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KNOWLEDGE REGARDING INFLUENCING FACTOR FOR NOT RECEIVING PHYSIOTHERAPY TREATMENT OF LOW BACK PATIENTS

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Bachelor of Science in Physiotherapy

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KNOWLEDGE REGARDING INFLUENCING FACTOR FOR NOT RECEIVING PHYSIOTHERAPY TREATMENT OF LOW BACK PATIENTS

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DECLARATION

I declare that the work presented here is my own. All sources used have been cited appropriately. Any mistakes or inaccuracies are my own. I also decline that for any publication, presentation, or dissemination of information about the study. I would be bound to take written consent from the Department of Physiotherapy, BHPI.

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ACRONYMS

BHPI	Bangladesh Health Professions Institute
CRP	Centre for the Rehabilitation of the Paralysed
DM	Diabetes Mellitus
HSC	Higher Secondary School Certificate
HTN	Hypertension
LBP	Low Back Pain
SSC	Secondary School Certificate
WHO	World Health Organization

ABSTRACT

Purpose: To explore the knowledge regarding influencing factors for not receiving physiotherapy treatment of low back pain patients. **Objectives:** To explore the socio-demographic characteristics of patients, and to find out the influencing factors for not receiving physiotherapy treatment of low back pain patients. **Methods:** A cross-sectional study was used to conduct the study. 123 patients were recruited in this study. The sample was selected by a convenient sampling method. The data were collected using a self-structured questionnaire form; finally, the data were analyzed and presented in quantitative analysis. **Results:** Among the 123 participants, 71% held the belief that medication can completely cure low back pain (LBP), and a substantial 90% expressed the view that regular medicine intake negates the necessity for physiotherapy. Notably, 4% of participants were unfamiliar with the concept of physiotherapy. A significant 70% shared the perception that, regardless of medication or physiotherapy, LBP persists throughout one's life. In terms of the effectiveness of physiotherapy, 52% doubted its ability to alleviate pain, with an additional 62% believing that physiotherapy might exacerbate discomfort. Surprisingly, a considerable 89% reported that their doctors never recommended physiotherapy. A notable 81% mentioned the absence of a physiotherapy center near their residence. Within participant families, 78% did not support the idea of physiotherapy, and 61% considered it a financially burdensome treatment. **Conclusion:** There are several influencing factors including knowledge impediments, family support, finance, social factors, etc. which happen to be critical factors affecting physiotherapy uptake of low back pain patients.

Keywords: LBP, Influencing Factors, Physiotherapy

Word Count: 10,277 words

1.1 Background

Low Back Pain is a very common phenomenon that a vast number of people face at some point in their life (Hoy et al., 2010). A typical complaint influences an expected 70% to 80% of grown-ups at a few focuses amid their lifetimes (Tavafian et al., 2005). The announced Low back pain is a to a great degree regular issue that the vast mainstream involvement with some lifetime pervasiveness ranges from 54% to over 80%, and the point commonness rate is around 20% in the overall public, making it the most widely recognized musculoskeletal indication (Barrero et al.,2006). Since both populace maturing and financial development have happened at a substantially speedier pace in Asian nations, for example, South Korea, LBP is relied upon to end up a noteworthy general medical issue around there. Some pervasive information has as of late been accounted for a country. Asian people group, for example, those in Bangladesh, China, India, The Philippines, Indonesia, and Pakistan, with announced commonness running from 4% to 35% (Cho et al., 2012).

A study by George et al. shows that the prevalence of mechanical low back pain is about 80-90% of people at some times in their lifetime (George et al., 2013). There is no denying the fact that pain is a major cause of morbidity. Besides low back pain is one of the most common locations of symptoms (Mannion et al., 2007). International surveys of low back pain (LBP) reported a point prevalence of 15% to 30%, a 1-month prevalence of 19% to 43%, and worldwide estimates of the lifetime prevalence of LBP vary from 50% to 84% (Ghaffari et al., 2006). In developed countries such as the United States of America and Australia, LBP prevalence is 26.4% to 79.2% (Walker et al., 2004). The 1-year prevalence of LBP in Britain was 49% and in the Nordic countries, the 1-month prevalence of LBP was 35% (Torill et al., 2004). In Netherlands & Belgium, LBP prevalence rates are 30% and 40% were recorded among workers, in Italy 60% of LBP are recognized as occupational diseases, in France LBP accounted for 40% (Fernandes et al., 2011). In Canada, low back pain (LBP) is an important occupational health problem, and also in most industrialized countries (Tissot et al., 2009).

Among the adult population low back pain is the most common everyday complaint. In Australia, about 20% of the adult population experiences low back pain at any given time (Alsaadi et al., 2011). Louw et al. (2007) stated that in Africa the prevalence of low back pain is 33% among adolescents and 50% among adults in one year. Low back pain is a common complaint in childhood and adolescence that is seen in adults. A cross-sectional study among 18-year-old females and 20-year-old males showed that the lifetime incidence surpassed 50% in Denmark (Sato et al., 2011).

In the first episode of low back pain found 62% of people, and 16% of those initially unable to work are not working after one year (Alsaadi et al., 2011). Estimates for the adult population burden of chronic mechanical low back pain include 11% for disabling back pain in the previous 3 months, 23% for low back pain lasting more than 3 months & 18% for at least troublesome pain in the previous month & it represents a burden to many people & enormous costs for society.

In 55.5% of the Australian adult population the majority of respondents to low back pain in the past 6 months did not seek care for it (Hilde et al., 2002). Adoption of self-management strategies was not achieved consistently in this group of participants. There was a strongly perceived need for self-management support following discharge from physiotherapy (Nahar et al., 2012). Exercises were reportedly the most common self-management strategy in use. However, it was common for participants to perceive that physiotherapy had little influence on their Chronic low back pain management following discharge (Coopera et al., 2009).

A cross-sectional study was performed in December 2010 using a questionnaire and car drivers who experienced back pain for at least one day during the past 12 months were included in the study. The study demonstrated that 78% of car drivers reported LBP for at least one day during the past 12 months. Occupational health and safety management interventions should be implemented to prevent adverse health effects in professional car drivers (Nahar et al., 2012).

Patient education was recommended for all patients with LBP. There was an agreement to advise spine manipulation for patients with acute and sub-acute non-specific LBP (Kumar et al., 2011). There was an agreement to recommend exercises for acute, sub-

acute, and chronic LBP. Few guidelines addressed conservative management (physical activity, exercise, education, electro-physical agents, behavioral counseling) of LBP with radiculopathy. Overall, the guidelines did not offer specific advice for manipulation (hypo mobility or instability) and exercise (stabilization or directional preference) (Ladeira, 2011). The point pervasiveness of LBP is 28.5% found in an Asian nation (Tomita et al., 2010). The lifetime pervasiveness of low back pain is accounted for to be more than 70%. Be that as it may, all around, the yearly pervasiveness of LBP has been evaluated at 38%. When all is said in done, LBP settles within weeks, however, may repeat in 24-50% of cases within 1 year. Along these lines, the identification of hazard factors for LBP is essential in the aversion of intermittent and perhaps incessant LBP (Sterud & Teyrus, 2013). The predominance of LBP in youngsters is low (1%-6%) however increments quickly (18% half) in the immature populace (Khan et al; 2014). The predominance of LBP tops around the finish of the sixth decade of life (Papageorgiou et al., 1995).

In India, many scenes of LBP are handicapping, in this way making it one of the exorbitant words related to medical issues. The best possible arrangement and lifting operations amid penetrating procedure much of the time uncovered the oil-boring specialists to surprise strain on the spine and consequently make them powerless for growing low back pain (Tiwari & Saha, 2014). In an orderly audit of the rate, 12 contemplates met the incorporation criteria and experienced information extraction. Of these, four were considered to have a generally safe predisposition; four a direct danger of inclination, and four a high danger of inclination. Case definitions shifted between these examinations. Most measured agony in the 'low back' and three concentrated in the 'back'. Most did not determine a base scene length that was required for a case to be tallied; four required a base scene term of one day (Hoy et al; 2010).

Despite many studies in different countries, little have tried to focus on the factors associated with patients' unwillingness to receive physiotherapy treatments in a developing country like Bangladesh. Physiotherapy treatments have been proven effective by lots of studies for LBP, but because of our lack of knowledge and other socio-cultural barriers, we cannot facilitate our patients with physiotherapy treatments.

This study aims to investigate the factors which are responsible for patients' unwillingness to receive physiotherapy who have LBP.

1.2 Research Question

What are the factors influencing for not receiving physiotherapy treatment of low back pain patients?

1.3 Objective of the Study

1.3.1 General Objective

To investigate and analyze various factors influencing patients with LBPs not to take physiotherapy.

1.3.2 Specific Objective

- To know about the sociodemographic factors of the participants.
- To know about the pain-related information.
- To explore the knowledge regarding influencing factors for not receiving physiotherapy treatment of low back pain patients.

1.4 Conceptual Framework

Independent variable	Dependent variable
Age	Low back pain
Sex	Patients who did not take Physiotherapy
Posture	
Prolong sitting/ Standing Posture	

1.5 Justification

The justification for conducting this research is rooted in the pervasive prevalence of mechanical low back pain, constituting a substantial burden on global health. George et al. emphasize that approximately 80-90% of individuals experience mechanical low back pain at some point in their lives, underscoring the magnitude of this health issue (George et al., 2013). The undeniable impact of pain on morbidity, coupled with low back pain being one of the most prevalent symptomatic conditions, further accentuates the urgency

to delve into factors influencing its management (Mannion et al., 2007). Global surveys on low back pain highlight its widespread occurrence, with point prevalence ranging from 15% to 30%, 1-month prevalence from 19% to 43%, and lifetime prevalence estimates varying from 50% to 84% (Ghaffari et al., 2006). This ubiquity underscores the need to explore why a significant proportion of individuals with low back pain do not receive physiotherapy, a recognized and effective intervention for this condition. Johnson et al. assert that formidable structural barriers to health often emanate from legislative, policy, or regulatory measures, impeding the advancement of good health (Johnson et al., 2011). Health service challenges, especially for individuals with disabilities, pose a substantial hindrance, emphasizing the necessity for comprehensive rehabilitation strategies encompassing health promotion, disease prevention, disability mitigation, individualized corrective interventions, and the reduction of handicapping phenomena. In essence, this research seeks to address a critical knowledge gap by investigating the factors influencing the underutilization of physiotherapy services for low back pain patients. By understanding these factors, the study aims to contribute to the development of targeted interventions and policies that can enhance the accessibility and utilization of physiotherapy, ultimately improving the overall management and well-being of individuals suffering from low back pain. This research is justified by the need to address the underutilization of physiotherapy services among low back pain patients, identifying specific barriers rooted in knowledge gaps and social factors. The findings aim to inform targeted interventions and policy measures to enhance physiotherapy accessibility and improve overall well-being for this demographic in Bangladesh.

Low back pain stands to be the absolute most basic explanation behind a visit to a general specialist and is likewise the best reason for work-related inability. It is from mechanical inception that is distinguished by the nearness or nonappearance of indications and signs with various stances or developments. Mechanical LBP is regularly treated moderately with exercise-based recuperation (Kumar, 2011). LBP is a noteworthy medical problem with critical financial ramifications in most Western nations. Many types of treatment have been proposed and examined previously, with the practice being a usually endorsed mediation. Inside partnered well-being, specifically physiotherapy, there has been a developing development that perceives the part of the McKenzie strategy in treating LBP (Duns portage et al., 2011). It is a typical and incapacitating issue in Western culture. The administration of LBP contains a scope of various mediation procedures including surgery, sedate treatment, and non-restorative intercessions (Middelkoop et al., 2011).

Low back pain is pain, muscle strain, or solidness, restricted underneath the costal edge or more the mediocre gluteal folds, with or without alluded or radicular leg pain (sciatica). For this outline, intense low back pain is characterized as pain that holds on for under 12 weeks. Non-particular low back pain is an unimportant term however is utilized by a few people to name back pain that isn't inferable from an unmistakable pathology or side effect design, (for example, contamination, tumor, osteoporosis, rheumatoid joint pain, break, or irritation). This outline avoids intense low back pain with indications or signs at the introduction that recommend a particular fundamental patho-anatomical condition. Concentrates exclusively of sciatica (lumbosacral radicular disorder), herniated circles, or both were likewise avoided. Unless generally expressed, individuals incorporated into this outline had another scene of intense low back pain (i.e., of <12 weeks' length). Some included RCTs additionally subdivided intense low back pain of under 12 weeks' length into intense (<6 weeks' term) or sub-intense, 6– 12 weeks' span (McIntosh and Hall, 2015).

Intense low back pain might act naturally restricting, albeit intense low back pain has a high repeat rate with manifestations repeating in half to 80% of individuals within 1 year; 1 year after the underlying scene, upwards of 33% of individuals still persevere through direct force torment and 15% experience extreme pain. The more extended the time of wiped-out leave, the more improbable come back to work moves toward becoming (Jarvik et al., 2002).

The low back design comprises vertebral bodies (the bones of the spine), vertebral plates (pads between the bones), ligaments (lines of the bones that interface with different bones), strong structures encompassing the spine, for example, muscles, ligaments (associating muscle to bone), tendons (associating unresolved issue) (Integrative torment medication, 2012). Various alternatives exist for patients with recalcitrant back torment and degenerative disc disease (DDD). Entomb body combination procedures misuse the mechanical points of interest of the circle space anteriorly, including an extensive combination bed, amazing blood supply, and unit pressure (Truumees et al., 2008).

The event of LBP has related to different variations from the norm of the spine on MRI, confirming being most grounded for circle herniation (projection or more terrible), nerve root deviation/pressure, plate degeneration, and high-intensity zone (HIZ). In any case, each of these irregularities can be found without indications, and numerous patients with back protests don't show any self-evident pathology on MRI (Sham stream et al., 2011).

Low back pain (LBP) is a noteworthy medical problem with critical financial ramifications in numerous Western nations. Predominance reports differ impressively, yet it has been evaluated that 60%– 80% of individuals will encounter a scene of LBP in their lives. With expanding costs, both as far as medicinal services and misfortune in efficiency, there is a reasonable requirement for powerful and opportune administration that will guarantee recuperation and keep away from chronicity. A few treatment systems, for example, joint activation and control, delicate tissue rub methods, electrotherapy, needle therapy, and footing, are as of now used in clinical practice by a scope of professionals, with shifting degrees of viability. Activities are regularly recommended for LBP by physiotherapists, however just appear to be upheld as mediation by confirmation for patients with ceaseless LBP. While current confirmation

bolsters the part of the activity for LBP, clinical use of this mediation is shifted, particularly regarding exercise medicine. Center steadiness practices are especially well-known in the clinical setting and have been broadly explored. Generally, the arrangement of LBP, especially for investigative purposes, has been dictated by the chronicity of the condition, e.g., "intense", "sub-intense", and "unending". While this grouping considers side effect length, it neglects to catch the complexities related to a patient's genuine manifestations and the reaction of their indications to development. Around the world, best practice clinical rules for the administration of LBP collectively distinguish practice as a key treatment choice, especially for incessant LBP. Despite this, LBP keeps on being ineffectively overseen over the social insurance range (Duns portage et al., 2011).

