



## **Knowledge, Attitude, Practice regarding Fibromyalgia syndrome in practicing Physiotherapists in Pune: A cross sectional study**

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### *Abstract*

Humeral shaft fractures, though relatively uncommon, pose distinct challenges, especially when accompanied by radial nerve palsy. This case report outlines the successful management of a mid-shaft humerus fracture with radial nerve palsy in a 53-year-old male involved in a road traffic accident. The patient underwent open reduction and internal fixation (ORIF) using plate osteosynthesis with radial nerve exploration. Postoperatively, a tailored physical therapy regimen was implemented, focusing on early range of motion (ROM) exercises, strengthening, and pain management through cryotherapy. A cock-up splint was used for wrist drop caused by radial nerve damage. Over 12 weeks, the patient demonstrated significant improvements in ROM, muscle strength, and pain levels, as evidenced by outcome measures such as the NPRS, PRWE, and DASH scores. The rehabilitation included proprioceptive neuromuscular facilitation, sensory intrication and advanced tools like a robotic glove to optimize recovery. This case highlights the importance of a multidisciplinary approach, combining timely surgical intervention with structured rehabilitation to achieve functional recovery and independence in daily activities. The use of modern rehabilitation technologies like robotic gloves shows promise in enhancing outcomes for complex upper limb injuries.

**Keywords:** *Humerus shaft fracture, radial nerve palsy, physiotherapy management, open reduction and internal fixation (ORIF), plate osteosynthesis, physical therapy.*

### **1. Introduction**

Fibromyalgia syndrome (FMS) is a chronic, non-inflammatory, complex musculoskeletal disorder(1). The syndrome presents with a cardinal feature of widespread musculoskeletal pain which is chronic accompanied by a cluster of symptoms such as chronic fatigue, non-restorative sleep, insomnia, cognitive dysfunction, mental health disorders, allodynia, hyperalgesia, and many functional



disorders(2,3).Fibromyalgia syndrome affects 2%-9% of the world's population, the gender distribution of this syndrome being equal in childhood but in adulthood it affects women more than men with a ratio of 9:1(4).Fibromyalgia Syndrome often co-exists with other chronic inflammatory diseases like, Rheumatoid Arthritis(RA), Systemic Lupus Erythematosus(SLE), osteoarthritis(1,5)

The exact pathophysiology of Fibromyalgia is still unknown. According to a recent study, Fibromyalgia Syndrome involves the abnormal functioning of the hypothalamic-Pituitary-Adrenal (HPA) axis in the neuroendocrine system. Fibromyalgia is also known as stress-related disorder since it is associated with the inability to suppress the cortisol levels in the body. The high cortisol levels in the plasma is linked with the increased pain sensitivity. Apart from increased pain sensitivity, patients with FMS also have increased sensitivity to heat, cold, mechanical and ischaemic pressure.(5)

There is oversensitivity to normally painful stimuli, such as pressure or heat (hyperalgesia) and painful sensation to normally non-painful stimuli, such as touch (allodynia).The fact that Fibromyalgia Syndrome presents chronic pain without any obvious peripheral tissue damage has given rise in recent years to the new concept of nondysplastic pain, also known as nociperception, which comes from the Latin nocere: pain that activates peripheral nociceptors without clear evidence of actual or threatening tissue damage(6)

There are two intrinsic mechanisms associated with the risk of developing chronic painful musculoskeletal disorders such as Fibromyalgia. (7)

#### 1)Pain Amplification

Pain amplification may be related to sensitization of afferent pathways in the peripheral or central nervous system that process coded pain information or impairment in the inhibitory systems of the central nervous system.

#### 2)Psychological distress

Psychological factors include enhanced somatic awareness or the perception and interpretation of sensory information, anxiety, depression, perceived stress, and catastrophizing. It is likely that genetic vulnerability coupled with environmental triggers are required to produce the clinical phenotype. The specific environmental triggers may include nonspecific behavioural factors, such as:-

1)Smoking and obesity- Obesity is commonly associated with FMS as significant comorbidity. Obesity significantly contributes to the severity of FMS and its allied symptoms. Obesity is also associated with a higher number of tender points and higher pain sensitivity.

