with physiotherapy interventions for chronic musculoskeletal pain in two major hospitals in Benin City.

ii. To investigate the potential relationship between socio-demographic variables (e.g., age, gender, marital status) and levels of patient satisfaction in both hospital settings.

1.4 Research hypotheses

1.4.1 Main hypotheses

i. There would be no significant relationship between socio-demographics and level of satisfaction with physiotherapy treatment for chronic musculoskeletal pain.

Sub hypotheses

i. There would be no significant relationship between age and level of satisfaction with physiotherapy treatment for chronic musculoskeletal pain.

ii. There would be no significant relationship between gender and level of satisfaction with physiotherapy treatment for chronic musculoskeletal pain.

iii. There would be no significant relationship between marital status and level of satisfaction with physiotherapy treatment for chronic musculoskeletal pain.

iv. There would be no significant relationship between level of education and level of satisfaction with physiotherapy treatment for chronic musculoskeletal pain.

v. There would be no significant relationship between location of pain and level of satisfaction with physiotherapy treatment for chronic musculoskeletal pain.

1.5 Significance of study

i. Understanding the levels of patient satisfaction with physiotherapy treatment for chronic musculoskeletal pain could lead to improvements in the quality of care provided.

ii. Physiotherapists could benefit from understanding patient perspectives and preferences and this insight can lead to more patient-centered care, potentially improving outcomes and patient-provider relationships.

iii. The findings of this study could add to the body of knowledge on patient satisfaction in physiotherapy settings, potentially paving the way for future research and advancements in the field.

1.6 Scope of study/delimitations

i. The study was conducted in two major hospitals located in Benin City, Nigeria.

ii. The study focused on individuals experiencing chronic musculoskeletal pain of more than 3 months who are currently undergoing physiotherapy treatment in the selected hospitals.

iii. The study made use of the Physical Therapy Outpatient Satisfaction Scale (PTOPS) questionnaire to assess the level of satisfaction of the patients.

1.7 Limitations

i. The study utilized data from only two major hospitals in Benin City, which may not be fully representative of the broader population of patients with chronic musculoskeletal pain in Nigeria.

ii. The study focused specifically on patients with chronic musculoskeletal pain receiving physiotherapy treatment in Benin City. Therefore, the findings may have limited generalizability to other patient populations or healthcare settings within Nigeria or beyond.

iii. The assessment of patient satisfaction relied on self-reported measures using PTOPS which could have been subjected to response biases and may not fully capture the complexity of patient experiences.

1.8 Definitions of terms

Musculoskeletal pain - Musculoskeletal (MSK) pain encompasses both acute and chronic discomfort that affects bones, muscles, ligaments, tendons, and even nerves.

Patient satisfaction: This refers to the extent to which the patients perceive that their needs and expectations are met by the services provided.

List of abbreviations

MSK- Musculoskeletal.

PTOPS- Physical Therapy Outpatient Satisfaction Scale.

CHAPTER TWO

LITERATURE REVIEW

2.1 Physiotherapy

The World Confederation for Physical Therapy (WCPT) and the American Physical Therapy Association (APTA) have both released policy statements on the definition of physiotherapy. Physiotherapy is a health profession concerned with the prevention, assessment, treatment, and management of movement disorders arising from conditions and diseases that affect people (WCPT, 2019). According to American Physical Therapy Association, physiotherapy was described as a dynamic profession with widespread clinical applications in the restoration, maintenance, and promotion of optimal physical function (APTA, 2021). According to the Chartered Society of Physiotherapy (2002), physiotherapy is a health care profession that focuses on human function, movement, and maximizing potential. It employs physical approaches to promote, maintain, and restore physical, psychological, and social well-being while accounting for variations in health status. Physiotherapy is a science-based profession that sees human mobility as essential to an individual's health and well-being, according to Stedman's Medical Dictionary (2000).

Physiotherapy is a healthcare profession that encompasses the assessment of patients through the application of physical tests, aimed at identifying injuries and assessing their severity and it is dedicated to delivering curative and rehabilitative services, harnessing the potential of physical agents and modalities to facilitate recovery and enhance overall well-being (Oke, 2004). Physiotherapy is a cornerstone in the multidisciplinary approach to managing musculoskeletal

(MSK) pain, aiming to alleviate pain, improve function, and enhance the overall quality of life for afflicted individuals (Trulsson-schouenborg *et al.*, 2021).

The primary aim of physiotherapy is to aid individuals in reaching, maintaining, or reclaiming their optimal range of motion and functional abilities. Physical therapists utilize their expertise in human anatomy, physiology, and kinesiology to enhance the movement and functional capacity of people across all age groups, from infants to the elderly. This specialized knowledge is applied to maximize health and overall quality of life for individuals by improving their mobility and ability to perform daily activities.

Physiotherapists don't just address acute and chronic conditions; they also play a crucial role in injury prevention and overall health promotion. Their work involves crafting personalized exercise routines, evaluating ergonomics, and suggesting lifestyle adjustments to optimize physical well-being and preempt potential health issues. Educating individuals on injury prevention, proper posture, body mechanics, and ergonomics is a key part of their practice. Additionally, they offer guidance on managing chronic conditions, like arthritis or diabetes, through lifestyle modifications (CPA, 2021).

Rehabilitation forms a significant aspect of physiotherapy, focusing on aiding patients in recovering physical function and autonomy post-surgery, injury, or illness. Customized rehabilitation plans are devised for each patient, accounting for their age, health status, lifestyle, and objectives. These tailored programs encompass exercises, mobility drills, balance and gait training, alongside various interventions aimed at restoring strength, flexibility, coordination, and functional abilities (APTA, 2021).

2.1.2 Goals of physiotherapy

According to WCPT (2019), Physiotherapists work across various settings and with individuals of different ages to address a wide array of issues related to movement, function, and overall well-being. Their primary goals include:

- Restoring Function: Physiotherapists help individuals regain function and mobility after injuries, surgeries, or illnesses. This may involve exercises, manual therapy, and other techniques to restore strength, flexibility, and range of motion.
- Preventing Injury: They educate individuals on proper body mechanics and techniques to reduce the risk of injury. This preventive aspect often involves developing personalized exercise programs and ergonomic recommendations for different lifestyles and professions.
- Managing Chronic Conditions: Physiotherapy plays a crucial role in managing chronic conditions like arthritis, chronic pain, neurological disorders, and cardiovascular conditions. Therapists use various interventions to alleviate symptoms and improve the overall quality of life for individuals living with these conditions.
- Improving Balance and Coordination: Physiotherapists work on enhancing balance and coordination, which is particularly crucial for older adults to prevent falls and maintain independence.
- Rehabilitation: Post-surgical rehabilitation or recovery from accidents is a significant area where physiotherapists assist individuals in regaining strength, mobility, and function.
- Promoting Health and Wellness: Beyond treating specific injuries or conditions, physiotherapists focus on overall health and wellness. They emphasize the importance of

regular physical activity, proper posture, and healthy movement patterns to improve and maintain health.

In accomplishing these goals, physiotherapists draw on their understanding of human anatomy, physiology, biomechanics, and exercise science. They design personalized treatment plans tailored to individual needs, considering factors like age, health condition, and lifestyle.

2.2 Musculoskeletal pain

The International Association for the Study of Pain (IASP) defines pain as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage (IASP, 1979). The definition of pain has evolved over time as our understanding of the underlying mechanisms and subjective experience of pain has grown. Chronic pain is defined as pain that lasts for more than 12 weeks and persists despite attempts at treatment (Woessner and James, 2006). Chronic pain can be caused by a variety of conditions, including nerve damage, arthritis, or fibromyalgia. Chronic pain is often described as dull, aching, or burning, and it can be accompanied by other symptoms such as fatigue, depression, and anxiety (Woessner and James, 2006). Musculoskeletal (MSK) pain includes both acute and chronic pain that affects bones, muscles, ligaments, tendons, and even nerves and the pain associated with MSK disorders represents a widespread medical and socioeconomic concern on a global scale (Smith *et al.*, 2014). These conditions manifest in different areas of the body, involving the upper and lower limbs as well as the back (Punnett & Wegman, 2004).