In a worldwide survey, experts specializing in disability issues, encompassing health policy and clinical assessments, acknowledged the hurdles encountered by individuals with disabilities in accessing adequate health services. The survey illuminated potential solutions to address these barriers. The global population's expansion, a surge in chronic diseases, aging demographics, and advancements in medical technologies enhancing the quality of life for people with disabilities contribute to a rising number of individuals with disabilities worldwide. These factors create considerable and often unrealistic demands for healthcare and rehabilitation, particularly in developing nations (Tomlinson et al., 2009).

Johnson highlights that the most substantial structural impediments to health often stem from legislative, policy, or regulatory measures that hinder the promotion of good health. Moreover, health service challenges pose a significant barrier for individuals with disabilities (Johnson et al., 2011). Consequently, the primary goals of rehabilitation encompass health promotion, disease prevention, mitigation and prevention of disability, individual corrective interventions, and the reduction of handicapping phenomena. Adopting a holistic approach to projects rather than treating them as isolated tasks can help prevent discord, redundancy, and the inefficient use of resources (Kamali, 2011).

Late methodical audits neglected to set up causality between numerous word-related exercises, for example, standing, strolling, lifting, pushing/pulling, conveying, and LBP. Among chance variables, we were especially inspired by those exercises natural in the

Asian way of life, for example, crouching and sitting on the floor without back help, which has not been already inspected. It is seen that the hours committed to profound crouching and sitting on the floor without back help at a youthful age were significantly connected with LBP (Cho et al., 2012).

Notably, hunching down and sitting on the floor was related to LBP as well as the nearness of radio graphical degenerative change in the timber spine. Among radio graphical highlights broke down, joint space narrowing and osteophytes were altogether connected with LBP and the quality of the affiliation expanded with expanding seriousness of plate space narrowing. Numerous past examinations proposed a relationship between plate space narrowing and LBP (de schepper et al., 2010).

The component connecting circle space narrowing with LBP might be identified with the expulsion of circle material, bringing about expanded weight on spinal nerve roots, lessening in physical space between the vertebra, change in spine biomechanics, and expanding weight on the influenced nociception (Pye et al., 2004). In this examination, the emphasis was on the connection between personal satisfaction and LBP. The discoveries demonstrated that there were solid contrasts between the two gatherings as to the physical working. This shows low back agony can cause handicaps and numerous restrictions for patients who experience the ill effects of extreme LBP. Additionally, there were astounding contrasts between the two gatherings in different measurements of personal satisfaction, for example, part physical, essentialness, emotional well-being, and general well-being. Maybe this implies LBP can fundamentally influence these measurements of personal satisfaction. To have a superior comprehension of the connection between personal satisfaction and LBP there have to do ponders that look at this relationship while considering patients' qualities and wellbeing practices (Tavafian et al., 2005).

People with disabilities, constituting 15 percent of the global population, routinely encounter challenges in their daily activities, irrespective of the presence of COVID-19. These challenges include impediments to community mobility (Jónsdóttir and Polgar, 2018), struggles with accessing public transportation, limited availability of healthcare services, and communication barriers. Individuals with impairments are at an elevated

risk of experiencing depression, reporting lower life satisfaction, and grappling with increased loneliness compared to the general population (Brunes, B. Hansen & Heir, 2019).

Maart and Jelsma (2014) conducted a survey involving 1,083 families in a disadvantaged neighborhood of Cape Town, South Africa, incorporating 152 people with disabilities (PWD). Among PWD, 71% identified financial constraints, and 72% cited transportation limitations as hindrances to accessing healthcare services. In a study in Chicago, US, Clarke et al. (2011) revealed that, compared to factors like high traffic, street quality, and household security, physical therapy played a minor role in influencing PWD's engagement in interpersonal interactions, preventive healthcare, and voting. Analyzing 61 papers on travel obstacles and healthcare access in the United States, Syed, Gerber, and Sharp (2013) found that transportation barriers significantly impede individuals with lower incomes, a factor relevant to PWD who often have reduced incomes, with a median gross personal income half that of those without disabilities (Temple, Dow, and Baird, 2019). Despite numerous studies recognizing transportation as a significant hurdle for PWD in accessing healthcare and daily activities, limited research has explored the relationship between improved public transportation and disability-specific healthcare utilization.

A barrier refers to anything that hinders fair access to products, services, or information for an individual or group. Obstacles are defined as "environmental factors that, through their absence or presence, impede disability." These encompass elements like an inaccessible environment, a deficiency in essential assistive technology (covering assistive, adaptive, and rehabilitative devices), unfavorable attitudes towards disability, and policies that are either non-existent or hinder the full participation of all individuals with health conditions in various aspects of life (Acemoglu & Angrist, 2001).

Attitude barriers form the foundational layer and give rise to other barriers. Unlike physical and other barriers that aren't inherent to the attributes of an individual or group, but rather stem from the attitudes of others toward them, attitude barriers can be surmounted. Negative attitudes often lead to the denial of fundamental human and civil rights that are granted to other members of the community. Attitudes encompass an

individual's emotions, beliefs, and behavioral tendencies directed toward a specific abstract or physical entity, be it a person, place, object, or event. The imposition of inferiority on people with disabilities can constitute an attitude barrier, at times leading to their perception as "second-class citizens" due to limitations in one of the major life functions (Reiter & Bryen, 2010).

A research study presented a comprehensive exploration of the diverse dimensions of barriers to healthcare access in less-developed countries, focusing on aspects like availability, affordability, geography, and acceptable access. It also offered an overview of potential strategies to overcome these challenges and summarized existing solutions aimed at addressing these issues (Jacobs et al., 2012).

3.1. Study Design:

The cross-sectional observational study design is chosen for this research to gain an understanding of the prevailing influencing factors faced by patients with low back pain in not seeking physiotherapy services.

3.2. Study Area:

The study was conducted in the residential area of Janata Housing, located in Agargaon, Dhaka, Bangladesh.

3.3 Study Population:

The study population comprises individuals residing in Janata Housing who are experiencing low back pain and have the potential to seek physiotherapy services.

3.4. Study Duration:

The research span was over 3 months, from May 2023 to July 2023, allowing ample time for the various stages of the study, including planning, ethical approval, data collection, analysis, and reporting.

3.5. Method of Sampling:

Convenience sampling method is used to collect data from Janata Housing, Agargaon, Dhaka.

3.6 Sample Size

To calculate the required sample size, the formula for estimating proportions is used.

$$n = \frac{z^2 \times p \times (1 - p)}{E^2}$$

Where,

n = required sample size

Z = Z-score corresponding to the desired confidence level (e.g., 95% confidence level corresponds to a Z-score of 1.96)

p = estimated prevalence of factors influencing patients with low back pain not receiving physiotherapy (if no previous estimate is available, a conservative estimate of 50% is used)

E = margin of error (maximum allowable error) set at 5% (0.05)

So, the sample size:

$$n = \frac{1.96^2 \times 0.5 \times (1 - 0.5)}{(0.05)^2}$$

$$\text{or, } n = 384.16$$

$$n = 384$$

The calculated sample size is 384 and a total of 123 responses were taken.

3.7 Criteria of Sampling (Inclusion & Exclusion):

3.7.1 Inclusion Criteria:

- Individuals who are having low back pains but did not receive physiotherapy.
- Age group: 18 years or above
- Voluntary participants
- Both male and female participants are included

3.7.2 Exclusion Criteria:

- Patients who are unable to communicate or provide information due to language barriers or other reasons.
- Unwilling participants

3.8 Data Collection Tools:

A consent form and self-structured questionnaire were used to collect data.

3.9 Data Collection Procedure:

A written consent approved by the IRB was used to take consent from the patients. A self-structured Questionnaire was used to collect data by face-to-face interview.

3.10 Data Analysis Procedure:

The data analysis for this research employs a comprehensive approach, integrating both descriptive and inferential statistical methods through SPSS, Excel, bar, and chart. Descriptive statistics provides a thorough overview of demographic characteristics and the prevalence of social impediments and knowledge barriers among low back pain patients. Inferential statistics explores associations between categorical variables. Excel is utilized for data visualization, particularly in creating bar charts that visually represent the distribution of responses.

3.11 Ethical Consideration:

The ethical dimensions of this research project were meticulously upheld in accordance with the guidelines stipulated by the Bangladesh Medical Research Council (BMRC), the Institution Review Board (IRB), and the Research guidelines of the World Health Organization (WHO). To guarantee ethical standards, explicit informed consent was obtained from all participants, elucidating the study's aim and objectives. Participants' rights and privileges is safeguarded, and the utmost confidentiality of their data was ensured throughout the research process. The study strictly adhered to non-harmful practices, and participants retained the autonomy to withdraw their participation at any juncture without any adverse consequences.

Baseline Information:**Table 1: Baseline of Socio-demographic and Pain-Related information of the participants**

Characteristics	Percentage %	Frequency (n)
Age overall (Mean \pm SD)	40.26 \pm 11.735	
Age category		
18-25	12	15
26-35	19	24
36-45	41	51
46-55	14	18
56-65	11	14
66-75	0.8	1
Gender		
Male	27	34
Female	72	89
Occupation		
Office Worker	18	23
Laborer	2	3
Driver	2	3
Housewife	53	66
Unemployed	9	12
Retired	8	10
Student	4	6
Marital status		
Married	79	98

Single	17	22
Widow	0.8	1
Divorce	1	2
Level of Education		
Illiterate	12	5
Primary	14	18
SSC	9	12
HSC	42	52
Higher Education	25	31
Other	3	4
Family Type		
Nuclear	92	114
Extended	7	9
Living area		
Rural	0	0
Urban	100	123
Co-Morbidities		
DM	26	33
HTN	13	16
Asthma	6	8
Kidney Disease	4	5
Pain Pattern		
Constant	17	21
Intermittent	82	102
Pain Duration Category		
6-9	26	33
10-12	7	9
13-15	43	54
16-18	3	4
19-21	4	5
22-24	14	18

Pain Increase While

Bending	30	38
Lying	22	27
Sitting	35	44
Standing	2	3
Walking	8	11

Do the same work all day.

Yes	24	30
No	75	93

4.1 Sociodemographic Information:

The study was conducted with 123 participants. The average age of the participants was 40.26 ± 11.735 . Among the respondents, 28% (n=34) were male and 72% (n=89) were female. Regarding marital status, 79.6% (n=98) were married, 17.8% (n=22) were single, 1.62% (n=2) were divorced, and 0.81% (n=1) were widowed. In terms of education, 4.1% (n=5) were illiterate, 14.6% (n=18) had completed primary education, 9.8% (n=18) had completed SSC, 42.3% (n=52) had completed HSC, 25.20% (n=31) had completed higher education, and 3.3% (n=4) had other levels of education.

Among the 123 participants, family types were predominantly nuclear households with a percentage of 92.7% (n=114). On the other hand, 7.3% (n=9) of the families were extended. All participants resided in urban areas (100%). The occupational distribution included 18.7% (n=23) office workers, 2.4% (n=3) laborers, 2.4% (n=3) drivers, 53.7% (n=66) housewives, 9.8% (n=12) unemployed, 8.1% (n=10) retired individuals, and 4.9 (n=6)% students.

4.2 Age of the Participants

The study was conducted with 123 participants. Among the respondents 12% (n=15) is in 18-25 years of age, 20% (n=24) is in 26-35 years of age, 42% (n=51) is in 36-45 years of age, 15% (n=18) is in 46-55 years of age, 11% (n=14) is in 56-65 years of age, 0.8% (n=1) is in 66-75 years of age.

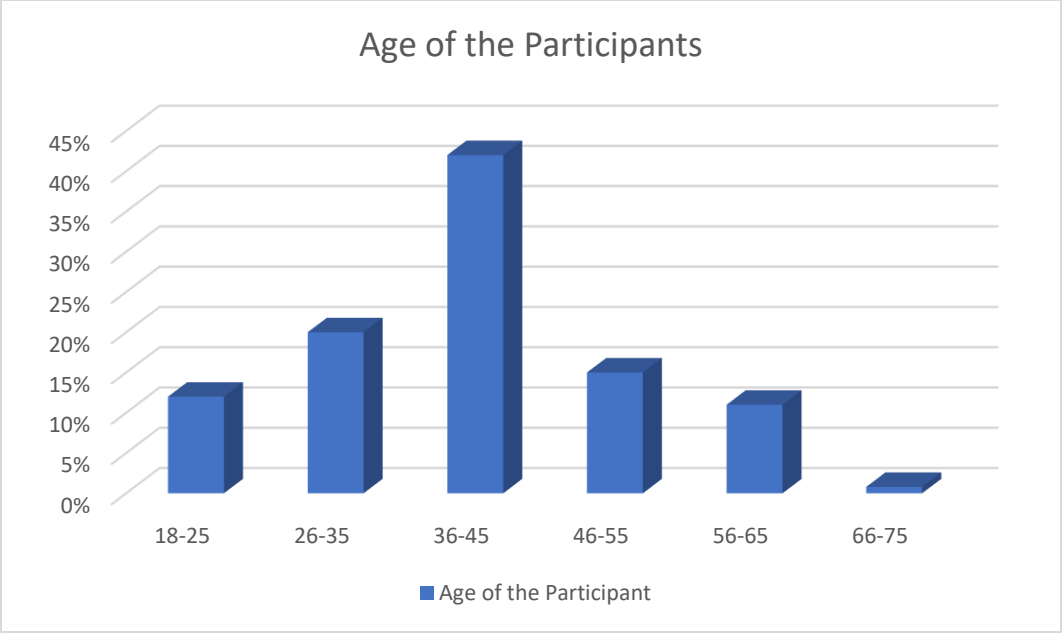


Figure 1: Age Distribution of the Participants

4.3 Gender Distribution of the Participants

The study was conducted with 123 participants. Among the respondents, 28%(n=34) Were male and 72%(n=89) was female.