2) Stress exposures

3) Nociceptive musculoskeletal pain

Fibromyalgia syndrome, a heterogenous disorder, presents with array of symptoms which makes it difficult for the clinicians to diagnose. The diagnosis of Fibromyalgia syndrome mainly depends on thorough clinical evaluation and the patient's description of pain as currently there are no biomarkers or diagnostic tests to confirm the diagnosis of the disease(3).The diagnostic criteria by The American College Of Rheumatology(ACR) is the most precise and it is the most commonly used criteria for diagnosing Fibromyalgia Syndrome(1,3).

The American College of Rheumatology (ACR) published the diagnostic criteria for Fibromyalgia in 1990.The ACR criteria for Fibromyalgia Syndrome had two categories to be satisfied- (1)History of Widespread pain present for a duration of at least 3 months and (2) Tenderness certain anatomical landmarks on digital palpation with (8).This criteria was updated in the year 2010 by ACR and the criteria focuses on widespread pain, severity of symptoms lasting for at least 3 months. The scaled used in the updated diagnostic criteria include the Widespread Pain Index( WPI) and Symptom Severity Scale(SSS).(8)

Fibromyalgia syndrome(FMS) is a chronic musculoskeletal disorder with pain as the central symptom. Along with pain, FMS presents with a wide variety of symptoms like fatigue, insomnia , mental disorders, irritable bowel syndrome, etc making it difficult to diagnose and treat.

Individuals suffering from FMS often have a sedentary life due to reduced cardiovascular capacity, less muscle strength & muscle endurance. Fibromyalgia affects the quality of living as it causes many functional limitations to individuals suffering from it including carrying out their day-to-day activities leading to increased morbidity. Due to functional limitations, FMS patients lead a sedentary lifestyle,

making them intolerant to physical activities .The diagnosis of FMS is fully based on the patient's symptoms. Fibromyalgia syndrome often gets either under diagnosed / over diagnosed/ mis diagnosed due to lack of diagnostic tests or bio markers.

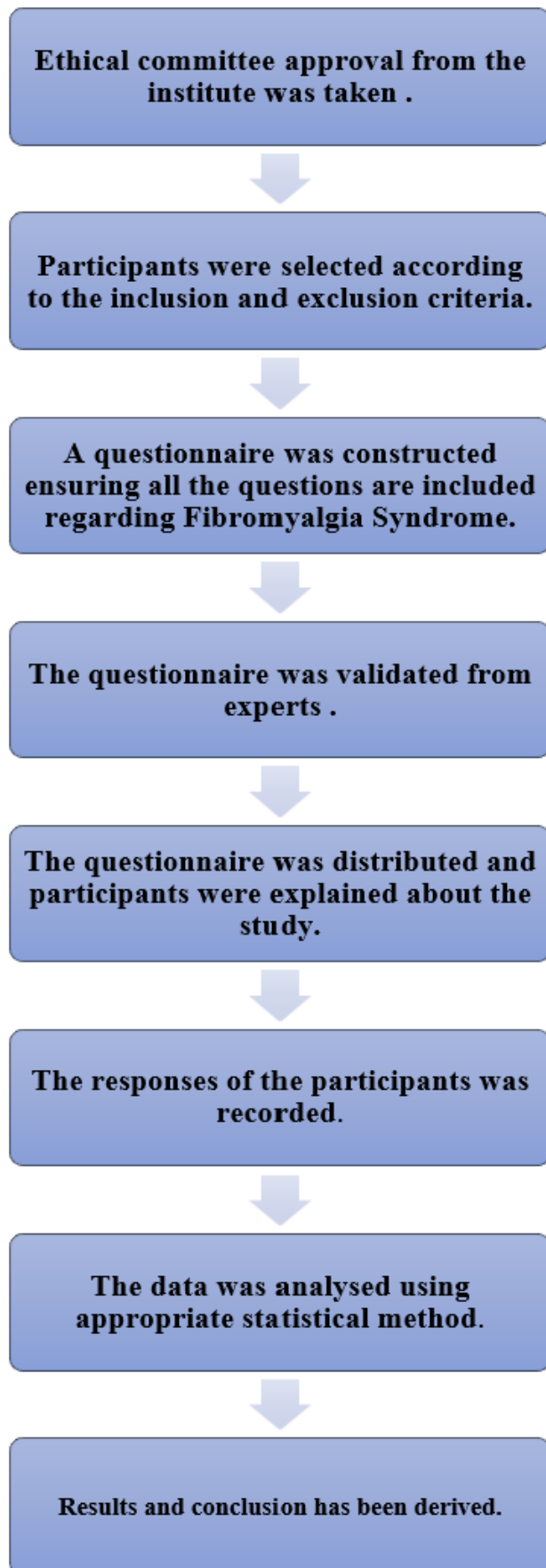
The need of the study is to raise awareness about Fibromyalgia Syndrome and the positive effects of Physiotherapy along with Pharmacological treatments. Physical Exercise along with Pharmacological intervention is an important treatment of Fibromyalgia which leads to an improvement in the quality of life of patients & reduced medication as pointed out by several studies. So the aim of our study is to asses knowledge, attitude and practice regarding fibromyalgia syndrome in practicing physiotherapist pune.