Chronic MSK pain significantly amplifies hardship in daily activities, amplifies reliance on medications, and leads to frequent absenteeism and disability claims, significantly reducing overall quality of life (El-Tallawy *et al.*, 2021). Moreover, it poses a substantial public health

challenge, generating substantial financial burdens on healthcare systems and disability insurance (Cimmino *et al.*, 2011). While musculoskeletal pain primarily manifests as somatic discomfort, its presence doesn't exclude the coexistence of other pain syndromes, including neuropathic or visceral pain (El-Tallawy *et al.*, 2021). Chronic low back pain, neck pain, and pain associated with conditions like osteoarthritis and rheumatoid arthritis stand as the most prevalent forms of musculoskeletal pain (El-Tallawy *et al.*, 2021. However, it encompasses various other types, such as muscle strains, pain linked to fractures, shoulder pain, and more. The risk of experiencing musculoskeletal pain escalates with age, although it can emerge at any stage of life. Almost everyone encounters some form of musculoskeletal pain at some point in their lifetime. Many individuals report persistent or recurring symptoms, amplifying the physical, psychological, and socio-economic repercussions of MSK pain (Babatunde *et al.*, 2017).

2.2.1 Types of Musculoskeletal pain

Musculoskeletal pain can cause by different conditions such as low back pain, genu valgum, dropped shoulder, scoliosis, lordosis, kyphosis, pes planus, and other regional pain syndromes (Punnett & Wegman, 2004; Olayinka *et al.*, 2009).

- **Low back pain:** Low back pain stands as one of the most prevalent musculoskeletal disorders, affecting approximately 38.9% of the global population (Hoy *et al.*, 2012). It is characterized as pain situated below the 12th rib and above the buttocks' lower crease, potentially accompanied by radiating sensations in the lower extremities (Balagué *et al.*, 2012). Based on its duration, low back pain is categorized into acute, subacute, and chronic (extending beyond 3 months) (Koes *et al.*, 2010). Additionally, other common back-related musculoskeletal issues include scoliosis, kyphosis, and lordosis.

- **Neck pain:** Neck pain can exist as either non-specific or arising from incidents like whiplash injuries, frequently occurring in road traffic accidents. Non-specific neck pain results from postural or mechanical complications (Binder, 2008). Factors contributing to neck pain encompass cervical trauma (like whiplash injuries), cervical spondylosis, sustained posture during work or sitting, anxiety, depression, neck strain, and sports-related injuries (Ming *et al.*, 2004; Binder, 2008). A study by Yeun and Han (2017) highlighted that neck pain is more prevalent among women, potentially linked to differences in muscle mass around the neck region between males and females.

- **Shoulder pain:** Shoulder pain represents another prevalent musculoskeletal symptom, involving discomfort in areas around the glenohumeral, acromioclavicular, and sternoclavicular joints, as well as their associated soft tissues (Murphy & Carr, 2010). Causes of shoulder pain include conditions such as frozen shoulder, instability in the glenohumeral and acromioclavicular joints, soft tissue trauma, poor posture, and muscle imbalances (Ming *et al.*, 2004; Murphy & Carr, 2010).

- **Arthritis:** Arthritis pain stands as one of the most prevalent causes of chronic pain worldwide. Arthritis encompasses a group of conditions characterized by inflammation and stiffness in the joints, resulting in pain and decreased mobility (Kidd *et al.*, 2007). The two most common types of arthritis are osteoarthritis and rheumatoid arthritis. Arthritis pain can significantly impact a person's quality of life, leading to chronic discomfort, stiffness, reduced mobility, and difficulties in performing daily activities (Malm *et al.*, 2017).

2.2.2 Epidemiology of chronic musculoskeletal pain

The World Health Organization (WHO) reports that approximately 20–33 % of the global population, equivalent to 1.75 billion individuals, suffer from one out of the various forms of chronic musculoskeletal pain (WHO, 2022).

Approximately 18% of people in Europe and 25% of people in the United States suffer from moderate-to-severe chronic pain, indicating the prevalence of chronic pain in the Western world (Breivik *et al.*, 2008; WHO, 2022). Between 13.5% to 47% of the general population have had one or more short periods of musculoskeletal discomfort as a result of injury or overuse (El-Tallawy *et al.*, 2021).

The frequency of different kinds of musculoskeletal pain shows significant variations. For example, rheumatoid arthritis and fibromyalgia are very uncommon rheumatologic disorders involving musculoskeletal pain, affecting only approximately 2% of adults, whereas low back pain (LBP) is extremely common, affecting 30–40% of adults (Koechlin *et al.*, 2019). Knee pain affects between 10% to 15% of people, but neck and shoulder discomfort is more common, ranging from 15% to 20% (Bedson *et al.*, 2007).

2.2.3 Risk factors for chronic musculoskeletal pain

Many different things can cause chronic musculoskeletal pain, and a number of risk factors are involved in its development. The following are some typical risk factors for chronic musculoskeletal pain

- **Age:** One of the main risk factors for persistent musculoskeletal discomfort is advanced age. Chronic pain can result from age-related changes in joints and tissues, such as osteoarthritis,

degenerative disc disease, and other conditions. Osteoarthritis is a prevalent cause of knee discomfort in the elderly, affecting more than one-third of those over 60 (GBD, 2017).

- **Gender:** Gender has been associated with chronic MSK pain, women experience pain 1.5–2 times more frequently than men do, with fibromyalgia showing a ratio of more than 4 females to 1 male (Bedson *et al.*, 2007).
- **Trauma and Injuries:** Chronic pain may be more likely to occur after prior trauma, accidents, or injuries to the muscles, ligaments, or bones, particularly if the injury results in long-term damage or improper healing (Smith *et al.*, 2014)
- **Occupational factors:** Jobs that require heavy lifting, repeated motions, bad posture, extended periods of sitting or standing, or poor ergonomics can all lead to chronic musculoskeletal pain, which can include injuries from repetitive strain or lower back pain (Mills *et al.*, 2019).
- **Bad Posture:** Whether standing, sitting, or sleeping, bad posture can strain muscles and joints and eventually cause chronic discomfort.
- **Obesity:** Carrying too much weight around can put stress on joints, especially in weight-bearing regions like the knees and hips, and can aggravate chronic joint pain and osteoarthritis (McVinnie, 2013)
- **Genetics and Family History:** Some people may be more susceptible to chronic pain due to a hereditary predisposition to specific musculoskeletal disorders.

- **Psychological Factors:** Pain sensitivity and tolerance can be affected by mental health problems such depression, anxiety, stress, and trauma, which can also intensify or exacerbate the impression of chronic pain (Vadivelu *et al.*, 2017).
- **Lack of Exercise:** A sedentary lifestyle or insufficient exercise can weaken muscles, decrease range of motion, and aggravate chronic pain syndromes.
- **Long-Term Medical Conditions:** Chronic musculoskeletal pain is a common sign of autoimmune diseases such as lupus, fibromyalgia, rheumatoid arthritis, and others.
- **Smoking and Unhealthy Lifestyle Practices**: Smoking may impede tissue repair and blood flow, which may exacerbate chronic pain. A poor diet and substance misuse are examples of unhealthy lifestyle choices that might affect how someone perceives pain**.**

2.2.4 Physiotherapy approaches for chronic musculoskeletal pain

Physiotherapy can help relieve low back pain and prevent future episodes by strengthening the muscles that support the spine, improving flexibility, and correcting posture (George *et al.*, 2021). Physiotherapy plays a crucial role in the management of chronic by providing non-invasive, evidence-based interventions to reduce pain, improve function, and prevent future episodes.

Here is an overview of physiotherapy interventions commonly used in LBP management:

- **Exercise Therapy:** Exercise programs tailored to the individual's specific needs and capabilities are a cornerstone of physiotherapy for LBP. These may include strengthening exercises, stretching, aerobic conditioning, and core stabilization exercises. Exercise therapy has been shown to improve pain, function, and quality of life in individuals with chronic LBP (Steffens *et al.*, 2016).

- **Manual Therapy:** Manual therapy techniques, such as spinal mobilization and manipulation, are commonly employed by physiotherapists to reduce pain, improve mobility, and restore proper alignment. Research supports the effectiveness of manual therapy as part of a comprehensive approach to LBP management (Rubinstein *et al.*, 2019).