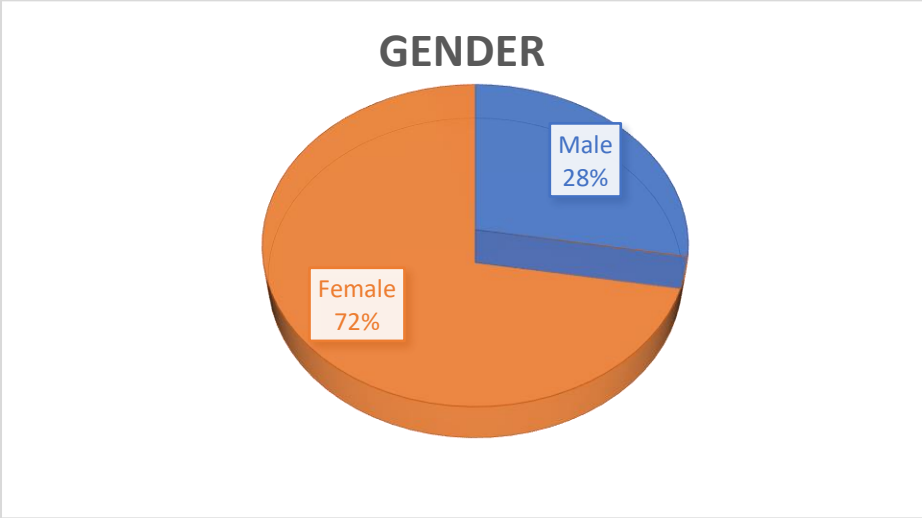


Figure 2: Gender Distribution of the Participants

4.4 Marital Status of the Participants

Regarding marital status, 79.6%(n=98) were married, 17.8%(n=22) were single, 1.62%(n=2) were divorced, and 0.81%(n=1) were widowed.

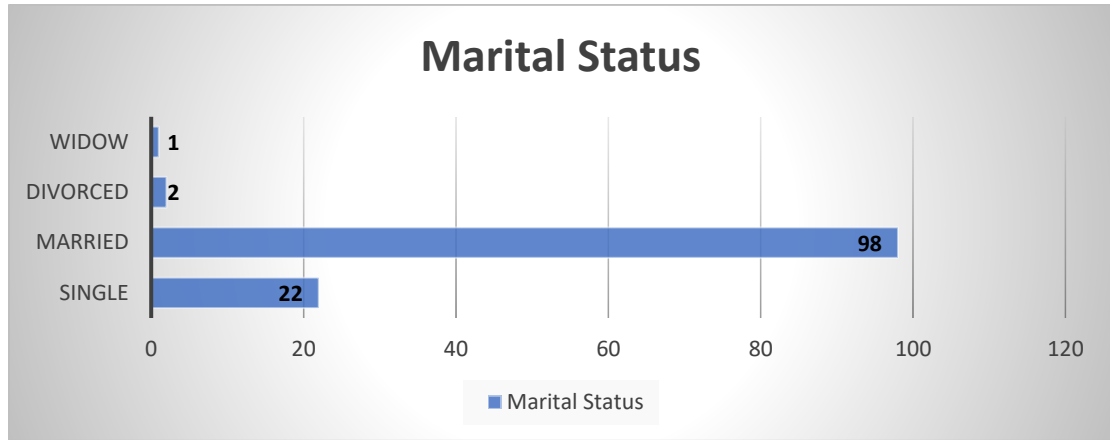


Figure 3: Marital Status of the participants

4.5 Level of Education of the Participants

In terms of education, 4.1% (n=5) were illiterate, 14.6% (n=18) had completed primary education, 9.8% (n=18) had completed SSC, 42.3% (n=52) had completed HSC, 25.20% (n=31) had completed higher education (Hons & Above), and 3.3% (n=4) had other levels of education.

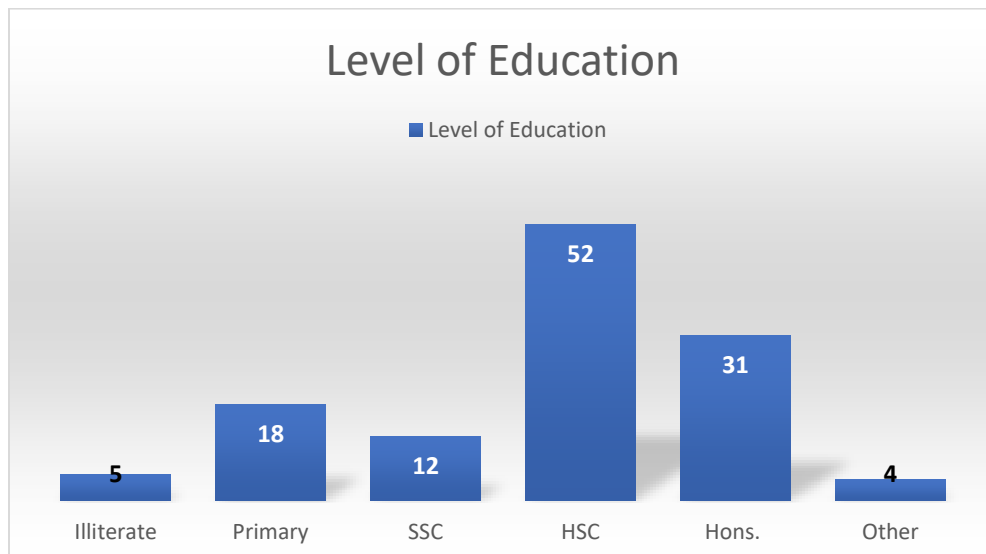


Figure 4: Level of Education of the Participants

4.6 Family Type of the Participants

Among the 123 participants, family types were predominantly nuclear households with a percentage of 92.7% (n=114). On the other hand, 7.3% (n=9) of the families were extended.

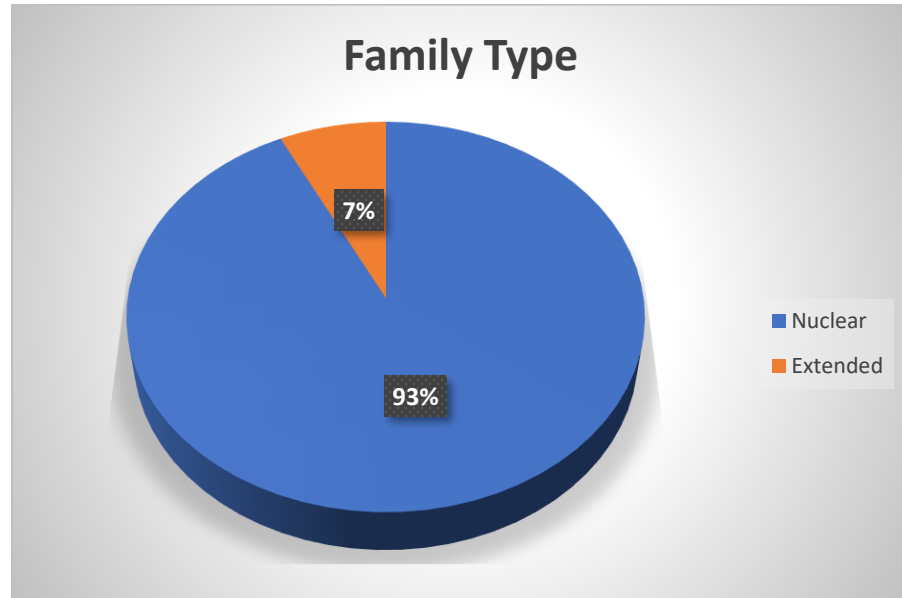


Figure 5: Family Type of the Participants

4.7 Living Area of the Participants

All participants resided in urban areas (100%).

Table 2: Living Area of the Participants

Living Area	Frequency	Percentage
Rural	0	0%
Urban	123	100%
Total	123	100%

4.8 Occupation of the Participants

The occupational distribution included 18.7% (n=23) office workers, 2.4% (n=3) laborers, 2.4% (n=3) drivers, 53.7% (n=66) housewives, 9.8% (n=12) unemployed, 8.1% (n=10) retired individuals, and 4.9 (n=6)% students.

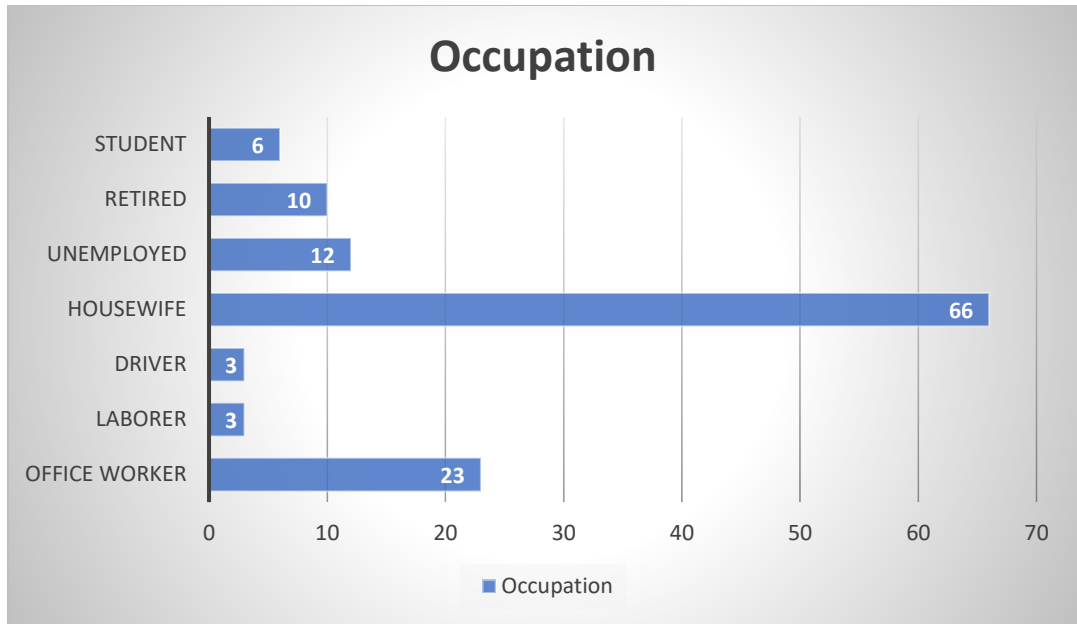


Figure 6: Occupation of the participants

4.9 Co-Morbidities of the Participants

Among the 123 participants, 6.5% (n=8) had Asthma, 26.8% (n=33) had Diabetes Mellitus (DM), 13% (n=16) had Hypertension (HTN), and 4.1% (n=5) had Kidney disease.

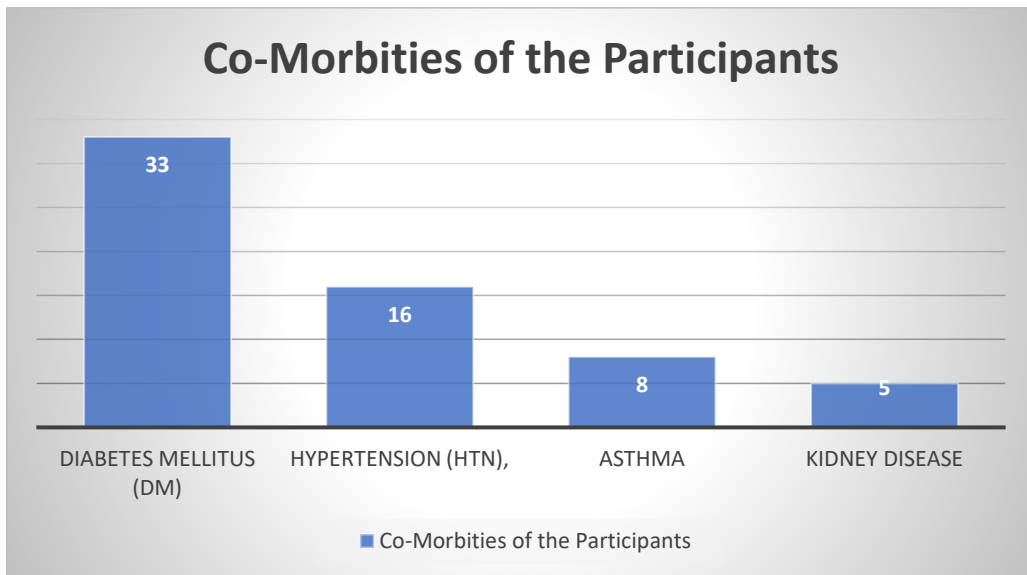


Figure 7: Co-Morbidities among Participants

4.10 Pain-Related Information:

Among the 123 participants, 26.8% (n=33) participants were facing low back pain for 6-9 months, 7.3% (n=9) participants were facing low back pain for 10-12 months, 43.9% (n=54) participants were facing low back pain for 13-15 months, 3.3% (n=4) participants were facing low back pain for 15-18 months, 4.1% (n=5) participants were facing low back pain for 19-21 months, 14.6% (n=18) participants were facing low back pain for 22-24 months. 17% (n=21) had constant pain whereas 83% (n=102) had intermittent pain. 24% (n=30) do the same of all day whereas 76%(n=93) do not perform the same work all day.

4.11 Pain Duration

Among the 123 participants, 26.8% (n=33) participants were facing low back pain for 6-9 months, 7.3% (n=9) participants were facing low back pain for 10-12 months, 43.9% (n=54) participants were facing low back pain for 13-15 months, 3.3% (n=4) participants were facing low back pain for 15-18 months, 4.1% (n=5) participants were facing low back pain for 19-21 months, 14.6% (n=18) participants were facing low back pain for 22-24 months.

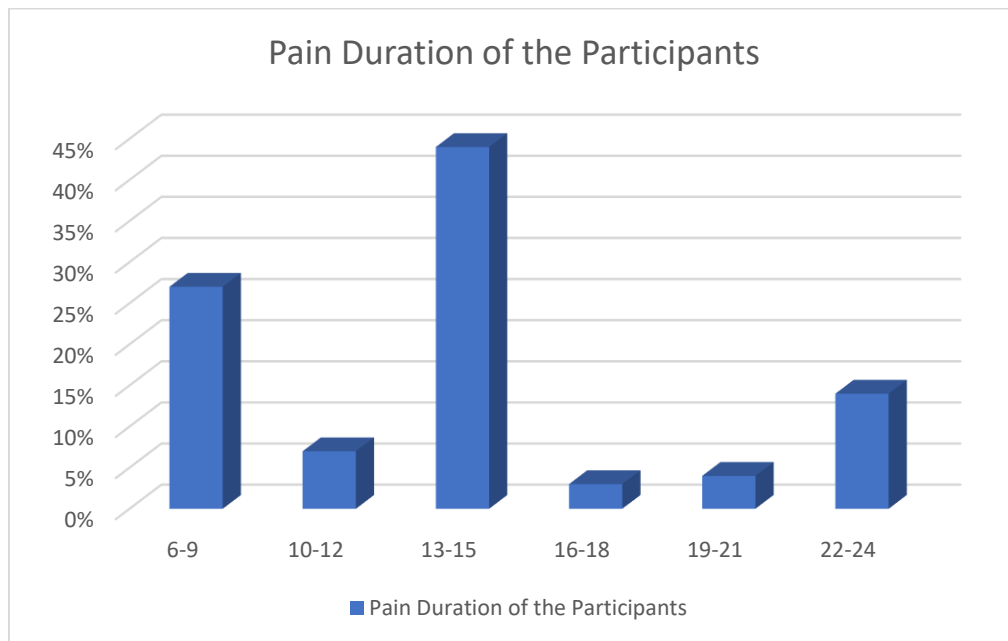


Figure 8: Pain Duration of the Participants

4.12 Pain Pattern

Among the 123 participants, 17% (n=21) had constant pain whereas 83% (n=102) had intermittent pain.