## **2. Methodology:**

In this cross sectional study conducted in Dr. D.Y. Patil College of Physiotherapy, Pune, MH, IND. The target population for the study was practicing population and the sample size was 60. The participants were recruited based on inclusion and exclusion criteria as follows. Clinical physiotherapist practicing in pune, having more than 2 years of clinical experience were included in the study where as undergraduate physiotherapy students and interns were excluded, individuals willing to participate and not practicing were excluded. The questionnaire was developed which was then validated by 10 experts and then a google form was created and circulated

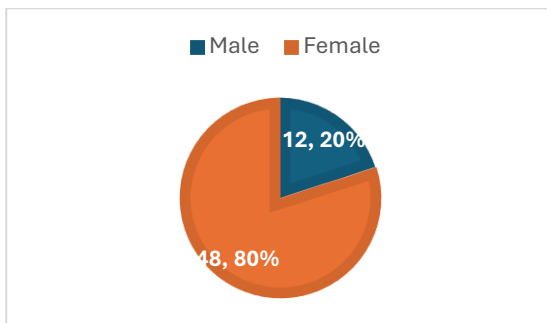
## **3. Procedure:**

After gaining approval from the institutional ethical committee, a questionnaire was generated which is then validated by the experts in the field. The questionnaire was then converted into google forms are circulated to the target population was screening based on inclusion and exclusion criteria. Individuals fulfilling the criteria were included in the study the response was recorded in to the excel sheet which is then analyzed and results were drawn. The flowchart of the procedure is shown in figure 1 below.



#### 4. Statistical Analysis:

##### 1. GENDER



**GRAPH 1.1**

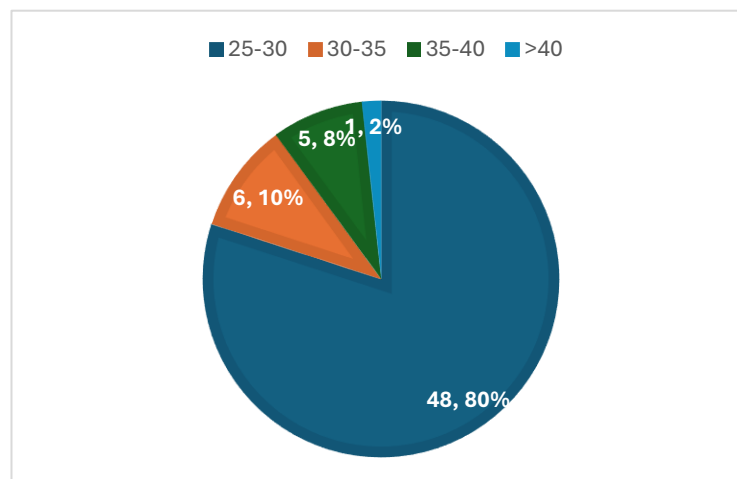
| GENDER | %   | RESPONSES |
|--------|-----|-----------|
| Male   | 20% | 12        |
| Female | 80% | 48        |

**Table 1.1**

##### Interpretation-

In this study, the majority of the respondents are Female Physiotherapists with a total number of 48(80%).The male participants are in minority with a total number of 12(20%).