- **Modalities and Physical Agents:** Physiotherapists use various modalities like heat, cold, ultrasound, electrical stimulation (TENS), laser therapy, or acupuncture to alleviate pain, reduce inflammation, and promote tissue healing (Chou *et al.*, 2017).

- **Activity Modification and Ergonomic Advice:** Assessing and modifying daily activities and work environments to improve posture and ergonomics can help prevent exacerbation of pain and reduce strain on muscles and joints.

- **Functional Rehabilitation:** Focusing on improving functional abilities and enhancing movements related to daily activities helps individuals regain independence and confidence in performing tasks without aggravating pain.

- **Cognitive-Behavioral Therapy (CBT):** Incorporating CBT techniques to address psychosocial aspects of pain, including thoughts, emotions, and behaviors related to pain perception, can be beneficial in managing chronic musculoskeletal pain.

- **Education and Advice:** Physiotherapists provide education and advice on ergonomics, posture, body mechanics, and lifestyle modifications to help individuals manage their LBP and prevent future episodes. This empowers patients to take an active role in their recovery (Foster *et al.*, 2018).

2.3 Patient satisfaction with Physiotherapy in patients with chronic musculoskeletal pain

Patient satisfaction refers to the extent to which the patients perceive that their needs and expectations are met by the services provided (Debono and Travaglia, 2009). In the evolving landscape of healthcare, where patient-centered approaches have gained prominence, patient satisfaction has risen to prominence as a pivotal measure of care quality (Kittelson *et al.*, 2020). Patient satisfaction with physiotherapy care plays a pivotal role in determining their continued engagement with physiotherapy services. Boshoff and Gray (2004) established that patient satisfaction significantly predicts return visits for physiotherapy services.

In a study by Odumodu *et al.* (2020), an overwhelming 97.9% of Respondents reported satisfaction or high satisfaction levels with their overall experience in physiotherapy clinics. However, contrasting findings were observed in a study by Odole *et al.* (2023), where 49.0% reported excellent satisfaction while 7.8% reported fair satisfaction specifically regarding physiotherapy in managing chronic mechanical neck pain. Sociodemographic factors, such as gender, age, and marital status, were identified as influential determinants of satisfaction with physiotherapy services. Research, including studies by Hills and Kitchen (2007), indicated that gender might mediate satisfaction levels, with females tending to report higher satisfaction compared to males. Moreover, the significance of patient satisfaction extends beyond mere perception. It serves as a critical factor influencing patients' adherence to prescribed treatment regimens and their cooperation during therapy (Xesfingi and Vozikis, 2016). Patients who are satisfied with their physiotherapy experience are more likely to comply with treatment plans, engage actively in sessions, and exhibit improved outcomes in their rehabilitation journey.

2.4 Empirical literature review

AUTHOR/ YEAR/COUNTRY	TITLE	SAMPLE SIZE	AIM OF STUDY	STUDY TYPE	OUTCOME /MEASURE	FINDINGS
Casserley-Feeney *et al.*, 2008/ Ireland	Patient Satisfaction with private Physiotherapy for musculoskeletal Pain	240 Respondents were recruited (131 respondents).	To measure patient satisfaction with private physiotherapy in Ireland, for patients with musculoskeletal pain	Cross sectional study	The Physiotherapy Outpatient Satisfaction Scale (PTOPS).	The findings revealed high levels of satisfaction across various aspects of physiotherapy treatment, except for the component related to cost, however, overall modal response was very good.
Hush *et al.*, 2012/ Austrailia	Patient satisfaction with musculoskeletal physiotherapy care in Australia: an international comparison	274 Respondents were examined in this study.	To attain a quantitative estimate of patient satisfaction with physiotherapy care for musculoskeletal conditions in Australia	Prospective study	Patient satisfaction was measured using the 20-item MedRisk Instrument for Measuring Patient Satisfaction with Physical Therapy Care	The average satisfaction score on the scale stood at 4.55, utilizing a rating scale ranging from 1 to 5. This scale designates 1 as representing high dissatisfaction, while 5

						signifies high satisfaction.
Odumodu *et al.*, 2020/Nigeria	Satisfaction With Services Among Attendees of Physiotherapy Outpatient Clinics in Tertiary Hospitals in Lagos State	284 Respondents were recruited with simple convenience sampling.	To evaluate outpatients' satisfaction with physiotherapy service.	Cross sectional design	2-part structured questionnaire with 33-items on a 5-point Likert-type scale.	86.2% of the particopants reported to be satisfied or very satisfied with physiotherapy treatment.
Keramat *et al.*, 2021/Pakistan	Patients' Satisfaction with Physiotherapy Services for Musculoskeletal Disorder	200 Respondents were assessed in this study.	The aim of the study is to evaluate satisfaction of patient receiving physiotherapy for their musculoskeletal disorders at Helping Hand institute of Rehabilitation sciences Khyber Pakhtoon Khawa Mansehra, Pakistan.	A retrospective design	Modified MedRisk Instrument in Urdu language was used to assess patient satisfaction	67% of the patients were of the opinion of highly satisfied with the way they have been treated so far and 32% of patients reported a moderate satisfaction.
Odole *et al.*,	Patients'	51 Respondents	To	A	MedRisk	49.0% and

2023/Nigeria	satisfaction with physiotherapy management of chronic mechanical neck pain in physiotherapy departments of public hospitals in Ibadan, Nigeria: A mixed-method study	were recruited for this study via purposive sampling technique.	determine patients' satisfaction level with physiotherapy in the management of chronic mechanical neck pain in physiotherapy departments of the 3 public hospitals in Ibadan, Nigeria.	mixed-method design	Instrument was used to assess patient satisfaction while patient satisfaction was also explored using a focus group discussion.	7.8% reported excellent and fair satisfsction with physiotherapy practice. Respondents also reported not to be satisified with attitude of record officers and frequent changes of treating physiotherapists.

CHAPTER THREE

MATERIALS AND METHODS

3.1 Respondents

Respondents for this study included male and female patients with musculoskeletal pain of more than 3 months duration who are attending physiotherapy out-patient care at University of Benin Teaching Hospital, and Edo Specialist Hospital, Benin City, Edo State.

Inclusion Criteria

- Male and female aged 16 years and above
- Individuals who have been diagnosed with musculoskeletal pain for more than 3 months
- Individuals receiving outpatient physiotherapy care for at least three months.
- Individuals that can communicate in English or pidgin English.
- Individuals residing in Benin City.

3.1.2 Exclusion Criteria

- Patients with recent-onset or acute musculoskeletal pain (pain duration less than three months).
- Individuals with severe cognitive impairment or mental health.
- Patients undergoing concurrent treatments for their musculoskeletal pain that might interfere with the assessment of physiotherapy treatment satisfaction.

- Individuals with severe comorbidities or medical conditions that could significantly affect their musculoskeletal pain or ability to participate in physiotherapy treatment.

3.2 Materials

3.2.1 Apparatus/Instruments

i. Physical Therapy Outpatient Satisfaction Scale (PTOPS): PTOPS is an assessment tool designed to assess patient satisfaction with physical therapy services in outpatient settings and was developed by Roush and Sonstroem in 1999 (Roush and Sonstroem, 1999). It's used to evaluate various aspects of patient experience, including the quality of care, communication with therapists, effectiveness of treatment, and overall satisfaction with the services received. The PTOPS components were initially labelled as follows: Component 1 as "Satisfaction Enhancers," Component 2 as "Satisfaction Detractors," Component 3 as "Location," Component 4 as "Cost," and Component 5 as "Expectation (Roush and Sonstroem, 1999).

In evaluating the inter-item reliability of the PTOPS dimensions, Cronbach's alpha coefficients were calculated for both a four-factor confirmatory solution and a three-factor exploratory model. For the four-factor model, the coefficients were .80, .85, .89, and .89, all surpassing the widely accepted threshold of 0.70, indicating strong reliability (Roush *et al.*, 2007). Comparatively, the three-factor exploratory model displayed coefficients of .80, .85, and .88, slightly lower than those of the four-factor model but still demonstrating acceptable reliability. Previously, the PTOPS had shown reliability and validity in outpatient settings within South eastern New England, validated through concurrent data collection via direct interviews ((Roush *et al.*, 2007). The test-retest stability, as measured by the Intra-class Correlation Coefficients (ICCs), yielded

values of 0.769 for Enhancers, 0.862 for Location, 0.893 for Detractors, and 0.862 for Cost (Vanti *et al.*, 2013).