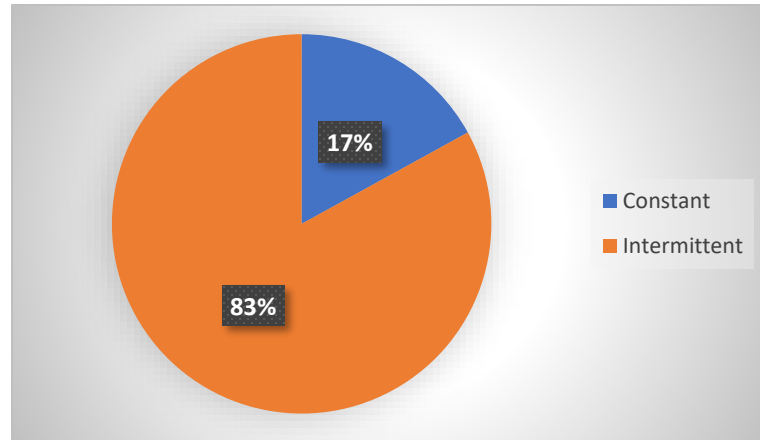


Figure 9: Pain Pattern among Participants

4.13 Position increase pain

Among the 123 participants, 31% (n=38) reported increase of pain during bending, 22% (n=27) reported increase of pain while lying, 22% (n=27) reported increase of pain while lying, 35.8% (n=44) reported increase of pain while sitting, 2.4% (n=3) reported increase of pain while standing, 8.9% (n=11) reported increase of pain while walking.

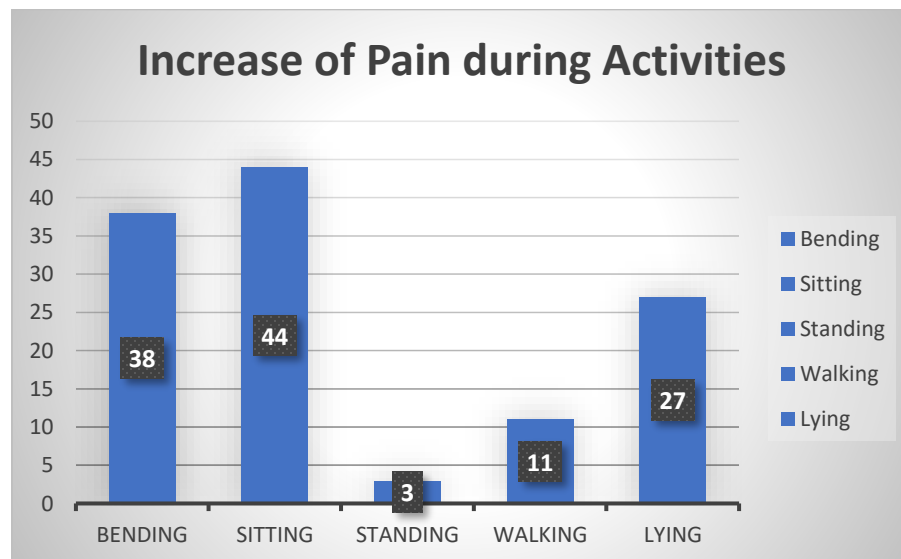


Figure 10: Increase of Pain During Activities

4.14 Influencing Factors for Not Receiving Physiotherapy

Table 2 shows the influencing factors for not receiving Physiotherapy.

Table 2: Influencing Factors for Not Receiving Physiotherapy

Influencing Factors Related Question	Total number	Percentage %
Medicine can fully cure LBP		
Yes	88	71
No	35	29
Physiotherapy is not necessary if you take regular medicine		
Yes	111	90
No	12	10
You have heard about physiotherapy		
Yes	118	96
No	5	4
No matter you take medicine or physiotherapy, LBP will last with you for the rest of your life		
Yes	86	70
No	37	30
No matter you take medicine or physiotherapy, LBP gets progressively worse later in life		
Yes	118	96
No	5	4
Physiotherapy will not lessen pain		
Yes	64	52
No	59	48

Taking physiotherapy increases		
pain		
Yes	76	62
No	57	38
You have heard about		
physiotherapy		
Yes	5	4
No	118	96
You never heard about		
physiotherapy before		
Yes	5	4
No	118	96
You have consulted a doctor for		
your LBP		
Yes	105	85
No	18	15
Your doctor never suggested you		
take physiotherapy		
Yes	109	89
No	14	11
There is no physiotherapy center		
near your residence		
Yes	100	81
No	23	19
You are too busy to take		
physiotherapy		
Yes	102	83
No	21	17

Your family members do not support you to take physiotherapy services

Yes	96	78
No	27	22

Physiotherapy is a costly treatment

Yes	75	61
No	48	39

4.15 Do the same work all day

24% (n=30) do the same of all day whereas 76%(n=93) do not perform the same work all day.

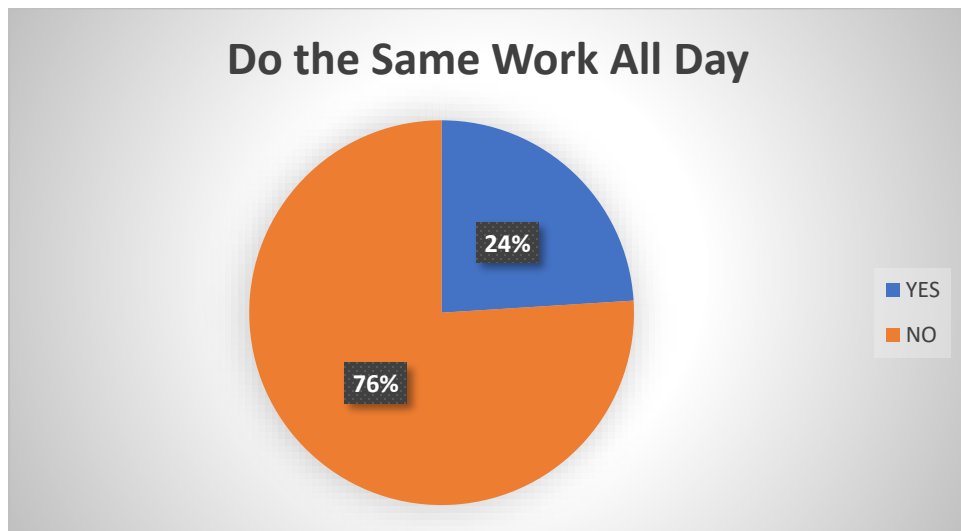


Figure 11: Response to “Do the Same Work All Day”

4.16 Medicine can fully cure LBP

Among 123 participants, 71% (n=88) responded Yes and 29% (n=35) responded No to the question “Medicine can fully cure LBP”

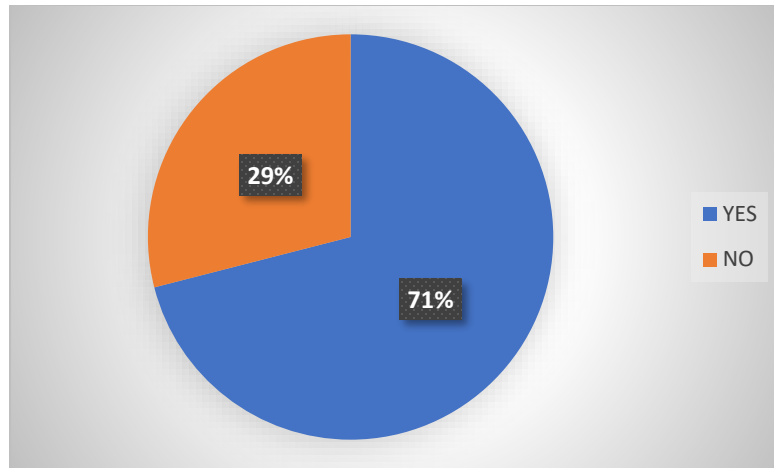


Figure 12: Response of participants to the Question ‘Medicine can fully cure LBP’

4.17 Physiotherapy is not necessary if you take regular medicine

Among 123 participants, 90% (n=111) responded Yes and 10% (n=12) responded No to the question “Physiotherapy is not necessary if you take regular medicine”

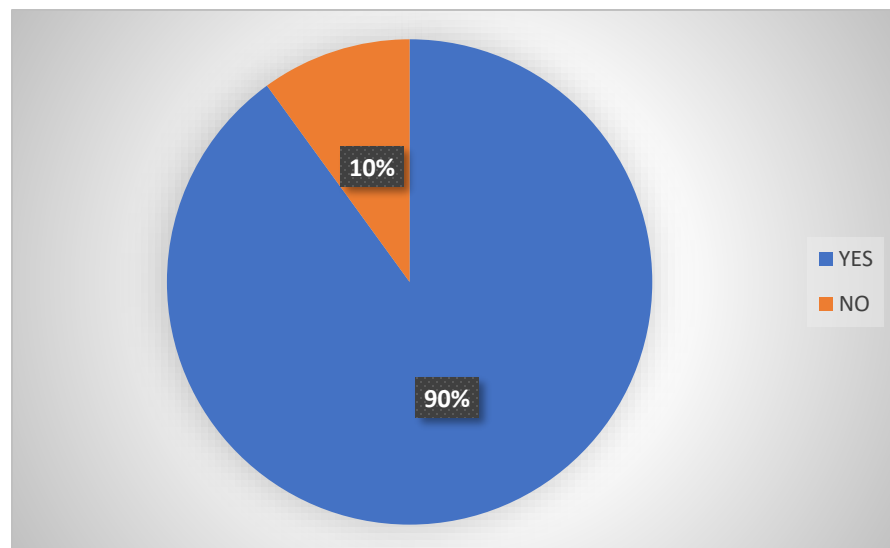


Figure 13: Response of participants to the Question ‘Physiotherapy is not necessary if you take regular medicine’

4.18 You have heard about Physiotherapy

Among 123 participants, 96% (n=118) responded Yes and 4% (n=5) responded No to the question “You have heard about Physiotherapy”

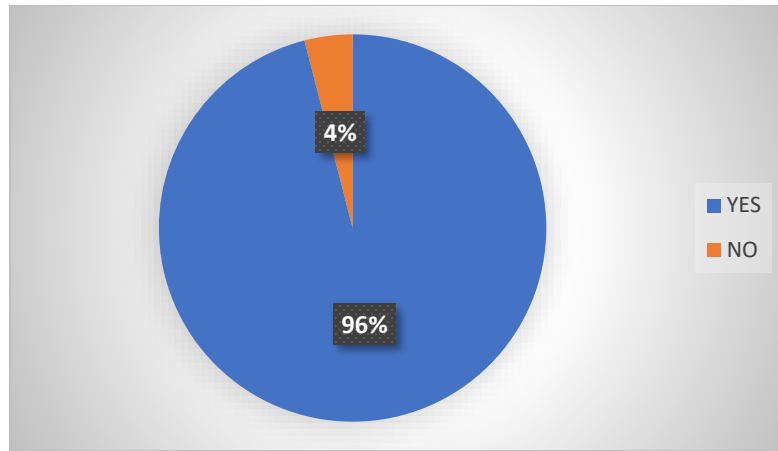


Figure 14: Response of participants to the Question ‘You have heard about Physiotherapy’

4.19 No matter what you take medicine or Physiotherapy, LBP will last with you for the rest of your life

Among 123 participants, 70% (n=86) responded Yes and 30% (n=37) responded No to the question “No matter what you take medicine or Physiotherapy, LBP will last with you for the rest of your life”

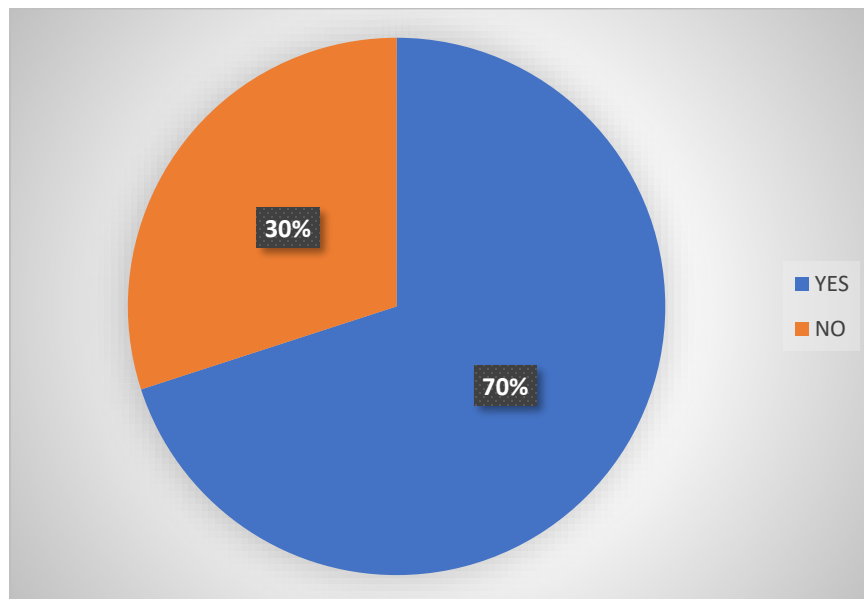


Figure 15: Response of participants to the Question ‘No matter what you take medicine or Physiotherapy, LBP will last with you for the rest of your life.’