##### 2. AGE



**GRAPH 1.2**

| OPTIONS | %   | RESPONSE |
|---------|-----|----------|
| 25-30   | 80% | 48       |
| 30-35   | 10% | 6        |
| 35-40   | 8%  | 5        |
| >40     | 2%  | 1        |

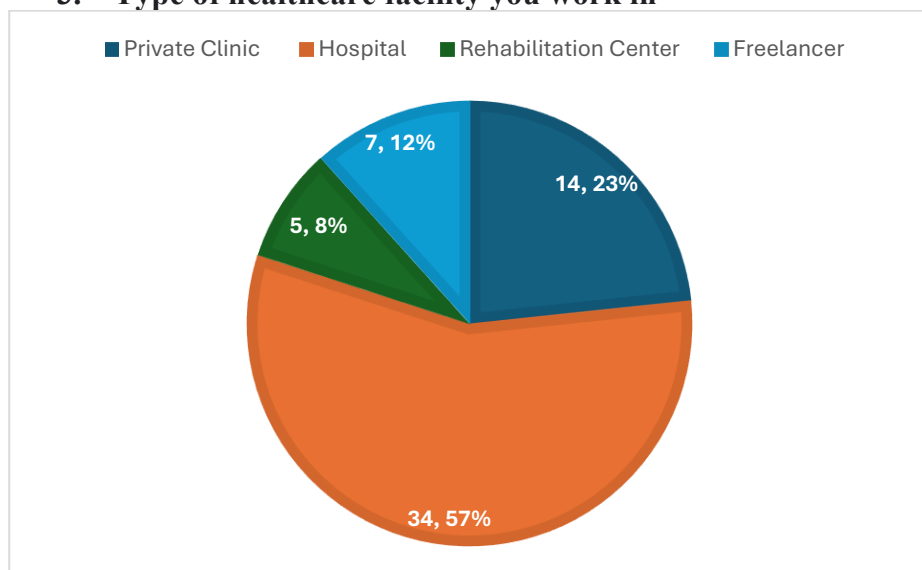
**Table 1.2**

##### Interpretation-

The above graph shows the age of the participants.

The majority of the respondents are between the age group of 25-30 comprising 80% of the sample size and the minority of the respondents are in the age group of >40.

**3. Type of healthcare facility you work in**



**GRAPH 1.3**

| Options               | %   | N  |
|-----------------------|-----|----|
| Private Clinic        | 23% | 14 |
| Hospital              | 57% | 34 |
| Rehabilitation Center | 8%  | 5  |
| Freelancer            | 12% | 7  |

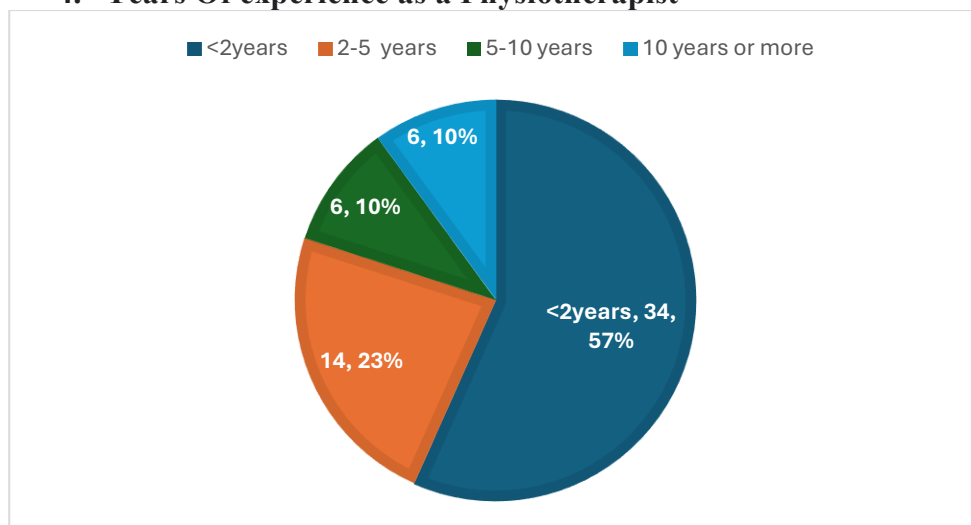
**Table 1.3**

**Interpretation-**

The above graph represents the type of healthcare facility the respondents work in. The majority of the respondents (34) work in a hospital set up comprising 57% of the sample size.

The minority of the respondents (5) work in a Rehabilitation Center comprising 8% of the sample size.