Concurrent validity was established by assessing the Pearson correlation coefficient between the PTOPS-I totals and scores obtained from other administered questionnaires, notably the Global Perceived Effect. The findings revealed significant associations. Specifically, the GPE demonstrated notable correlations with the Enhancers ($r=-0.429$, $P< 0.0001$), Detractors ($r= 0.281$, $P< 0.0001$), and Cost ($r= 0.328$, $P<0.0001$) dimensions of the PTOPS (Vanti *et al.*, 2013). These correlations suggest a meaningful relationship between patient-perceived global effect and various facets of satisfaction and cost within the PTOPS instrument.

3.3 Methods

3.3.1 Research Design

This was a cross sectional study design

3.3.2 Sampling Technique/Sample Size

Simple random sampling technique was used in recruiting Respondents for this study.

Sample Size

Respondents were selected via convenient method of sampling.

3.3.3 Research Procedure

The Respondents met all the inclusion criteria. Once the criteria were met, their informed consents were obtained. Afterward, the purpose and protocol for the study were thoroughly explained to them. The Respondents were administered a questionnaire to fill, and it was retrieved immediately once completed. The questionnaire was divided into two sections. Section

A contained the socio-demographic details, and section B contained the Physical Therapy Outpatient Satisfaction Scale (PTOPS) used to assess the level of physiotherapy satisfaction. To ensure confidentiality and to avoid the influence of the physiotherapists, questionnaires were given to the Respondents after the physiotherapists had completed their treatment session and exited the treatment cubicle.

3.3.4 Area of study

This study was carried out at the University of Benin Teaching Hospital (UBTH) and Edo Specialist Hospital.

3.3.5 Ethical Consideration

Ethical approval was obtained from the health research ethics committee of the University of Benin Teaching Hospital and Edo Specialist Hospital, after which informed consent was also be obtained of the Respondents.

3.3.6 Data Analysis

Data was analysed using IBM for statistical package of social sciences (SPSS version 27.0) software. The distribution of the data was visually checked for normality using histogram or other normality tests. Data was summarized using descriptive statistics of frequency, percentages, mean, standard deviation as appropriate. Mann Whitney U test and Kruskal Wallis test was used to determine the relationship between sociodemographic characteristics and level of patient satisfaction with physiotherapy service with alpha level set at 0.05.

CHAPTER FOUR

RESULTS

4.1 Results

4.1.1 Sociodemographic characteristics of the Participants

46 Participants were recruited for this study. More than half of the Participants 27 (58.7%) were female while 19 (41.3%) were male. Majority of the Participants 34 (73.9%) fall in between age bracket 31 and above, 44 (95.7%) were Christians, 34 (73.9%) were married, 33 (71.7%) belong to the medium socioeconomic class, 29 (63.0%) attained tertiary education and 19 (41.3%) had chronic pain associated with low back pain.

Table 1: Sociodemographic characteristics of the Participants

N=46

Variable	Category	Frequency	Percentage
Gender	Male	19	41.3
	Female	27	58.7
Age (years)	16-20	4	8.7
	21-25	4	8.7
	26-30	4	8.7
	31 and above	34	73.9
Religion	Christianity	44	95.7
	Muslim	2	4.3
Marital status	Single	9	19.6
	Married	34	73.9
	Divorced	3	6.5
Socioeconomic status	Low	6	13.0
	Medium	33	71.7
	High	7	15.2
Education	Primary	8	17.4
	Secondary	9	19.6
	Tertiary	29	63.0
Type of pain	Low back pain	19	41.3
	Neck pain	7	15.2
	Osteoarthritis related pain	11	23.9
	Others	9	19.6

4.1.2 Participants' Patient satisfaction with physiotherapy outpatient.

Table 2 shows the mean of the total physical therapy outpatient satisfaction (PTOPS) and the mean subscale. The enhancers subscale of physical therapy outpatient satisfaction ranged from 33.00 to 48.00 with an average of 40.93 ± 4.03. The detractors subscale of physical therapy outpatient satisfaction ranged from 19.00 to 41.00 with an average of 27.65 ± 6.25. The location subscale of the physical therapy outpatient satisfaction ranged from 12.00 to 33.00 with an average of 22.26 ± 4.80. The cost subscale of the physical therapy outpatient satisfaction ranged from 15.00 to 24.00 with an average of 19.67 ± 2.44. The total overall physical therapy outpatient satisfaction score ranged from 102.00 to 129.00 with an average of 110.52 ± 5.70 as shown in Table 2.

Table 2: Participants' Patient satisfaction with physiotherapy outpatient.

N=46

Variable	Category	Minimum	Maximum	Mean ± S. D
PTOPS Domain	Enhancers	33.00	48.00	40.93 ± 4.03
	Detractors	19.00	41.00	27.65 ± 6.25
	Location	12.00	33.00	22.26 ± 4.80
	Cost	15.00	24.00	19.67 ± 2.44
Total PTOPS		102.00	129.00	110.52 ± 5.70

PTOPS= Physical Therapy Outpatient Satisfaction Survey

4.1.3 Influence of patients' characteristics on enhancer sub domain score

Table 3 shows the difference in mean score for enhancer of physiotherapy satisfaction among sociodemographic variables. Mann Whitney U test showed there was no significant difference in the enhancers score of the PTOPS between male and female gender ($p>0.05$). KRUSKAL WALLIS also showed that there was no significant difference in enhancers of the PTOPS score between age, educational status, marital status, religion, socioeconomic status, and type of pain variables ($p>0.05$).

Table 3: Influence of patients' characteristics on enhancer sub domain score

N=46

Variable	Category	Median (IQR)	Test statistic	P value
Gender	Male	40.00 (38.00 – 46.00)	238.000	0.678[a]
	Female	42.00 (38.00 -43.00)		
Age	16-20	39.00 (35.75 – 42.25)	3.116	0.374[b]
	21-25	37.50 (34.75 – 43.25)		
	26-30	41.00 (36.25 – 45.00)		
	31 and above	42.00 (38.75 – 45.00)		
Education status	Primary	43.00 (42.25 – 44.50)	2.060	0.357[b]
	Secondary	40.00 (37.5 – 42.50)		
	Tertiary	40.00 (38.00 -45.50)		
Marital status	Single	38.00 (36.00 – 43.00)	2.922	0.232[b]
	Married	42.00 (38.75 – 45.25)		
	Divorced	39.00 (38.00 – 39.00)		
Religion	Christian	42.00 (38.00 – 44.50)	12.000	0.083[a]
	Muslim	36.00 (34.00 - 36.00)		
Socioeconomic	Low	39.00 (37.25 – 43.50)	0.603	0.740[b]
	Medium	42.00 (37.5 – 45.00)		
	High	42.00 (40.00 – 43.00)		
Type of pain	LBP	42.00 (39.00 – 45.00)	1.898	0.387[b]
	NP	38.00 (34.00 – 46.00)		
	OA related pain	40.00 (37.00 – 45.00)		
	Others	41.00 (36.00 – 43.00)		

a=Mann Whitney U test, b=Kruskal Wallis Test

4.1.4 Influence of patients' characteristics on Detractor's sub domain score

Table 4 shows the difference in mean score for enhancer of physiotherapy satisfaction among sociodemographic variables. Mann Whitney U test showed there was no significant difference in the enhancers score of the PTOPS between male and female gender ($p>0.05$). However, KRUSKAL WALLIS also showed that there was a significant difference in enhancers subdomain score of the PTOPS score between type of pain variables ($p = 0.019$) as shown in Table 4.