4.20 No matter what you take medicine or Physiotherapy, LBP gets progressively worse later in life

Among 123 participants, 96% (n=118) responded Yes and 4% (n=5) responded No to the question “No matter what you take medicine or Physiotherapy, LBP gets progressively worse later in life”

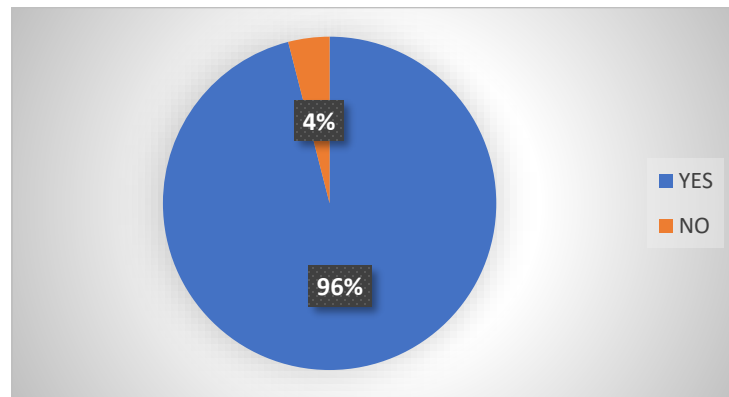


Figure 16: Response of participants to the Question ‘No matter what you take medicine or Physiotherapy, LBP gets progressively worse later in life’

4.21 Physiotherapy will not lessen pain

Among 123 participants, 52% (n=64) responded Yes and 48% (n=59) responded No to the question “Physiotherapy will not lessen pain”

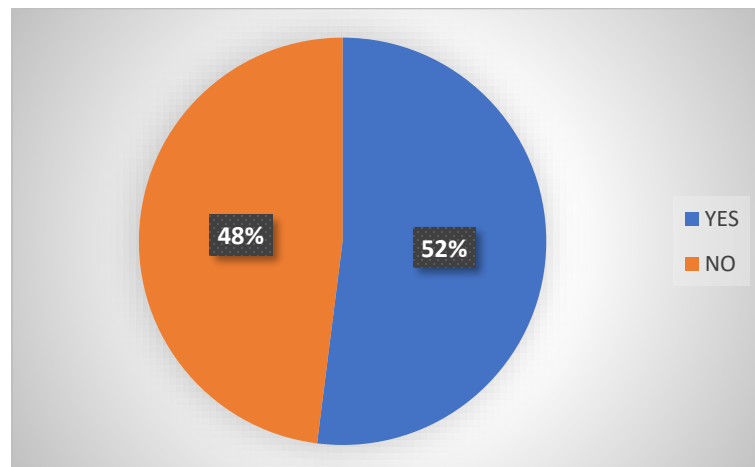


Figure 17: Response of participants to the Question ‘Physiotherapy will not lessen pain’

4.22 Taking physiotherapy increases pain

Among 123 participants, 62% (n=76) responded Yes and 38% (n=57) responded No to the question “Taking physiotherapy increases pain”

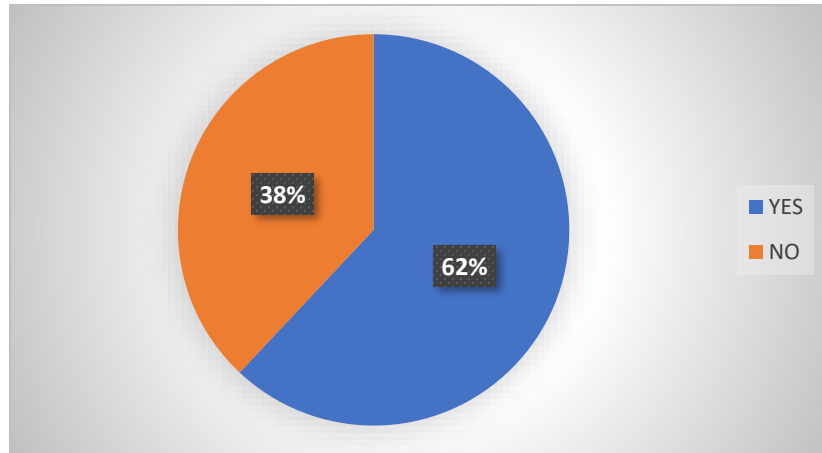


Figure 18: Response of participants to the Question ‘Taking physiotherapy increases pain’

4.23 You have never heard about physiotherapy before

Among 123 participants, 4% (n=5) responded Yes and 96% (n=118) responded No to the question “You never heard about physiotherapy before”

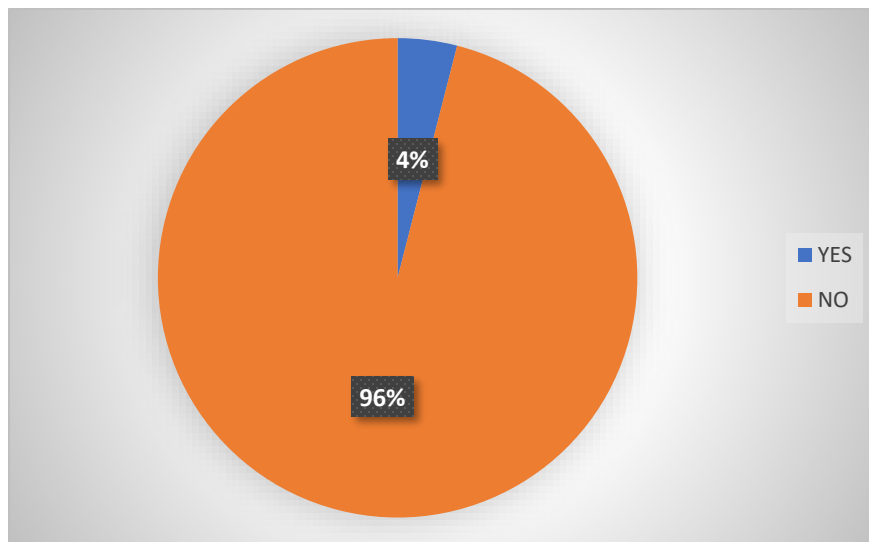


Figure 19: Response of participants on the Question ‘You never heard about physiotherapy before’

4.24 You have consulted a doctor for your LBP

Among 123 participants, 85% (n=105) responded Yes and 15% (n=18) responded No to the question “You have consulted a doctor for your LBP”

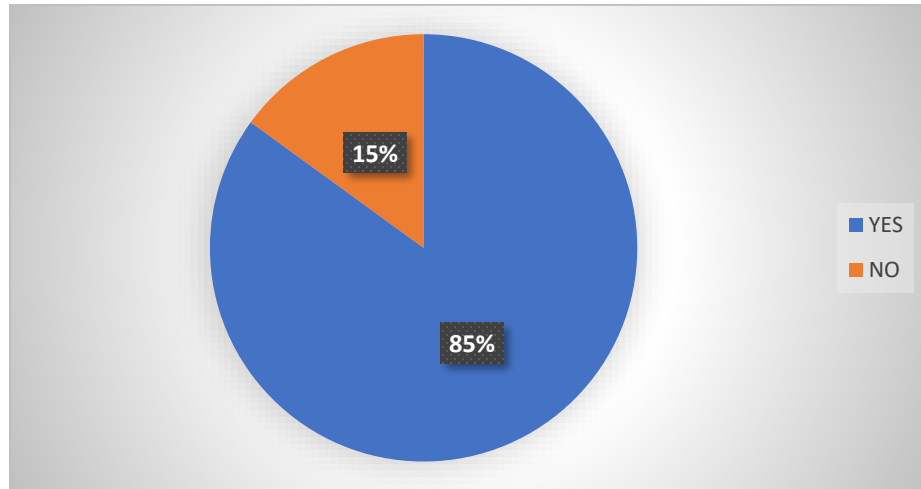


Figure 20: Response of participants on the Question ‘You have consulted a doctor for your LBP’

4.25 Your doctor never suggested you take physiotherapy

Among 123 participants, 89% (n=109) responded Yes and 11% (n=14) responded No to the question “Your doctor never suggested you take physiotherapy”

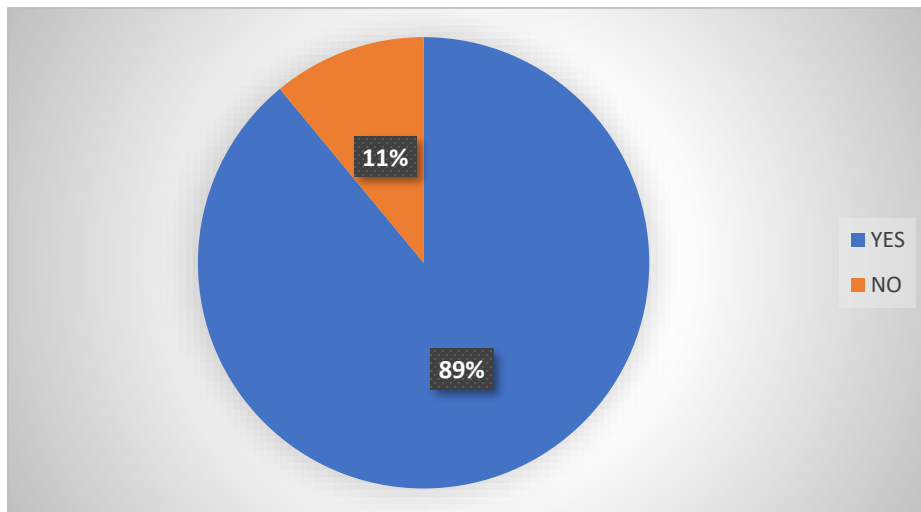


Figure 21: Response of participants on the Question ‘Your doctor never suggested you take physiotherapy’

4.26 There is no physiotherapy center near your residence

Among 123 participants, 81% (n=100) responded Yes and 19% (n=23) responded No to the question “There is no physiotherapy center near your residence”

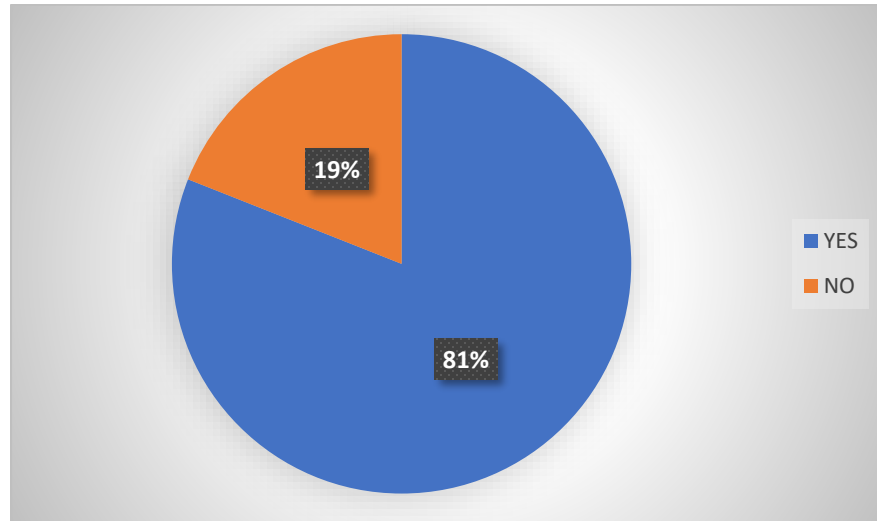


Figure 22: Response of participants on the Question ‘There is no physiotherapy center near your residence’

4.27 You are too busy to take physiotherapy

Among 123 participants, 83% (n=102) responded Yes and 17% (n=21) responded No to the question “You are too busy to take physiotherapy”

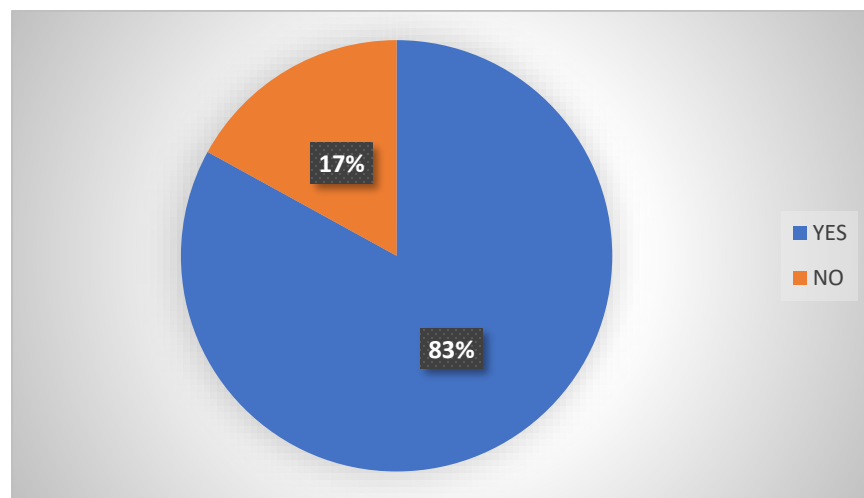


Figure 23: Response of participants to the Question ‘You are too busy to take physiotherapy’

4.28 Your family members do not support you to take physiotherapy services

Among 123 participants, 78% (n=96) responded Yes and 22% (n=27) responded No to the question “Your family members do not support you to take physiotherapy services”

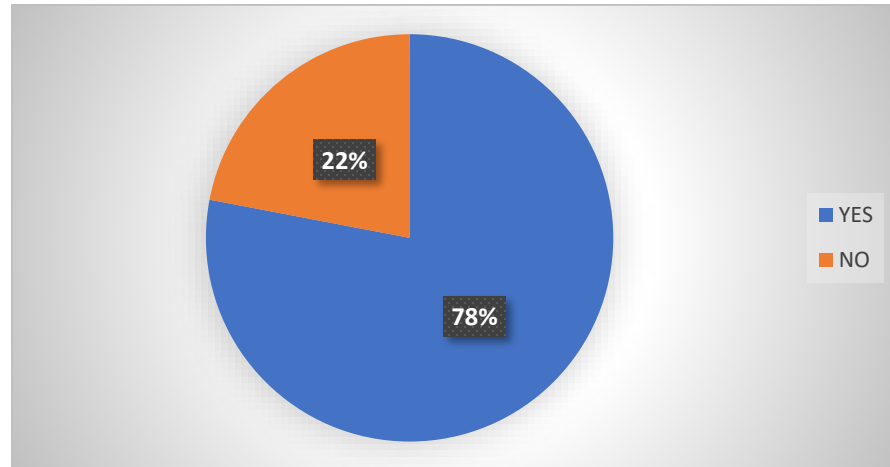


Figure 24: Response of participants on the Question ‘Your family members do not support you to take physiotherapy services’

4.29 Physiotherapy is a costly treatment

Among 123 participants, 61% (n=75) responded Yes and 39% (n=48) responded No to the question “Physiotherapy is a costly treatment”