**4. Years Of experience as a Physiotherapist**



**GRAPH 1.4**

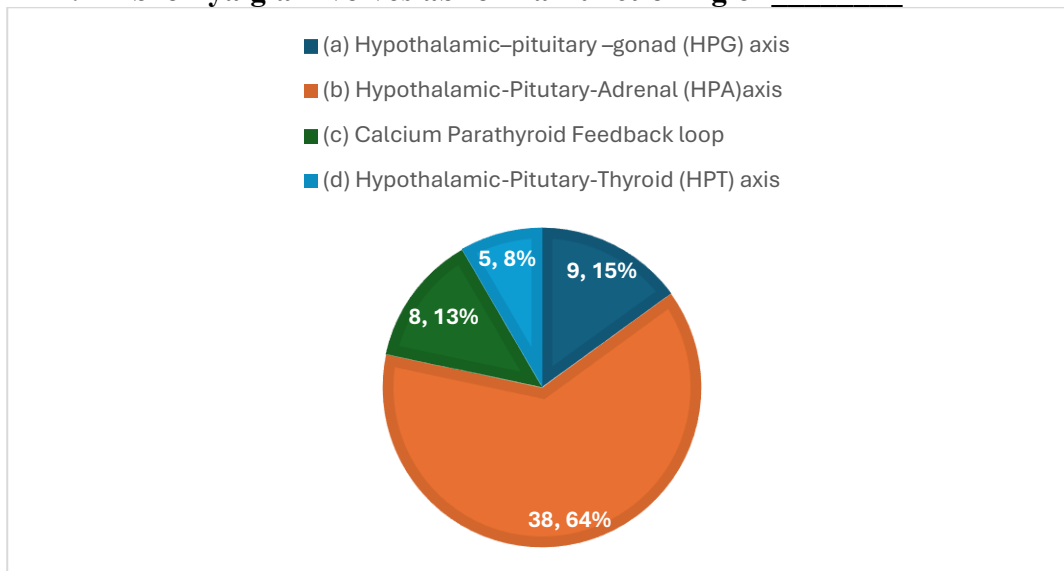
| Options          | %   | N  |
|------------------|-----|----|
| <2 years         | 57% | 34 |
| 2-5 years        | 23% | 14 |
| 5-10 years       | 10% | 6  |
| 10 years or more | 10% | 6  |

**Interpretation-**

The above graph depicts the years of experience of the respondents as a Physiotherapist. The majority of the respondents (23) have an experience of <2 years comprising 57% of the sample size. The minority of the respondents have a work experience of 5-10 years and 10 years or more with 6 respondents in each category.

**DOMAIN- KNOWLEDGE**

**1. Fibromyalgia involves abnormal functioning of \_\_\_\_\_**



**GRAPH 2.1**

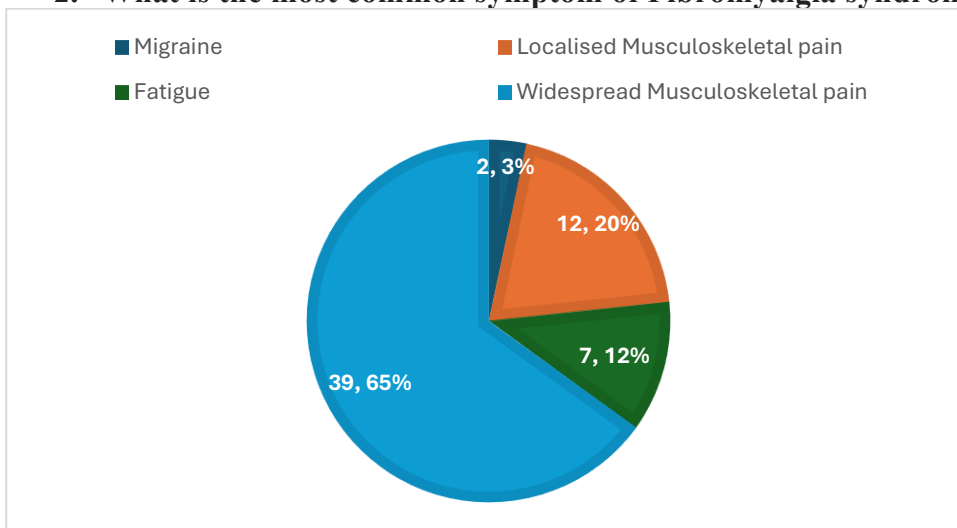
| Options                                       | %   | N  |
|---|-----|----|
| (a) Hypothalamic-Pituitary –gonad (HPG) axis  | 15% | 9  |
| (b) Hypothalamic-Pituitary-Adrenal (HPA)axis  | 64% | 38 |
| (c) Calcium Parathyroid Feedback loop         | 13% | 8  |
| (d) Hypothalamic-Pituitary-Thyroid (HPT) axis | 8%  | 5  |

|           | %   | N  |
|-----------|-----|----|
| Correct   | 64% | 38 |
| Incorrect | 36% | 22 |