Table 4: Influence of patients' characteristics on detractors sub domain score

N=46

Variable	Category	Median (IQR)	Test statistic	P value
Gender	Male	28.00 (24.00 – 34.00)	215.000	0.353[a]
	Female	26.00 (21.00 -31.00)		
Age	16-20	35.00 (31.00 – 40.50)	7.646	0.054[b]
	21-25	31.00 (20.50 – 37.75)		
	26-30	28.00 (23.50 – 37.00)		
	31 and above	26.00 (21.75 – 28.25)		
Education status	Primary	27.00 (22.25 – 29.75)	2.589	0.274[b]
	Secondary	31.00 (24.00 -38.50)		
	Tertiary	26.00 (22.00 – 31.00)		
Marital status	Single	31.00 (27.50 – 38.50)	5.625	0.060[b]
	Married	26.00 (21.75 – 28.25)		
	Divorced	28.00 (25.00 – 28.00)		
			10.00	0.070[b]
Religion	Christian	26.00 (22.00 – 31.00)		
	Muslim	36.5 (35.00 – 36.50)		
Socioeconomic	Low	26.00 (21.25 – 32.75)	0.197	0.906[b]
	Medium	26.00 (22.00 – 32.50)		
	High	28.00 (21.00 – 31.00)		
Type of pain	LBP	25.00 (21.00 – 27.00)	7.962	0.019*[b]
	NP	31.00 (28.00 – 37.00)		
	OA related pain	28.00 (20.00 – 38.00)		
	Others	30.00 (25.50 – 36.00)		

a=Mann Whitney U test, b=Kruskal Wallis Test

4.1.5 Influence of patients' characteristics on location sub domain score

Table 5 shows the difference in mean score for location sub domain of physiotherapy satisfaction among sociodemographic variables. Mann Whitney U test showed there was a significant difference in the location sub domain score of the PTOPS between male and female gender (p = 0.038) with male gender exhibiting higher satisfaction on the location sub domain score. KRUSKAL WALLIS also showed that there was a significant difference in location subdomain score of the PTOPS score between marital status (p = 0.048) with the divorced Participants showing a higher satisfaction score in the location sub domain as shown in Table 5.

Table 5: Influence of patients' characteristics on location sub domain score
N=46

Variable	Category	Median (IQR)	Test statistic	P value
Gender	Male	25.00 (20.00 – 28.00)	164.000	0.038*[a]
	Female	22.00 (20.00 -23.00)		
Age	16-20	18.00 (13.00 – 24.50)	3.645	0.302[b]
	21-25	19.00 (16.00 – 26.50)		
	26-30	22.00 (15.00 – 23.75)		
	31 and above	22.00 (20.00 – 27.00)		
Education status	Primary	21.50 (20.00 – 23.50)	2.330	0.312[b]
	Secondary	20.00 (15.50 – 27.50)		
	Tertiary	22.00 (21.00 – 26.50)		
Marital status	Single	16.00 (14.50 – 24.00)	6.024	0.049*[b]
	Married	22.00 (20.00 – 26.50)		
	Divorced	24.00 (24.00 – 25.00)		
Religion	Christian	22.00 (20.00 – 26.00)	39.00	0.812[a]
	Muslim	21.50 (20.00 – 21.50)		
Socioeconomic	Low	23.00 (12.25 – 25.25)	1.754	0.416[b]
	Medium	22.00 (20.00 – 26.50)		
	High	23.00 (22.00 – 27.00)		
Type of pain	LBP	22.00 (21.00 – 24.00)	0.164	0.921[b]
	NP	23.00 (16.00 -28.00)		
	OA related pain	22.00 (20.00 -29.00)		
	Others	18.00 (15.50 – 24.00)		

a=Mann Whitney U test, b=Kruskal Wallis Test

4.1.6 Influence of patients' characteristics on cost sub domain score

Table 6 shows the difference in mean score for cost sub domain of the physiotherapy satisfaction among sociodemographic variables. Mann Whitney U test showed there was no significant difference in the cost sub domain score of the PTOPS between male and female gender ($p>0.05$). KRUSKAL WALLIS also showed that there was no significant difference in cost subdomain of the PTOPS score between age, educational status, marital status, religion, socioeconomic status, and type of pain variables ($p>0.05$)

Table 6: Influence of patients' characteristics on cost sub domain score
N=46

Variable	Category	Median (IQR)	Test statistic	P value
Gender	Male	19.00 (17.00 – 21.00)	180.500	0.088[a]
	Female	20.00 (19.00 – 22.00)		
Age	16-20	18.50 (17.00 – 21.50)	0.937	0.937[b]
	21-25	19.00 (18.25 – 22.00)		
	26-30	20.50 (18.50 – 21.00)		
	31 and above	20.00 (17.00 – 22.00)		
Education status	Primary	21.00 (20.00 – 22.75)	3.287	0.193[b]
	Secondary	19.00 (17.00 – 21.50)		
	Tertiary	19.00 (17.00 – 21.50)		
Marital status	Single	19.00 (17.50 – 22.50)	0.619	0.734[b]
	Married	20.00 (17.75 – 22.00)		
	Divorced	18.00 (17.00 – 18.00)		
Religion	Christian	20.00 (17.25 – 22.00)	30.000	0.448[a]
	Muslim	21.00 (19.00 -21.00)		
Socioeconomic	Low	18.00 (15.00 – 22.50)	0.881	0.644[b]
	Medium	20.00 (18.00 -22.00)		
	High	21.00 (18.00 – 21.00)		
Type of pain	LBP	20.00 (18.00 -22.00)	0.285	0.867[b]
	NP	19.00 (17.00 – 22.00)		
	OA related pain	20.00 (17.50 – 21.50)		
	Others	20.00 (17.50 -21.50)		

a=Mann Whitney U test, b=Kruskal Wallis Test

4.1.7 Influence of patients' characteristics on total PTOPS domain score

Table 7 shows the difference in mean score for location sub domain of physiotherapy satisfaction among sociodemographic variables. Mann Whitney U test showed there was a significant difference in the total patient satisfaction score between male and female gender ($p = 0.007$) with male gender exhibiting higher satisfaction compared to their female gender. KRUSKAL WALLIS also showed that there was no significant difference in the total patient satisfaction score between age, educational status, marital status, religion, socioeconomic and type of pain as shown in Table 7.

Table 7: Influence of patients' characteristics on total PTOPS domain score
N=46

Variable	Category	Median (IQR)	Test statistic	P value
Gender	Male	115.00 (107.00 – 118.00)	174.500	0.007[a]*
	Female	108.00 (105.00 -112.00)		
Age	16-20	112.50 (107.25 – 116.50)	0.819	0.845[b]
	21-25	109.00 (105.75 – 110.75)		
	26-30	111.00 (106.25 – 114.25)		
	31 and above	109.00 (106.75 – 115.25)		
Education status	Primary	109.50 (107.00 – 113.75)	0.315	0.854[b]
	Secondary	111.00 (107.00 – 115.50)		
	Tertiary	109.00 (105.50 – 115.50)		
Marital status	Single	109.50 (107.00 – 113.75)	0.697	0.706[b]
	Married	111.00 (107.00 – 115.50)		
	Divorced	109.00 (105.50 – 115.00)		
Religion	Christianity	109.50 (107.00 – 113.75)	0.697	0.706[b]
	Islam	111.00 (107.00 – 115.50)		
Socioeconomic	Low	106.50 (102.00 – 111.00)	3.330	0.189[b]
	Medium	110.00 (107.00 – 114.50)		
	High	112.00 (107.00 – 117.00)		
Type of pain	LBP	108.00 (105.00 -113.00)	3.894	0.273[b]
	NP	111.00 (110.00 – 119.00)		
	OA related pain	111.00 (105.00 – 117.00)		
	Others	109.00 (106.50 – 114.50)		

a=Mann Whitney U test, b=Kruskal Wallis Test

4.2 Hypothesis Testing

Hypothesis 1: There would be no significant difference in Level of satisfaction between gender.

Test: Mann Whitney U test

Alpha value: 0.05

Observed p value = 0.007

JUDGEMENT: Since the observed p value was lesser than 0.05 alpha level, therefore the null hypothesis was therefore REJECTED.

Hypothesis 2: There would be no significant difference in Level of satisfaction between age group.

Test: Kruskal Wallis test

Alpha value: 0.05

Observed p value = 0.845

JUDGEMENT: Since the observed p value was greater than 0.05 alpha level, therefore the null hypothesis was therefore NOT REJECTED.

Hypothesis 3: There would be no significant difference in Level of satisfaction between education level.

Test: Kruskal Wallis test

Alpha value: 0.05

Observed p value = 0.854

JUDGEMENT: Since the observed p value was greater than 0.05 alpha level, therefore the null hypothesis was therefore NOT REJECTED.