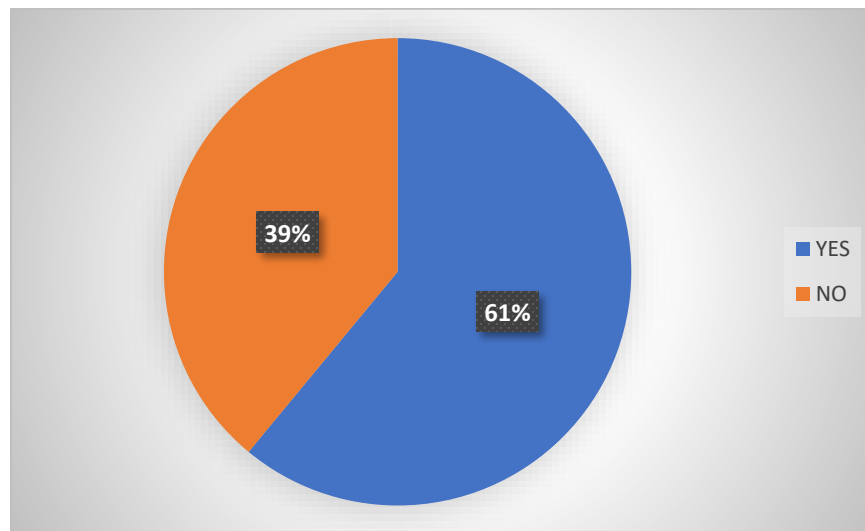


Figure 25: Response of participants to the Question ‘Physiotherapy is a costly treatment’

4.30 Association

To figure out if there's some association between the variables, a chi-square test was performed. The chi-square test value and P-value is shown on the table:

Table 3: Association between age category with pain and other influencing factors

Independent Variable	Dependent Variable			
	Pain and other influencing factors	Chi-Square (χ^2)	P-Value (α)	
Sociodemographic Characteristics	Co-Morbidities	30.16	0.011*	
	Pain Duration	21.72	0.652	
	Pain Pattern	44.04	<0.001*	
	Pain Increase While	26.21	0.159	
	Do the same work all-day	7.05	0.217	
	Medicine can fully cure LBP	14.25	0.014*	
	Age Category	Physiotherapy is not necessary if you take regular medicine	11.75	0.030*
		You have heard about physiotherapy	25.51	<0.001*
		LBP will last for the rest of your life	10.19	0.070
		LBP gets progressively worse later in life	2.85	0.722
		Physiotherapy will not lessen pain	3.53	0.618
		Physiotherapy will increase pain	3.03	0.695
		Never heard about Physiotherapy	25.51	<0.010*
		Consulted doctor for your LBP	1.78	0.878
		Your doctor never suggested take physiotherapy	1.71	0.887
		No physiotherapy center near residence	5.85	0.321
		Too busy to take physiotherapy	8.11	0.150
		Family members do not support you take physiotherapy	5.59	0.347
		Physiotherapy is a costly treatment	2.462	0.782

The association between Age Category and co-morbidities, pain pattern, medicine can fully cure LBP, Physiotherapy is not necessary if you take regular medicine, you have heard about physiotherapy, never heard about physiotherapy (P=.011), (P=.001), (P=.014), (P=.030), (P=.001), (P=.010) was significant.

Table 4: Association between gender with pain and other influencing factors

Independent Variable	Dependent Variable	Chi-Square (χ^2)	P-Value (α)
Sociodemographic Characteristics	Pain and other influencing factors		
Gender	Co-Morbidities	2.64	.450
	Pain Duration	0.52	.992
	Pain Pattern	0.01	.917
	Pain Increase While	0.13	.998
	Do the same work all-day	9.91	.002*
	Medicine can fully cure LBP	1.07	.299
	Physiotherapy is not necessary if you take regular medicine	0.21	.643
	You have heard about physiotherapy	1.99	.158
	LBP will last for the rest of your life	0.95	.327
	LBP gets progressively worse later in life	2.72	.099
	Physiotherapy will not lessen pain	0.27	.597
	Physiotherapy will increase pain	1.55	.212
	Never heard about Physiotherapy	1.99	.158
	Consulted doctor for your LBP	0.00	.989
	Your doctor never suggested take physiotherapy	.007	.934
	No physiotherapy center near residence	0.03	.853
	Too busy to take physiotherapy	0.41	.522
	Family members do not support you take physiotherapy	2.96	.085
Physiotherapy is a costly treatment	2.37	.123	

The association between Gender and do the same work all day (P=.002) was significant.

Table 5: Association between marital status with pain and other influencing factors

Independent Variable	Dependent Variable		
	Pain and other influencing factors	Chi-Square (χ^2)	P-Value (α)
Sociodemographic Characteristics	Co-Morbidities	4.78	.574
	Pain Duration	7.55	.940
	Pain Pattern	6.46	.091
	Pain Increase While	12.49	.497
	Do the same work all-day	6.98	.072
	Medicine can fully cure LBP	6.52	.089
	Physiotherapy is not necessary if you take regular medicine	4.48	.213
	You have heard about physiotherapy	1.33	.722
	LBP will last for the rest of your life	0.85	.837
	LBP gets progressively worse later in life	1.81	.641
	Physiotherapy will not lessen pain	3.63	.303
	Physiotherapy will increase pain	0.78	.854
	Never heard about Physiotherapy	1.33	.722
	Consulted doctor for your LBP	1.81	.612
	Your doctor never suggested take physiotherapy	1.52	.676
	No physiotherapy center near residence	0.93	.818
	Too busy to take physiotherapy	1.15	.764
	Family members do not support you take physiotherapy	4.14	.247
	Physiotherapy is a costly treatment	0.83	.8422

There was no association between marital status with pain and other influencing factors.

Table 6: Association between level of education with pain and other influencing factors

Independent Variable	Dependent Variable		
		Chi-Square (χ^2)	P-Value (α)
Sociodemographic Characteristics	Pain and other influencing factors		
	Co-Morbidities	25.54	.043
	Pain Duration	20.36	.727
	Pain Pattern	52.84	.001*
	Pain Increase While	19.45	.493
	Do the same work all-day	12.19	.032*
	Medicine can fully cure LBP	25.13	<.001*
	Physiotherapy is not necessary if you take regular medicine	15.18	<.010*
	You have heard about physiotherapy	77.61	<.001*
	LBP will last for the rest of your life	7.96	.158
	LBP gets progressively worse later in life	4.13	.531
	Physiotherapy will not lessen pain	5.51	.356
	Physiotherapy will increase pain	4.51	.478
	Never heard about Physiotherapy	77.61	<.001*
	Consulted doctor for your LBP	2.54	.770
	Your doctor never suggested take physiotherapy	1.82	.873
	No physiotherapy center near residence	2.54	.749
	Too busy to take physiotherapy	2.154	.827
	Family members do not support you take physiotherapy	5.18	.393
	Physiotherapy is a costly treatment	3.22	.665

The association between level of education and pain pattern, do the same work all day, medicine can fully cure LBP, Physiotherapy is not necessary if you take regular medicine, you have heard about physiotherapy, never heard about physiotherapy (P=.001), (P=.032), (P=.001), (P=.010), (P=.001), (P=.001) was significant.

Table 7: Association between occupation with pain and other influencing factors

Independent Variable	Dependent Variable		
Sociodemographic Characteristics	Pain and other influencing factors	Chi-Square (χ^2)	P-Value (α)
Occupation	Co-Morbidities	12.13	.669
	Pain Duration	20.91	.890
	Pain Pattern	23.43	<.001*
	Pain Increase While	25.94	.356
	Do the same work all-day	39.27	<.001*
	Medicine can fully cure LBP	20.35	.002*
	Physiotherapy is not necessary if you take regular medicine	10.32	.112
	You have heard about physiotherapy	4.50	.609
	LBP will last for the rest of your life	8.58	.198
	LBP gets progressively worse later in life	4.33	.631
	Physiotherapy will not lessen pain	4.52	.606
	Physiotherapy will increase pain	2.77	.837
	Never heard about Physiotherapy	4.50	.609
	Consulted doctor for your LBP	3.75	.709
	Your doctor never suggested take physiotherapy	2.53	.865
	No physiotherapy center near residence	3.53	.739
	Too busy to take physiotherapy	3.71	.716
	Family members do not support you take physiotherapy	9.45	.149
	Physiotherapy is a costly treatment	4.38	.624

The association between occupation and pain pattern, do the same work all day, medicine can fully cure LBP, (P=.001), (P=.001), (P=.002) was significant.

A total of 123 individuals participated in the study, with an average age of 40.26 years and a standard deviation of 11.73 years. In 2011, Iezzoni et al. identified an age-adjusted odds ratio of 1.00, with a 95 percent confidence interval (CI) ratio of 1.00 and a p-value of 0.003. Their study in 2009 revealed that over 29 percent of individuals aged 25 to 34 were uninsured, contrasting with 17.8 percent in the 45 to 54 age group and 13.9 percent in the 55 to 64 age group. Notably, one-third of the uninsured belonged to the category of young individuals who perceive themselves as invincible and thus do not perceive the necessity for health insurance, given their belief in not requiring medical treatment. Lishner et al. (1996) explored correlations between demographic factors, disability markers, insurance status, and reported access issues. The analysis considered age and female sex as positively associated with reporting access restrictions, while Hispanic ethnicity was found to be adversely linked to reporting barriers.

Out of the total 123 participants in this study, 34 were male, and 89 were female. The proportion of male participants constituted 28 percent, while the female participants comprised 72 percent of the total cohort.

Our findings, which indicate a higher prevalence of females experiencing low back pain, may suggest that women tend to underutilize medical services, potentially contributing to the increased occurrence of low back pain. This pattern aligns with existing research on patient preferences, highlighting the significance of gender-concordant healthcare providers, especially for Muslim women (Meldrum et al., 2016). Studies in various settings, both developed and developing, consistently show that limited access to female healthcare providers is linked to delayed care-seeking and refusal of care. Conversely, increased accessibility to female providers has been associated with better adherence to screening guidelines (Tanke et al., 2012). This gender-based disparity in healthcare seeking behavior may be influenced by cultural considerations, and further exploration of these dynamics is crucial for improving healthcare access and outcomes.

According to Gupta, 83% of non-working housewives experience low back pain. Women, inherently predisposed to low back pain, encounter this issue due to anatomical structures and biological changes such as pregnancy, contraceptive pill usage, and estrogen fluctuations during menopause. These factors lead to hormonal changes, causing laxity in the muscles and ligaments of the lower back, ultimately resulting in spine dysfunctions (Gupta & Nandini, 2015).

Regarding marital status, 79.6%(n=98) were married, 17.8%(n=22) were single, 1.62%(n=2) were divorced, and 0.81%(n=1) were widowed. All participants resided in urban areas (100%). Kirschner et al. (2007) found fewer demographic distinctions between individuals with and without disabilities who lacked insurance coverage. However, those with disabilities tended to be significantly older, more likely to be female, non-Hispanic, and had very low family incomes. In contrast, individuals without disabilities were notably more likely to be Caucasian. In comparison to insured individuals without disabilities, insured individuals with disabilities were more inclined to be older, female, black, non-Hispanic, have less than a high school education, possess lower incomes, and exhibit less educational attainment than their insured counterparts without disabilities ($p < 0.001$ for all comparisons) (Iezzoni et al., 2006).

c. Schuler (2015) emphasizes the significance of precisely defining terms to enhance awareness and comprehension of the challenges faced by low-income families and children with limited or no access to healthcare. Individuals with lower incomes often experience a higher prevalence of mental health issues, potentially leading to more severe health complications. In 2015, Schuler conducted a cross-sectional quantitative investigation to explore the correlation between a lower standard of living and reduced income. The study revealed a link between the two factors, highlighting that while money alone may not be a definitive indicator of a poor quality of life, a lower income is associated with diminished self-perception, subsequently impacting overall life quality (Savage et al., 2016).

In terms of education, 4.1% (n=5) were illiterate, 14.6% (n=18) had completed primary education, 9.8% (n=18) had completed SSC, 42.3% (n=52) had completed HSC, 25.20% (n=31) had completed higher education (Hons & Above), and 3.3% (n=4) had other

levels of education. The unique needs of low-income individuals in terms of healthcare are compounded by a combination of socioeconomic status and family structure. Despite being covered by health insurance, many families face challenges in accessing necessary treatment due to the complexities within the family dynamic (Fairbrother et al., 2005). Factors such as financial difficulties, job insecurity, and an inability to cope with stress contribute to these challenging situations. A significant barrier to preventive and primary healthcare for low-income families is the logistical aspects of healthcare, including transportation to healthcare institutions. The financial constraints related to affording insurance and paying co-pays lead low-income families to prioritize their children's health over their own, inadvertently conveying the message that parental health is of lesser importance. Consequently, low-income parents tend to experience poorer health compared to their wealthier counterparts, contributing to heightened levels of anxiety (Wen et al., 2015).

Among the 123 participants, family types were predominantly nuclear households with a percentage of 92.7% (n=114). On the other hand, 7.3% (n=9) of the families were extended. Among the 123 participants, 6.5% (n=8) had Asthma, 26.8% (n=33) had Diabetes Mellitus (DM), 13% (n=16) had Hypertension (HTN), and 4.1% (n=5) had kidney disease. Among the 123 participants, 26.8% (n=33) participants were facing low back pain for 6-9 months, 7.3% (n=9) participants were facing low back pain for 10-12 months, 43.9% (n=54) participants were facing low back pain for 13-15 months, 3.3% (n=4) participants were facing low back pain for 15-18 months, 4.1% (n=5) participants were facing low back pain for 19-21 months, 14.6% (n=18) participants were facing low back pain for 22-24 months.

Among 123 participants, 61% (n=75) responded Yes and 39% (n=48) responded No to the question "Physiotherapy is a costly treatment". Individuals with various impairments frequently identify the substantial cost associated with accessing healthcare as a significant barrier to treatment (Ahumuza et al., 2014). Limited employment opportunities and a lack of subsidies and insurance programs that could alleviate healthcare expenses place individuals with disabilities at an increased risk of poverty (CBM, 2016). Simultaneously, people with disabilities often have heightened healthcare needs, leading to increased expenditures. Moreover, the prohibitive costs of (public)

transportation hinder many individuals with impairments from accessing medical facilities (Mavuso & Maharaj, 2015).

Among 123 participants, 81% (n=100) responded Yes and 19% (n=23) responded No to the question “There is no physiotherapy center near your residence”. Among the 16 scrutinized publications, a minimum of eight highlight transportation and mobility issues as significant barriers to accessing healthcare (Eide et al., 2015). The lack of familial support emerges as a primary factor contributing to mobility-related constraints on the demand side. Individuals with visual and physical limitations face heightened risks, particularly concerning independent travel to health centers (Ganle et al., 2016).