**Interpretation-**

The correct answer for the above question is (b)Hypothalamic-Pituitary-Adrenal (HPA) axis. The majority of the respondents (38) have chosen the correct answers comprising 64% of the sample size and the minority of the respondents (22) have chosen the incorrect answer comprising 36% of the sample size.

## 2. What is the most common symptom of Fibromyalgia syndrome?



**GRAPH 2.2**

| Options                         | %   | N  |
|---------------------------------|-----|----|
| Migraine                        | 3%  | 2  |
| Localized Musculoskeletal Pain  | 20% | 12 |
| Fatigue                         | 12% | 7  |
| Widespread Musculoskeletal Pain | 65% | 39 |

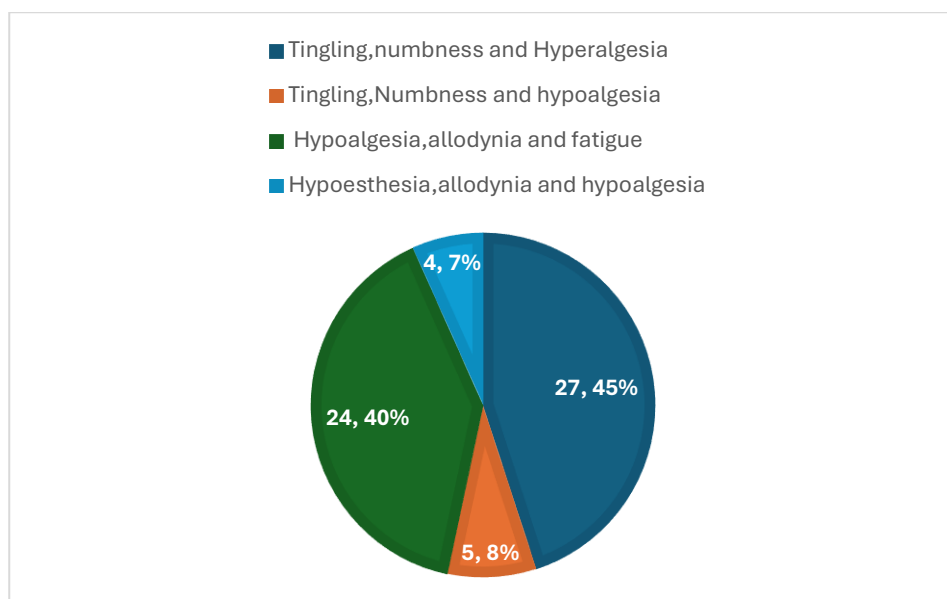
|           | %   | N  |
|-----------|-----|----|
| Correct   | 65% | 39 |
| Incorrect | 35% | 21 |

### **Interpretation-**

The correct answer for the above question is (d)Widespread Musculoskeletal Pain.

The majority of the respondents (39) have chosen the correct answers comprising 65% of the sample size and the minority of the respondents (21) have chosen the incorrect answer comprising 35% of the sample size.

### 3. Which of the following sensory affections are noticed in Fibromyalgia syndrome?



**GRAPH 2.3**

| Options                                     | %   | N  |
|---|-----|----|
| (a) Tingling, numbness and Hyperalgesia     | 45% | 27 |
| (b) Tingling, Numbness and hypoalgesia      | 8%  | 5  |
| (c) Hypoalgesia, allodynia and fatigue      | 40% | 24 |
| (d) Hypoesthesia, allodynia and hypoalgesia | 7%  | 4  |