Hypothesis 4: There would be no significant difference in Level of satisfaction between marital status.

Test: Kruskal Wallis test

Alpha value: 0.05

Observed p value = 0.706

JUDGEMENT: Since the observed p value was greater than 0.05 alpha level, therefore the null hypothesis was therefore NOT REJECTED.

Hypothesis 5: There would be no significant difference in Level of satisfaction between socioeconomic status.

Test: Kruskal Wallis test

Alpha value: 0.05

Observed p value = 0.189

JUDGEMENT: Since the observed p value was greater than 0.05 alpha level, therefore the null hypothesis was therefore NOT REJECTED.

Hypothesis 6: There would be no significant difference in Level of satisfaction between type of pain.

Test: Kruskal Wallis test

Alpha value: 0.05

Observed p value = 0.273

JUDGEMENT: Since the observed p value was greater than 0.05 alpha level, therefore the null hypothesis was therefore NOT REJECTED.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

The aim of the study was to determine the level of patient satisfaction with chronic musculoskeletal pain with physiotherapy treatment in two major hospitals in Benin City. The findings of this study revealed that patients with chronic musculoskeletal pain are generally satisfied with physiotherapy outpatient treatment with an overall average score well beyond average. This is in agreement with Casserley-Feeney *et al.* (2008), Hush *et al.* (2012), Rufai *et al.* (2019) and Odumodu *et al.* (2020) study who also reported a general high level of satisfaction among patients attending outpatient clinic. The PTOPS questionnaire evaluates four distinct domains with independent summary scores. While the results for the enhancer and location, were relatively satisfactory and comparable to optimum scores, respondents expressed notable dissatisfaction with the detractor and cost domain. This is in agreement with Casserley-Feeney *et al.* (2008) study who reported similar results regarding the sub domains of physiotherapy satisfaction. Nigeria faces economic challenges, with a significant portion of the population living below the poverty line. The cost of healthcare services, including physiotherapy, may be perceived as unaffordable for many individuals, leading to dissatisfaction with the cost domain.

The current study observed gender differences in patient satisfaction with physiotherapy services, with males reporting higher satisfaction compared to females. This finding is in agreement with previous studies by Hall and Dornan (1990) who reported that male patients were significantly more satisfied with physiotherapy services compared to females. However, in contrast, Casserley-Feeney *et al.*, (2008), Olatunji *et al.*, (2008) and Rufai *et al.* (2019) which reported a

higher satisfaction among female patients compared to the male patients. Hills and Kitchen (2007) study showed that variations in satisfaction between male and female patients were observed. For male patients, satisfaction was primarily predicted by the therapist and treatment outcome, while for female patients, organization and communication were the main predictors of satisfaction.

Furthermore, there was a significant difference in the level of patient satisfaction between male and female regarding location sub domain with male exhibiting a high level of satisfaction with location of physiotherapy outpatient compared to female. This is in disagreement with Casserley-Feeney *et al.* (2008) who reported no significant difference in satisfaction score between male and female. One possible reason for the significant difference in patient satisfaction regarding the location sub-domain between male and female patients could be related to differing transportation challenges. Within the cultural contexts or regions of Benin metropolis, females may encounter more difficulties in accessing healthcare facilities due to transportation constraints or safety concerns, leading to lower satisfaction with the location of physiotherapy outpatient services compared to their male counterparts.

Education was found to have no significant association with satisfaction in the present study. This contradicts findings from previous studies by Olatunji *et al.* (2008) and Rufai *et al.* (2019), which reported higher satisfaction with physiotherapy services among patients with post-secondary education. One possible explanation for this discrepancy could be differences in the study populations or healthcare settings. Additionally, variations in healthcare access, communication, and expectations among patients with different educational backgrounds may also contribute to these contrasting findings. The findings of this study also found no significant relationship between age and level of satisfaction with physiotherapy outpatient services for

musculoskeletal pain among the respondents. However, this observation contradicts the findings of Nguyen *et al.* (2014) and Rufai *et al.* (2019) which reported a significant difference between age group attending out patient physiotherapy with older patients more satisfied with physiotherapy services compared to their younger counterparts. This discrepancy may be as a result variation in healthcare delivery, treatment approaches, and patient expectations among different age groups may also contribute to these differing findings.

5.2 Conclusion

The study found high satisfaction levels among patients with chronic musculoskeletal pain undergoing physiotherapy treatment in Benin City hospitals. Although satisfaction levels varied by gender, there were no significant variations in satisfaction based on education, age, or socioeconomic status among patients receiving outpatient physiotherapy treatment for chronic musculoskeletal pain in Benin City hospitals. Notably, significant dissatisfaction was observed in detractor and cost domains.

5.3 Recommendations

- Healthcare policymakers and providers should implement measures to improve the affordability of physiotherapy services for patients with chronic musculoskeletal pain. This could include the introduction of subsidized or low-cost options, insurance coverage expansion, or financial assistance programs.
- Recognizing the gender differences in satisfaction, healthcare providers should consider tailoring physiotherapy services to meet the specific preferences and needs of male and female patients. This may involve adjusting communication styles, treatment approaches, and facility environments to better accommodate diverse patient populations.

5.4 Implications for further studies

- Future research could utilize longitudinal designs to monitor shifts in patient satisfaction with physiotherapy services over time. These longitudinal studies would offer valuable insights into the stability of satisfaction levels and uncover potential factors driving changes in satisfaction throughout various stages of treatment or recovery.
- Qualitative research could further investigate the underlying factors contributing to patient satisfaction with physiotherapy services, with a specific focus on domains such as detractor and cost.

REFERENCES

American Physical Therapy Association. (2021). Code of Ethics for the Physical Therapist. Available on: https://www.apta.org/docs/default-source/default-document-library/code-of-ethics.pdf Accessed 17 November, 2023

Babatunde, O. O., Jordan, J. L., Van der Windt, D. A., Hill, J. C., Foster, N. E., & Protheroe, J. (2017). Effective treatment options for musculoskeletal pain in primary care: A systematic overview of current evidence. *PloS one*, *12*(6), pp.0178621.

Balagué, F., Mannion, A. F., Pellisé, F., & Cedraschi, C. (2012). Non-specific low back pain. *Lancet*, *379*(9814), pp.482–491.

Bedson, J., Mottram, S., Thomas, E., & Peat, G. (2007). Knee pain and osteoarthritis in the general population: what influences patients to consult?. *Family practice*, *24*(5), pp.443–453.

Binder A. (2008). Neck Pain. *Biomedical Journal of Clinical Evidence*., 8, pp.1103.

Breivik, H., Collett, B., Ventafridda, V., Cohen, R., & Gallacher, D. (2006). Survey of chronic pain in Europe: prevalence, impact on daily life, and treatment. *European journal of pain (London, England)*, *10*(4), pp.287–333.

Canadian Physiotherapy Association. (2021). What is Physiotherapy? Available on: https://physiotherapy.ca/what-physiotherapy Accessed 17 November, 2023

Casserley-Feeney, S. N., Phelan, M., Duffy, F., Roush, S., Cairns, M. C., & Hurley, D. A. (2008). Patient satisfaction with private physiotherapy for musculoskeletal pain. *BMC musculoskeletal disorders*, *9*, pp.50.

Casserley-Feeney, S. N., Phelan, M., Duffy, F., Roush, S., Cairns, M. C., & Hurley, D. A. (2008). Patient satisfaction with private physiotherapy for musculoskeletal pain. *BMC musculoskeletal disorders*, *9*, p.50.

Chou, R., Deyo, R., Friedly, J., Skelly, A., Hashimoto, R., Weimer, M., ... & Grusing, S. (2017). Nonpharmacologic therapies for low back pain: a systematic review for an American College of Physicians Clinical Practice Guideline. *Annals of Internal Medicine,* 166(7), pp.493-505.

Cimmino, M. A., Ferrone, C., & Cutolo, M. (2011). Epidemiology of chronic musculoskeletal pain. *Best practice & research. Clinical rheumatology*, *25*(2), pp.173–183.

Danazumi, M., Falkeabubakar, M., Auwal, B., Usman, U. & Yakasai, A. (2020). A Qualitative Study into Nigerian Patients' Satisfaction with Physiotherapy Management of Low Back Pain. *Nigerian Journal of Clinical Medicine*, pp.70-75.