This challenge is further pronounced for women seeking prenatal or maternity care due to societal perceptions surrounding femininity and pregnancy. In Uganda, reports indicate instances of ridicule or rejection by taxi drivers and fellow passengers on public transportation for individuals with impairments. Given the considerable distances between homes and health centers for persons with disabilities, coupled with sporadic accessibility of public transportation, it becomes imperative to identify and incorporate alternative transportation means into budgets. Moreover, challenges such as poorly maintained roads, absence of ramps, hilly terrains, or flooding further compound the difficulty for individuals with disabilities to navigate the journey on foot (Ahumuza et al., 2014).

Among 123 participants, 78% (n=96) responded Yes and 22% (n=27) responded No to the question “Your family members do not support you to take physiotherapy services”. The ability to access healthcare is impeded by the stigma and marginalization experienced by many individuals. Discrimination, reticence, and a lack of self-confidence among persons with disabilities often stem from unfavorable family and community perceptions (UPHLS, 2015). Families with disabled members may opt to seclude them at home due to a sense of shame, reflecting a form of marginalization. This marginalization can further manifest in the lack of practical support extended to a family member with a disability. Disabled individuals are commonly perceived as lacking sexuality, particularly concerning aspects of sexual and reproductive health (Ledger, 2016).

Limitation of the Study:

Conducting thorough research can be time-intensive. Due to a limited timeframe for completing the research, a relatively small sample size of 123 was chosen. If a larger sample size had been feasible, the results could have been more reliable and insightful, providing a clearer understanding of the influencing factors for not receiving physiotherapy of the low back pain patients. The 123 samples may not fully represent the extensive number of LBP patients at Janata Housing, Agargaon. Considering this is the researcher's initial study, there might be some inadvertent errors, and it is hoped that these will be graciously overseen by the supervisor and esteemed teachers.

6.1 Conclusion

A total of 123 individuals participated in the study, with an average age of 40.26 years and a standard deviation of 11.73 years. The proportion of male participants constituted 28 percent, while the female participants comprised 72 percent of the total cohort. Regarding marital status, 79.6%(n=98) were married, 17.8%(n=22) were single, 1.62%(n=2) were divorced, and 0.81%(n=1) were widowed. All participants resided in urban areas (100%). The occupational distribution included 18.7% (n=23) office workers, 2.4% (n=3) laborers, 2.4% (n=3) drivers, 53.7% (n=66) housewives, 9.8% (n=12) unemployed, 8.1% (n=10) retired individuals, and 4.9 (n=6)% students. In terms of education, 4.1% (n=5) were illiterate, 14.6% (n=18) had completed primary education, 9.8% (n=18) had completed SSC, 42.3% (n=52) had completed HSC, 25.20% (n=31) had completed higher education (Hons & Above), and 3.3% (n=4) had other levels of education. Among the 123 participants, family types were predominantly nuclear households with a percentage of 92.7% (n=114). On the other hand, 7.3% (n=9) of the families were extended. Among the 123 participants, 6.5% (n=8) had Asthma, 26.8% (n=33) had Diabetes Mellitus (DM), 13% (n=16) had Hypertension (HTN), and 4.1% (n=5) had kidney disease. Among the 123 participants, 26.8% (n=33) participants were facing low back pain for 6-9 months, 7.3% (n=9) participants were facing low back pain for 10-12 months, 43.9% (n=54) participants were facing low back pain for 13-15 months, 3.3% (n=4) participants were facing low back pain for 15-18 months, 4.1% (n=5) participants were facing low back pain for 19-21 months, 14.6% (n=18) participants were facing low back pain for 22-24 months. Among the 123 participants, 71% held the belief that medication can completely cure low back pain (LBP), and a substantial 90% expressed the view that regular medicine intake negates the necessity for physiotherapy. Notably, 4% of participants were unfamiliar with the concept of physiotherapy. A significant 70% shared the perception that, regardless of medication or physiotherapy, LBP persists throughout one's life. In terms of the effectiveness of physiotherapy, 52% doubted its ability to alleviate pain, with an additional 62% believing that physiotherapy might exacerbate discomfort. Surprisingly, a considerable 89% reported that their doctors

never recommended physiotherapy. A notable 81% mentioned the absence of a physiotherapy center near their residence. Within participant families, 78% did not support the idea of physiotherapy, and 61% considered it a financially burdensome treatment. The study on knowledge reading influencing factors for not receiving physiotherapy treatment of low back pain patients at Janata Housing, Agargaon, Dhaka has illuminated critical factors affecting physiotherapy uptake. The findings emphasize the need for targeted interventions and policy changes to address the identified barriers. By implementing health education programs, financial support mechanisms, and community engagement initiatives, healthcare providers and stakeholders can enhance the accessibility and utilization of physiotherapy services, thereby improving the quality of life for patients with low back pain in Bangladesh.

6.2 Recommendations:

Like other countries, patients with low back pain (LBP) pose a potential future burden for Bangladesh. Therefore, it is imperative to establish research-based evidence for physiotherapy practices in this context. Presently, numerous NGOs addressing disability concerns incorporate physiotherapy services, yet the application of physiotherapy for LBP is a recent introduction in Bangladesh. It is essential to generate research-based insights into the prevalence of LBP among patients. This study lays the groundwork for the provision of physiotherapy services specifically tailored for individuals with LBP. Adequate physiotherapy has the potential to diminish age-related LBP and prevent complications associated with LBP. Although there are limited studies in the low back pain field, they do not cover all aspects of this extensive area. Hence, it is recommended that the upcoming generation of physiotherapy practitioners continue research in this domain, potentially involving a larger sample size and participants from various districts of Bangladesh. The government should raise awareness about physiotherapy in the low back pain field and establish positions in government and community hospitals.

REFERENCE

- Acemoglu, D., and Angrist, J.D., (2001). Consequences of employment protection? The case of the Americans with Disabilities Act. *Journal of Political Economy*, 109(5):915-957.
- Alsaadi, S.M., McAuley, J.H., Hush, J.M., and Maher, C.G., (2011). Prevalence of sleep disturbance in patients with low back pain. *European Spine Journal*, 20:737-743.
- Barrero, L. H., Hsu, Y. H., Terwedow, H., Perry, M. J., Dennerlein, J. T., Brain, J. D., & Xu, X., (2006). Prevalence and physical determinants of low back pain in a rural Chinese population. *The Spine Journal*, 31(23): 2728-2734.
- Bickenbach, J., 2011. The world report on disability. *Disability & Society*, 26(5):655-658
- Brunes, A., and Hansen, B., M., & Heir, T., (2019). Loneliness among adults with visual impairment: prevalence, associated factors, and relationship to life satisfaction. *Health and Quality of Life Outcomes*, 17(1):24.
- Clarke, P.J., Ailshire, J.A., Nieuwenhuijsen, E.R., and de Kleijn–de Vrankrijker, M.W., (2011). Participation among adults with disability: The role of the urban environment. *Social science & medicine*, 72(10):1674-1684
- Coopera, K., Smithb, B.H., and Hancocka, E., (2009). Patients’ perceptions of self-management of chronic low back pain: evidence for enhancing patient education and support. *Physiotherapy*, 95(I): 43–50.
- Cho, N. H., Jung, Y. O., Lim, S. H., Chung, C. K., & Kim, H. A., (2012). The prevalence and risk factors of low back pain in rural community residents of Korea. *The Spine Journal*, 37(24):2001-2010.
- De Schepper, E. I., Damen, J., van Meurs, J. B., Ginai, A. Z., Popham, M., Hofman, A., and Bierma-Zeinstra, S. M., (2010). The association between lumbar disc degeneration and low back pain: the influence of age, gender, and individual radiographic features. *The Spine Journal*, 35(5): 531-536.

Dunsford, A., Kumar, S., & Clarke, S., (2011). Integrating evidence into practice: use of McKenzie-based treatment for mechanical low back pain. *Journal of Multidisciplinary Healthcare*, 4:393-402.

Fernandes RCP, Carvalho FM and Assunção AA., (2011), Prevalence of musculoskeletal disorders among plastics industry workers, *Cadernos De saude Publica*, 27(1):78-86.

George, A.J., Dhanesh, K.K.U. and Nikhil, N.P., (2013). Research Article Effectiveness of Trunk Proprioceptive Neuromuscular Facilitation Training in Mechanical Low Back Pain. *International Journal of Current Research*, 5(7): 1965-1968.

Ghaffari M, Alipour A, Jensen I, Farshad A and Vingard E., (2006). Low back pain among Iranian industrial workers, *Occupational Medicine*, 56(7):455-460.

Gupta, G., and Nandini, N., (2015). Prevalence of low back pain in non working rural housewives of Kanpur, India. *Int J Occup Med Environ Health*, 28(2):313-20.

Hoy, D., Brooks, P., Blyth, F., and Buchbinder, R., (2010). The epidemiology of low back pain. *Best Practice & Research Clinical Rheumatology*, 24(6): 769-781.

Iezzoni, L.I., Frakt, A.B., and Pizer, S.D., (2011). Uninsured persons with disability confront substantial barriers to health care services. *Disability and Health Journal*, 4(4):238-244.

Iezzoni, L.I., Killeen, M.B., and O'Day, B.L., (2006). Rural residents with disabilities confront substantial barriers to obtaining primary care. *Health services research*, 41(4p1):1258-1275

Integrative pain medicine, (2012), Low Back Pain: Causes [online], University Hospital and Campus for the Albert Einstein College of Medicine, available <http://www.healingchronicpain.org/content/backpain/causes.asp> [accessed on 17th October, 2012].

Jacobs, B., Ir, P., Bigdeli, M., Annear, P.L., and Van Damme, W., 2012. Addressing access barriers to health services: an analytical framework for selecting appropriate interventions in low-income Asian countries. *Health policy and planning*, 27(4):288-300.

- Jarvik, J. G., and Deyo, R. A., (2002). Diagnostic evaluation of low back pain with emphasis on imaging. *Annals of Internal Medicine*, 137(7): 586-597.
- Johnson, C., Paul, C., Girgis, A., Adams, J., and Currow, D.C., (2011). Australian general practitioners' and oncology specialists' perceptions of barriers and facilitators of access to specialist palliative care services. *Journal of palliative medicine*, 14(4):429-435.
- Kamali, M., An overview of the situation of the disabled in Iran. *Advancing the rights of persons with disabilities: A US-Iran Dialogue on law. Policy., and Advocacy*. 2011:15.
- Kirschner, K.L., Breslin, M.L., and Iezzoni, L.I., (2007). Structural impairments that limit access to health care for patients with disabilities. *Jama*, 297(10):1121-1125.
- Kumar, A., Zutshi, K. and Narang, N., (2011). Efficacy of trunk Proprioceptive Neuromuscular Facilitation training on chronic low back pain. *Int J Sports Sci Engineering*, 5(03):174-80.
- Krahn, G.L., (2011). WHO world report on disability: a review. *Disability and health journal*, 4(3):141-142.
- Ladeira, C.E., (2011). Evidence based practice guidelines for management of low back pain: physical therapy implications. *Brazilian Journal of Physical Therapy*, 15(3):190-199.
- Lishner, D.M., PhD, M.R., Levine, P., and Patrick, D., (1996). Access to primary health care among persons with disabilities in rural areas: a summary of the literature. *The Journal of Rural Health*, 12(1):45-53.
- Maart, S., and Jelsma, J., (2014). Disability and access to health care—a community based descriptive study. *Disability and rehabilitation*, 36(18):1489-1493.
- McIntosh, G., & Hall, H. (2015). Low back pain (acute): non-drug treatments. *British Medical Journal*: 1-25.
- Meldrum, R.M., Liamputtong, P. and Wollersheim, D., (2016). Sexual health knowledge and needs: young Muslim women in Melbourne, Australia. *International Journal of Health Services*, 46(1):124-140

- Middlekoop, M .V., Rubinstein SM, Kujipers T, Verhage AP, Ostelo R, Koes BW and Tulder MWV., (2011). A systematic review on the effectiveness of physical and rehabilitation interventions for chronic non-specific low back pain, *European Spine Journal*, 20(1):19-39
- Nahar, B.N., Ashan, G.U. and Khan, N.A., (2013). Prevalence of low back pain and associated risk factors among professional car drivers in Dhaka city, Bangladesh. *South East Asia Journal of Public Health*, 2(1):60-63.
- Papageorgiou, A. C., Croft, P. R., Ferry, S., Jayson, M. I., and Silman, A. J., (1995). Estimating the prevalence of low back pain in the general population: evidence from the South Manchester Back Pain Survey. *The Spine Journal*, 20(17): 1889-1894.
- Pye, S. R., Reid, D. M., Smith, R., Adams, J. E., Nelson, K., Silman, A. J., and O'Neill, T. W., (2004). Radiographic features of lumbar disc degeneration and self-reported back pain. *The Journal of Rheumatology*, 31(4):753-758.
- Reiter, S., and Bryen, D.N., Attitudinal Barriers to Rehabilitation in International Encyclopedia of Rehabilitation 2010 http://cirrie.buffalo.edu-encyclopedia-pdf-enattitudinal_barriers_to_rehabilitation.
- Sato, T., Ito, T., Hirano, T., Morita, O., Kikuchi, R., Endo, N., and Tanabe, N., (2011). Low back pain in childhood and adolescence: assessment of sports activities. *European Spine Journal*, 20:94-99.
- Savage, J.S., Neshteruk, C.D., Balantekin Temple, J., Dow, B., and Baird, M., (2019). Special working arrangements to allow for care responsibilities in Australia: availability, usage and barriers
- Schuler, B.R., (2015). Health perceptions and quality of life among low-income adults. *Health & social work*, 40(3):225-232.
- Shambook, J., McNee, P., Harris, CE., Kim, M., Sampson, M., Palmer, K., and Coggon, (2011), Clinical Presentation of Low Back Pain And Association With Risk Factors According To Findings On Magnetic Resonance Imaging, *Pain*, 152(7):1659 – 1665.