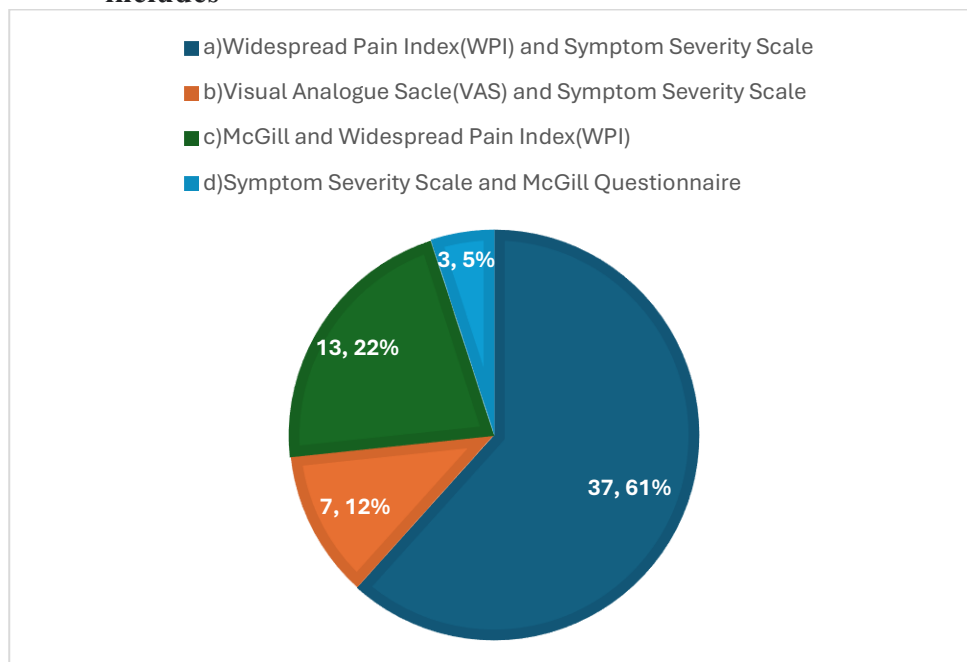
|                  | %   | N  |
|------------------|-----|----|
| <b>Correct</b>   | 45% | 27 |
| <b>Incorrect</b> | 55% | 73 |

#### **Interpretation-**

The correct answer for the above question is (a)Tingling, numbness and Hyperalgesia .

The majority of the respondents (73) have chosen the incorrect answer comprising 55% of the sample size and the minority of the respondents (27) have chosen the correct answer comprising 45% of the sample size.

#### 4. American College of Rheumatology criteria for diagnosing Fibromyalgia syndrome includes



**GRAPH 2.4**

| Options   | %   | N  |
|---|-----|----|
| <b>a) Widespread Pain Index (WPI) and Symptom Severity scale</b>  | 61% | 37 |
| <b>(b) Visual Analogue Scale (VAS) and Symptom Severity scale</b> | 12% | 7  |
| <b>(c) McGill and Widespread Pain Index (WPI)</b>                 | 22% | 13 |
| <b>(d) Symptom Severity scale and McGill</b>                      | 5%  | 3  |

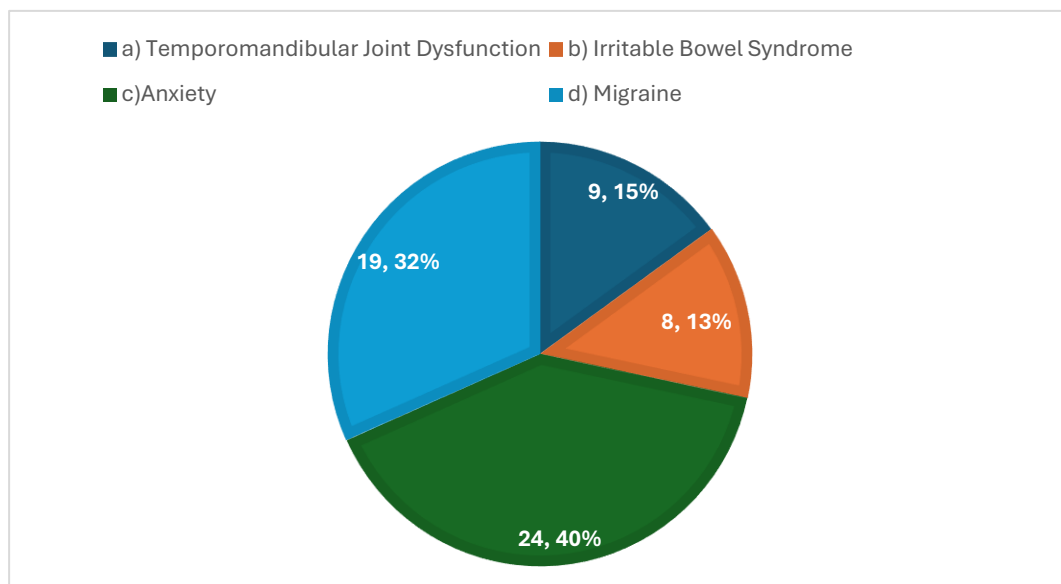
|                  | %          | N         |
|------------------|------------|-----------|
| <b>Correct</b>   | <b>61%</b> | <b>37</b> |
| <b>Incorrect</b> | <b>39%</b> | <b>23</b> |