Debono D, & Travaglia J. (2009). Complaints and Patient Satisfaction: A Comprehensive Review of Literature, *Journal of Education,* 23 (4), pp.23-24

Edgman-Levitan, S., & Schoenbaum, S. C. (2021). Patient-centered care: achieving higher quality by designing care through the patient's eyes. *Israel journal of health policy research*, *10*(1), pp.21.

El-Tallawy, S. N., Nalamasu, R., Salem, G. I., LeQuang, J. A. K., Pergolizzi, J. V., & Christo, P. J. (2021). Management of Musculoskeletal Pain: An Update with Emphasis on Chronic Musculoskeletal Pain. *Pain and therapy*, *10*(1), pp.181–209

Foster, N. E., Anema, J. R., Cherkin, D., Chou, R., Cohen, S. P., Gross, D. P., ... & Turner, J. A. (2018). Prevention and treatment of low back pain: evidence, challenges, and promising directions. *The Lancet*, 391(10137), pp.2368-2383.

GBD 2017 Disease and Injury Incidence and Prevalence Collaborators (2018). Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet (London, England)*, *392*(10159), pp.1789–1858.

George, S. Z., Fritz, J. M., Silfies, S. P., Schneider, M. J., Beneciuk, J. M., Lentz, T. A., Gilliam, J. R., Hendren, S., & Norman, K. S. (2021). Interventions for the Management of Acute and Chronic Low Back Pain: Revision 2021. *The Journal of orthopaedic and sports physical therapy*, 51(11), pp.1-60.

Hall, J. A., & Dornan, M. C. (1990). Patient sociodemographic characteristics as predictors of satisfaction with medical care: a meta-analysis. *Social science & medicine (1982)*, *30*(7), pp.811–818.

Hills, R., & Kitchen, S. (2007). Satisfaction with outpatient physiotherapy: a survey comparing the views of patients with acute and chronic musculoskeletal conditions. *Physiotherapy theory and practice*, *23*(1), pp.21–36.

Hills, R., & Kitchen, S. (2007). Satisfaction with outpatient physiotherapy: a survey comparing the views of patients with acute and chronic musculoskeletal conditions. *Physiotherapy theory and practice*, *23*(1), pp.21–36.

Hoy D., Bain C., Williams G., March L., Brooks P., Blyth F., Woolf A., Vos T. & Buchbinder R. (2012). A Systematic Review of the Global Prevalence of Low Back Pain. *Arthritis and Rheumatism*, 64 (6), pp.2028 – 2037

Hush, J. M., & Alison, J. A. (2011). Evidence-based practice: lost in translation?. *Journal of physiotherapy*, *57*(3), pp.143–144.

Hush, J. M., & Alison, J. A. (2011). Evidence-based practice: lost in translation?. *Journal of physiotherapy*, *57*(3), pp.143–144.

Hush, J. M., Yung, V., Mackey, M., Adams, R., Wand, B. M., Nelson, R., & Beattie, P. (2012). Patient satisfaction with musculoskeletal physiotherapy care in Australia: an international comparison. *The Journal of manual & manipulative therapy*, *20*(4), pp.201–208.

Keramat, K. U., Bhutta, A. H., & Ilyas, M. B. (2021). Patients' Satisfaction with Physiotherapy Services for Musculoskeletal Disorder. *Pakistan Journal of Public Health*, *10*(3), pp.174–178.

Kidd, B. L., Langford, R. M., & Wodehouse, T. (2007). Arthritis and pain. Current approaches in the treatment of arthritic pain. *Arthritis research & therapy*, *9*(3), pp.214.

Kittelson, A. J., Hoogeboom, T. J., Schenkman, M., Stevens-Lapsley, J. E., & van Meeteren, N. L. U. (2020). Person-Centered Care and Physical Therapy: A "People-Like-Me" Approach. *Physical therapy*, *100*(1), pp.99–106.

Koechlin, H., Whalley, B., Welton, N. J., & Locher, C. (2019). The best treatment option(s) for adult and elderly patients with chronic primary musculoskeletal pain: a protocol for a systematic review and network meta-analysis. *Systematic reviews*, *8*(1), pp.269.

Malm, K., Bergman, S., Andersson, M. L., Bremander, A., & Larsson, I. (2017). Quality of life in patients with established rheumatoid arthritis: A phenomenographic study. *SAGE open medicine*, *5*, 2050312117713647.

Mbada, C., Olawuyi, A., Oyewole, O. O., Odole, A. C., Ogundele, A. O., & Fatoye, F. (2019). Characteristics and determinants of community physiotherapy utilization and supply. *BMC health services research*, *19*(1), p.168.

McVinnie D. S. (2013). Obesity and pain. *British journal of pain*, *7*(4), pp.163–170.

Mills, S. E. E., Nicolson, K. P., & Smith, B. H. (2019). Chronic pain: a review of its epidemiology and associated factors in population-based studies. *British journal of anaesthesia*, *123*(2), pp.273–283.

Ming Z., Närhi M. & Siivola J. (2004). Neck and shoulder pain related to computer use. *Pathophysiology*, 11, pp.51 – 56

Murphy & Carr. (2010). Shoulder Pain. *Biomedical Journal of Clinical Evidence*, 7 (1107), 1 – 37

Obi, I. E., Ndu, A. C., Agu, K. A., Omotowo, B. I., Agunwa, C. C., & Idoko, A. C. (2018). Patient satisfaction with services at a tertiary hospital in south-east Nigeria. *Malawi medical journal: the journal of Medical Association of Malawi*, *30*(4), pp.270–275.

Odole, A. C., Ayodeji, A., Adolo, B., Alumona, C. J., Adandom, H., Mbada, C. E., & Awosoga, O. A. (2023). Patients' satisfaction with physiotherapy management of chronic mechanical neck pain in physiotherapy departments of public hospitals in Ibadan, Nigeria: A mixed-method study. *Physiotherapy Theory and Practice*, *39*(9), pp.1896–1905.

Odumodu, I. J., Olufunlayo, T. F., Ogunnowo, B. E., & Kalu, M. E. (2020). Satisfaction With Services Among Attendees of Physiotherapy Outpatient Clinics in Tertiary Hospitals in Lagos State. *Journal of patient experience*, *7*(4), pp.468–478.

Odumodu, I. J., Olufunlayo, T. F., Ogunnowo, B. E., & Kalu, M. E. (2020). Satisfaction With Services Among Attendees of Physiotherapy Outpatient Clinics in Tertiary Hospitals in Lagos State. *Journal of patient experience*, *7*(4), pp.468–478.

Oke K.I. (2004). What is physiotherapy all about? The Sun Newspaper; October 26, *Good health column,* pp.22.

Oke, K.I. & Kubeyinje, O.S. (2013). Utilization of in-patient physiotherapy services in a nigerian teaching hospital. *African Journal of Biomedical Research*, 16 (2), pp.137-142

Olatunji, T.O. & Ogunlana, Michael & Bello, M.A. & Omobaanu, S.O.. (2008). Assessment of patient satisfaction with physiotherapy care. Journal Nigeria Society of Physiotherapy, 16, pp.11-15.

Olayinka O.A., Adesegun O.F., Caleb A.A., Opeyemi O.A., Ganiyu O.A. & Akintunde A. (2009) Musculoskeletal Disorders: Epidemiology and Treatment Seeking Behavior of Secondary School Students in a Nigerian Community. *Indian Journal of Community Medicine*, 34 (2), pp.140 – 144.

Punnett L & Wegman D. (2004). Work-related musculoskeletal disorders: the epidemiologic evidence and the debate. *Journal of Electromyography and Kinesiology*, 14, pp.13 – 23.

Roush, S. E., & Sonstroem, R. J. (1999). Development of the physical therapy outpatient satisfaction survey (PTOPS). *Physical therapy*, *79*(2), pp.159–170.

Roush, S. E., Scott, C., & Drake, M. (2007). The reliability and validity of the physical therapy outpatient satisfaction survey: A replication study.

Rubinstein, S. M., Terwee, C. B., Assendelft, W. J., de Boer, M. R., & van Tulder, M. W. (2019). Spinal manipulative therapy for acute low back pain: an update of the Cochrane Review. Spine, 44(11), pp.914-922.