- Sterud, T., and Tynes, T., (2013). Work-related psychosocial and mechanical risk factors for low back pain: a 3-year follow-up study of the general working population in Norway. *Occupational and Environmental Medicine*, 70(5): 296-302.
- Tanke, M.A., and Ikkersheim, D.E., (2012). A new approach to the tradeoff between quality and accessibility of health care. *Health policy*, 105(2-3):282-287.
- Tavafian, S. S., Eftekhari, H., Mohammad, K., Jamshidi, A. R., Montazeri, A., Shojaezadeh, D., and Ghofranipour, F., (2005). Quality of life in women with different intensity of low back pain. *Iranian Journal of Public Health*, 34(2): 36-39.
- Temple, J., Dow, B., and Baird, M., (2019). Special working arrangements to allow for care responsibilities in Australia: availability, usage and barriers.
- Tissot, F., Messing, K. and Stock S., (2009). Studying the relationship between low back pain and working postures among those who stand and those who sit most of the working day, *Ergonomics*, 52(11):1402–1418.
- Tomita, S., Arphorn, S., Muto, T., Koetkhilai, K., Naing, S. S., and Chaikittiporn, C., (2010). Prevalence and risk factors of low back pain among Thai and Myanmar migrant seafood processing factory workers in Samut Sakorn Province, Thailand. *Industrial Health*, 48(3):283-291.
- Tomlinson, M., Swartz, L., Officer, A., Chan, K.Y., Rudan, I., and Saxena, S., (2009). Research priorities for health of people with disabilities: an expert opinion exercise. *The Lancet*, 374(9704):1857-1862.
- Torill, H., Hysing, M. and Ericson, H.R., (2004). Low back pain interventions at the Workplace: a systematic literature review, *Occupational Medicine*, 54(1):3-13.
- Walker, B., (2004). Low back pain in Australian adults. Prevalence and associated Disability. *Journal of Manipulative and Physiological Therapeutics*, 27(1):238-44.
- Wylie, K., McAllister, L., Davidson, B., and Marshall, J., (2013). Changing practice: Implications of the World Report on Disability for responding to communication disability in under-served populations. *International journal of speech-language pathology*, 15(1):1-13

Appendix-A

Consent form

I am Farjana Akter, 4th year student of B.Sc. in Physiotherapy at Bangladesh Health Profession Institute. I am conducting research, and the title is “Knowledge Regarding Influencing Factors for Not Receiving Physiotherapy of Low Back Pain Patients” which is included in my course. For that, I'm asking you to answer some questions, which will not take time more than 10-15 minutes. It also ensures that the information you provide will be kept confidential. Participation here depends on your own will. If you want, you can skip your name from the list of participants at any time. In addition, if you have any questions as a participant in this study or if there is any problem, you can contact me or my supervisor Md. Shofiqul Islam, Associate Professor & Head, Department of Physiotherapy, BHPI.

Do you have any questions before starting the research?

Can I start this interview with your permission?

Yes.....

No.....

Participant's signature and date

Witness's signature and date.....

অনুমতি ফরম

আমি ফারজানা আক্তার, বাংলাদেশ হেলথ প্রফেশনাল ইনস্টিটিউটের অধীনে বিএসসি ৪র্থ বর্ষের ছাত্রী। আমি একটি গবেষণা পরিচালনা করছি এবং শিরোনাম হল “Knowledge Regarding Influencing Factors for Not Receiving Physiotherapy of Low Back Pain Patients” যা আমার কোর্সের অন্তর্ভুক্ত। সে জন্য আমি আপনাকে অনুরোধ করছি কিছু প্রশ্নের উত্তর দিন, এতে ১০-১৫ মিনিটের বেশি সময় প্রয়োজন হবে না। আপনার দেওয়া তথ্য গোপন রাখা হবে। এখানে অংশগ্রহণ নির্ভর করে আপনার নিজের ইচ্ছার উপর। আপনি যদি চান, আপনি যে কোনো সময়ে অংশগ্রহণকারীদের তালিকা থেকে আপনার নাম সরিয়ে নিতে পারেন। এছাড়াও, এই গবেষণায় অংশগ্রহণকারী হিসাবে আপনার যদি কোন প্রশ্ন থাকে আপনি আমার সাথে বা আমার সুপারভাইজার মোঃ শফিকুল ইসলাম, সহযোগী অধ্যাপক ও প্রধান, ফিজিওথেরাপি বিভাগ, বিএইচপিআই সাথে যোগাযোগ করতে পারেন।

প্রশ্নোত্তর শুরু করার আগে আপনার কোন প্রশ্ন আছে?

আমি কি আপনার অনুমতি নিয়ে এই ইন্টারভিউ শুরু করতে পারি?

হ্যাঁ.....

না.....

অংশগ্রহণকারীর স্বাক্ষর এবং তারিখ

সাক্ষীর স্বাক্ষর ও তারিখ.....



বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI)
(The Academic Institute of CRP)
CRP-Chapain, Savar, Dhaka, Tel: 02224445464 , 02224441404, Website: www.bhpi.edu.bd

Date: 21.03.2023

To
President of Housing Committee,
Janata Housing,
Taltola, Agargoan, Dhaka-1207.

Subject: *Regarding Data collection for dissertation.*


Greetings from Bangladesh Health Professions Institute (BHPI). I would like to inform you that, BHPI, the Academic Institute of CRP is running B. Sc in Physiotherapy Course, under Faculty of Medicine, University of Dhaka.

According to the content of 4th year of University course curriculum, the students have to do Research and Course work in different topics to develop their skills. Considering the situation, your division will be the most appropriate place to collect data.

4th year students of BHPI Farjana Akter would like to collect data in your Area in your convenient time.

We shall remain grateful to you if you could kindly allow us in conducting the Data collection.

With regards


Prof. Dr. Md. Omar Ali Sarker
Principal
BHPI, CRP, Savar, Dhaka.



Date: 26th February 2023
The Chairman
Institutional Review Board (IRB)
Bangladesh Health Professions Institute (BHPI), CRP
Savar, Dhaka-1343. Bangladesh

Subject: **Application for review and ethical approval.**

Dear Sir,

With due respect, I am Farjana Akter, student of B.Sc. in physiotherapy program at Bangladesh Health Professions Institute (BHPI) the academic institute of Centre for the Rehabilitation of the Paralyzed (CRP) under the Faculty of Medicine, University of Dhaka. As per the course curriculum, I have to conduct a dissertation entitled **"A Study on Social Impediments and Knowledge Barriers Influencing Patients with Low Back Pain for not receiving Physiotherapy"** under the supervision of **Md. Shofiqul Islam, Associate Professor & Head of the Department of Physiotherapy, BHPI, CRP, Savar, Dhaka-1343.**

The purpose of the study is to discover Social Impediments and Knowledge Barriers Influencing Patients with Low Back Pain for not receiving Physiotherapy. The study involves face-to-face interview by using structured questionnaire to find out social impediments and knowledge barriers influencing patients with low back pain for not receiving Physiotherapy in the community residing at Savar, Dhaka in Bangladesh that may take 20 to 25 minutes to fill in the questionnaire and there is no likelihood of any harm to the participants. Related information will be collected from the patients' guide books. Data collectors will receive informed consent from all participants and the collected data will be kept confidential.

Therefore, I look forward to having your kind approval for the dissertation proposal and to start data collection. I can also assure you that I will maintain all the requirements for study.

Sincerely,

Farjana Akter
.....
Farjana Akter
4th Year B.Sc. in Physiotherapy
Session: 2015-16 Student ID: 112150288
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Shofiqul Islam
Recommendation from the Dissertation supervisor
Md. Shofiqul Islam
Associate Professor &
Head of the Department of Physiotherapy
BHPI, CRP, Savar, Dhaka-1343

Dissertation date: 9th January 2023

Shofiqul Islam 26.02.2023

Head, Department of Physiotherapy, BHPI

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Bangladesh Health Professions Institute (BHPI)
CRP, Chapaini, Savar, Dhaka-1343



বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
Bangladesh Health Professions Institute (BHPI)
(The Academic Institute of CRP)

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Date: 13/03/2023

To
Farjana Akter
B.Sc. in Physiotherapy,
Session: 2015-2016, DU Reg. No: 3621
BHPI, CRP, Savar, Dhaka- 1343, Bangladesh

Subject: Approval of the dissertation proposal “A Study on Social Impediments and Knowledge Barriers Influencing Patients with Low Back Pain for not Receiving Physiotherapy”- by ethics committee.

Dear
Farjana Akter,
Congratulations

The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above-mentioned dissertation, with yourself, as the Principal Investigator, Md. Shofiqul Islam, Associate Professor & Head of the Department of Physiotherapy, BHPI, CRP, Savar, Dhaka-1343, as dissertation supervisor. The following documents have been reviewed and approved:

Sr. No.	Name of the Documents
1	Dissertation Proposal
2	Questionnaire (English and Bengali version)
3	Information sheet & consent form

The purpose of the study is to discover Social Impediments and Knowledge Barriers Influencing Patients with Low Back Pain for not receiving Physiotherapy. Should there be any interpretation, typo, spelling, or grammatical mistakes in the title, it is the responsibility of the investigator. Since the study involves a questionnaire that takes a maximum of 20- 25 minutes and has no likelihood of any harm to the participants. The members of the Ethics committee approved the study to be conducted in the presented form at the meeting held at 09:00 AM on January 9, 2023, at BHPI, 34th IRB Meeting.

The institutional Ethics committee expects to be informed about the progress of the study, any changes occurring in the course of the study, any revision in the protocol, and patient information or informed consent and ask to be provided a copy of the final report. This Ethics committee is working in accordance to Nuremberg Code 1947, World Medical Association Declaration of Helsinki, 1964 - 2013 and other applicable regulation.

Best regards,

Muhammad Millat Hossain
Associate Professor, Dept. of Rehabilitation Science
Member Secretary, Institutional Review Board (IRB) BHPI,
CRP, Savar, Dhaka-1343, Bangladesh

Appendix-B

Knowledge Regarding Influencing Factors for not receiving Physiotherapy Treatment of Low back Pain Patients

Demographic Questions

1. Age _____
2. Gender Male Female
3. Marital Status Single Married Divorced Widow
4. Level of Education Illiterate Literate
 Primary SSC HSC
 Hons & above Other
5. Family Type Nuclear Extended
6. Living Area Rural Urban
7. Occupation Office Worker laborer Driver
 Housewife Unemployed Retired
 Student Other
8. Co-morbidities DM, HTN. Asthma, Kidney Disease, Others _____

Pain Related Questions

1. Pain Duration _____
2. Pain Pattern (i) intermittent _____ (ii) constant _____
3. Increase Pain while (i) Bending _____ (ii) Sitting _____

(iii) Standing_____ (iv)Walking_____

(v) Lying_____

4. Do the same work all day? (i) Yes _____ (ii) No _____

**Knowledge Regarding Influencing Factors for not Receiving
Physiotherapy**

If you think that the following factors are responsible for not receiving physiotherapy services, please put tick marks on Yes or No

SL	Statements	Yes	No
1	Medicine can fully cure LBP		
2	Physiotherapy is not necessary if you take regular medicine		
3	You heard about physiotherapy		
4	No matter you take medicine or physiotherapy, LBP will last with you for the rest of your life		
5	No matter you take medicine or physiotherapy, LBP gets progressively worse later in life		
6	Physiotherapy will not lessen pain		
7	Taking physiotherapy increases pain		
8	You never heard about physiotherapy before		
9	You have consulted a doctor for your LBP		
10	Your doctor never suggested you take physiotherapy		
11	There is no physiotherapy center near your residence		
12	You are too busy to take physiotherapy		
13	Your family members do not support you to take physiotherapy services		
14	Physiotherapy is a costly treatment		

জনমিতি সংক্রান্ত প্রশ্ন

1. বয়স _____
2. লিঙ্গ পুরুষ মহিলা
3. বৈবাহিক অবস্থা অবিবাহিত বিবাহিত
 তলাকপ্রাপ্ত বিধবা
4. পড়াশুনার স্তর নিরক্ষর স্বাক্ষর
 প্রাথমিক SSC HSC
 অনার্স ও তদুর্ধ অন্যান্য
5. পরিবারের প্রকৃতি অনু জড়িত
6. বাসস্থান গ্রাম শহর
7. পেশা অফিস শ্রমিক ড্রাইভার
 গৃহিনী বেকার অবসরপ্রাপ্ত
 ছাত্র অন্যান্য
8. অন্যান্য অসুস্থতা DM, HTN. Asthma, Kidney Disease, Others _____

ব্যথা সংক্রান্ত প্রশ্ন

1. ব্যথার স্থায়িত্ব _____
2. ব্যথার প্রকৃতি (i) অনিয়মিত _____ (ii) স্থায়ী _____
3. ব্যথা বৃদ্ধি পায় (i) বুকলে _____ (ii) বসলে _____
(iii) দাঁড়ালে _____ (iv) হাঁটলে _____

(v) শয়ন করলে _____

4. সারাদিন কী আপনি একই কাজ করেন? (i) হ্যাঁ _____ (ii) না _____

ফিজিওথেরাপি সংক্রান্ত ভুল ধারণা বিষয়ক প্রশ্ন

আপনি যদি মনে করেন যে ফিজিওথেরাপি পরিষেবা না পাওয়ার জন্য নিম্নলিখিত কারণগুলি দায়ী, অনুগ্রহ করে হ্যাঁ বা না-তে টিক চিহ্ন দিন

ক্রমিক	বিবৃতি	হ্যাঁ	না
১	ওষুধ সম্পূর্ণরূপে LBP নিরাময় করতে পারে		
২	নিয়মিত ওষুধ সেবন করলে ফিজিওথেরাপির প্রয়োজন হয় না		
৩	আপনি ফিজিওথেরাপির কথা শুনেছেন		
৪	আপনি ওষুধ বা ফিজিওথেরাপি গ্রহণ করুন না কেন, LBP আপনার সাথে সারাজীবন থাকবে		
৫	আপনি ওষুধ বা ফিজিওথেরাপি গ্রহণ করুন না কেন, পরবর্তী জীবনে LBP ক্রমশ খারাপ হতে থাকে		
৬	ফিজিওথেরাপি ব্যথা কমবে না		
৭	ফিজিওথেরাপি নিলে ব্যথা বাড়ে		
৮	আপনি আগে কখনো ফিজিওথেরাপির কথা শুনেননি		
৯	আপনি আপনার LBP এর জন্য একজন ডাক্তারের সাথে পরামর্শ করেছেন		
১০	আপনার ডাক্তার আপনাকে ফিজিওথেরাপি নেওয়ার পরামর্শ দেননি		
১১	আপনার বাসস্থানের কাছে কোন ফিজিওথেরাপি সেন্টার নেই		
১২	আপনি ব্যস্ততার কারণে ফিজিওথেরাপি নিতে পারেন না		
১৩	আপনার পরিবারের সদস্যরা আপনাকে ফিজিওথেরাপি সেবা নিতে সমর্থন করে না		
১৪	ফিজিওথেরাপি একটি ব্যয়বহুল চিকিৎসা		