Rufa'i, A. A., Saidu, I. A., Lawan, M. D., Oyeyemi, A. L., Aliyu, S. U., Lawan, A., Jajere, A. M., & Oyeyemi, A. Y. (2019). Outpatients' Satisfaction with the Provision of Physiotherapy Services. *Middle East Journal of Rehabilitation and Health*, 12, pp45-51.

Smith, E., Hoy, D. G., Cross, M., Vos, T., Naghavi, M., Buchbinder, R., Woolf, A. D., & March, L. (2014). The global burden of other musculoskeletal disorders: estimates from the Global Burden of Disease 2010 study. *Annals of the rheumatic diseases*, *73*(8), pp.1462–1469.

Steffens, D., Maher, C. G., Pereira, L. S., Stevens, M. L., Oliveira, V. C., Chapple, M., ... & Hancock, M. J. (2016). Prevention of low back pain: a systematic review and meta-analysis. JAMA Internal Medicine, 176(2), pp.199-208.

Trulsson-Schouenborg, A., Rivano Fischer, M., Bondesson, E., & Jöud, A. (2021). Physiotherapist-led rehabilitation for patients with chronic musculoskeletal pain: interventions and promising long-term outcomes. *BMC musculoskeletal disorders*, *22*(1), pp.910.

Vadivelu, N., Kai, A. M., Kodumudi, G., Babayan, K., Fontes, M., & Burg, M. M. (2017). Pain and Psychology-A Reciprocal Relationship. *Ochsner journal*, *17*(2), pp.173–180.

Vanti, C., Bonetti, F., Ceron, D., Piccarreta, R., Violante, F. S., Guccione, A., & Pillastrini, P. (2013). Cross-cultural adaptation and validation of the Physical Therapy Outpatient Satisfaction Survey in an Italian musculoskeletal population. *BMC Musculoskeletal Disorders*, *14*(1), pp.125.

Wagner, D., & Bear, M. (2009). Patient satisfaction with nursing care: a concept analysis within a nursing framework. *Journal of advanced nursing*, *65*(3), pp.692–701.

WCPT. (2019). Retrieved from Policy statement: Description of physical therapy | World Physiotherapy. Accessed 17 November , 2023.

WHO. (2022). Musculoskeletal Conditions. Retriebved from https://www.who.int/news-room/fact sheets/detail/musculoskeletal-conditions. Accessed, November 6, 2023

Woessner & James. (2006). Overview of pain: Classification and concepts. *Weiner's Pain Management: A Practical Guide for Clinicians*, 3(2), pp.35-48.

Xesfingi, S., & Vozikis, A. (2016). Patient satisfaction with the healthcare system: Assessing the impact of socio-economic and healthcare provision factors. *BMC health services research*, *16*, pp.94.

APPENDIX 1

INFORMED CONSENT FORM

TITLE OF STUDY: Physiotherapy treatment satisfaction of patient with chronic musculoskeletal pain in two major hospitals in Benin city.

INSTITUTION: Department of Physiotherapy, University of Benin, Benin city, Edo State.

PRINCIPAL INVESTIGATOR: Ogieriakhi Mercy Itohan

PARTICIPATION: Participation in this study is voluntary. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may discontinue your participation at any time without penalty or loss of benefits. The principal investigator may decide to withdraw you from the study if we are unable to obtain the necessary information.

INTRODUCTION: I'm interested in examining The level of Physiotherapy treatment satisfaction among patients in University of Benin Teaching Hospital (UBTH). I will only ask questions on level of physiotherapy treatment satisfaction.

PROCEDURES TO BE FOLLOWED

QUESTIONNAIRE: If you agree to participate, I will ask you questions about your socio-demographic data and The Physical Therapy Out-patient Satisfaction Scale will be used to assess the level of physiotherapy satisfaction.

BENEFITS: Physiotherapist may benefit from understanding patient perspectives and preferences and this insight can lead to more patient-centered care, potentially improving outcomes and patient-provided relationship.

COMPENSATION: There is no compensation to volunteers for their participation.

DURATION OF PARTICIPATION: This study only requires the questionnaire. There is no follow-up or further information needed.

WHO CAN PARTICIPATE IN THIS STUDY: the study focus on both male and female patient from age 16 above with chronic musculuskeletal pain who are currently receiving physiotherapy out-patient treatment at the physiotherapy department of University of benin teaching Hospital.

ASSURANCE OF CONFIDENTIALITY OF VOLUNTEER'S IDENTITY: Records relating to your participation in the study will remain confidential. Your name will not be used in any report resulting this study. All questionnaires, computerized records, and analysis of data will contain only a unique study number, not your name.

PERSONS AND PLACES FOR ANSWERS REGARDING YOUR RIGHTS AS A RESEARCH SUBJECT: If during the course of this study you have questions concerning the nature of the research or you believe you have sustained a research-related injury or assault, you should contact;

Ogieriakhi, Mercy Itohan

Phone number: 09033062311

Email: Mercypatogie@gmail.com

IF THERE IS ANY PORTION OF THIS CONSENT AGREEMENT THAT YOU DO NOT UNDERSTAND, ASK THE FIELD WORKER OR INVESTIGATOR BEFORE SIGNING.

Please, sign below if you have agreed to participate in the study.

CERTIFICATION OF CONSENT

I, ……. having full capacity to consent for myself do thereby to my participation in the research study.

The methods and means by which the study will be conducted and the risks which may be reasonably expected have been explained to me by Ethical Committee. I have been given the opportunity to ask question concerning this investigational study, and any such questions have been answered to my full and complete satisfaction.

I understand that I may at any time during the course of this study revoke this consent and withdraw myself from the study without prejudice.

Subject's Signature: _____ Date:

APPENDIX 2

SECTION A

SOCIODEMOGRAPHIC DATA

Please fill in the details

Gender: ☐ Female ☐ Male

Age: ☐ 16-20 years ☐ 21- 25 years ☐ 26-30 years ☐ 31 years and above

Education Level: ☐ Primary ☐ Secondary ☐ BSc ☐ Masters ☐ Ph.D

Marital status: ☐ Single ☐ Married ☐ Divorced

Religion: ☐ Christian ☐ Muslim ☐ Traditional ☐ Others

Socio-economic Status: ☐ Low ☐ Medium ☐ High

Type of Pain: ☐ Low back pain ☐ Neck Pain ☐ Pain Associated with Rheumatoid and Osteoarthritis ☐ Others

APPENDIX 3

Physical Therapy Outpatient Satisfaction Scale (PTOPS)

1=Strongly Disagree; 2=Disagree; 3=Uncertain; 4=Agree; 5=Strongly Agree

"PLEASE FILL THE QUESTIONS BELOW WITH THE APPROPRIATE NUMBER ABOVE"

- The cost of treatment is more than I expected.
- I enjoy listening to my therapist.
- I expect the facility to be quieter than it is.
- The facility is flexible about payment options.
- The distance required to get to the facility is acceptable to me.
- I expect my therapist to spend more time with me than he/she does.
- I am given privacy when I need it.
- It is difficult for me to get into the facility from the parking lot.
- I am charged a reasonable amount for my therapy.
- This facility could be more conveniently located for me.
- I feel my therapist overcharges me.
- The office staff is attentive to my needs.
- My therapist acts like he/she is doing me a big favor by treating
- The facility is in a desirable location.
- My therapist could communicate with me more.
- I have to wait too long between appointments.
- The quality of the care I receive is **not** compatible with the cost.
- This facility is a nice place to get my therapy.

- It is somewhat difficult for me to reach this PT facility.
- The facility is too crowded.
- I have to travel too far to receive my treatment.
- I can get around easily inside of the facility.
- I don't really enjoy talking with my therapist.
- My therapist seems to have a genuine interest in me as a person.
- My therapist does not expect me to pay significantly more than what my insurance covers.
- I anticipate my questions will be answered clearly.
- My therapist doesn't give me a chance to say what is on my mind.
- I should not have to travel this far for therapy.
- This facility appreciates my business.
- It could be easier to make the arrangements to pay for my therapy.
- My therapist should be more thorough in my treatment.
- The physical therapy facility is conveniently located for me.
- My therapist should listen more carefully to what I tell him/her.
- I get along well with everyone in this PT facility.