#### **Interpretation-**

The correct answer for the above question is (a) Widespread Pain Index (WPI) and Symptom Severity scale.

The majority of the respondents (37) have chosen the correct answers comprising 61% of the sample size and the minority of the respondents (23) have chosen the incorrect answer comprising 39% of the sample size.

### 5. Which of the following is a commonly associated condition with Fibromyalgia?



**GRAPH 2.5**

| Options                                | %   | N  |
|--|-----|----|
| a) Temporomandibular Joint Dysfunction | 15% | 9  |
| b) Irritable Bowel Syndrome            | 13% | 8  |
| c) Anxiety                             | 40% | 24 |
| d) Migraine                            | 32% | 19 |

|           | %   | N  |
|-----------|-----|----|
| Correct   | 40% | 24 |
| Incorrect | 60% | 36 |

#### **Interpretation-**

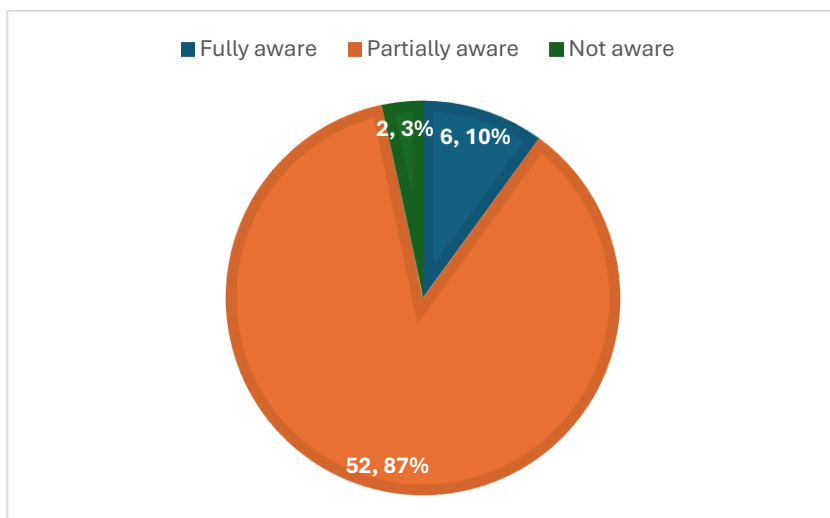
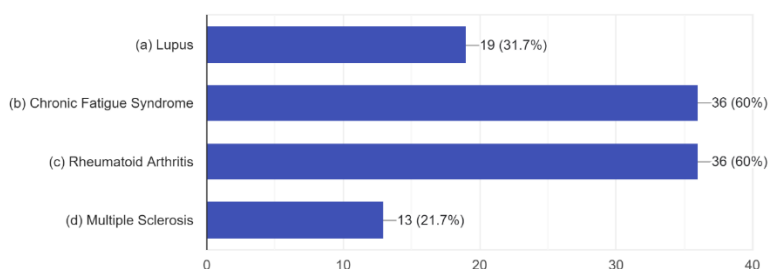
The correct answer for the above question is (c)Anxiety.

The majority of the respondents (36) have chosen the incorrect answers comprising 60% of the sample size and the minority of the respondents (24) have chosen the correct answer comprising 40% of the sample size.

**6. What are the conditions which mimic Fibromyalgia Syndrome? (select all applicable)**

6)What are the conditions which mimic Fibromyalgia Syndrome?(select all applicable)

60 responses



**GRAPH 2.6**

|                        | %   | N  |
|------------------------|-----|----|
| <b>Fully Aware</b>     | 10% | 6  |
| <b>Partially Aware</b> | 87% | 52 |
| <b>Not Aware</b>       | 3%  | 2  |

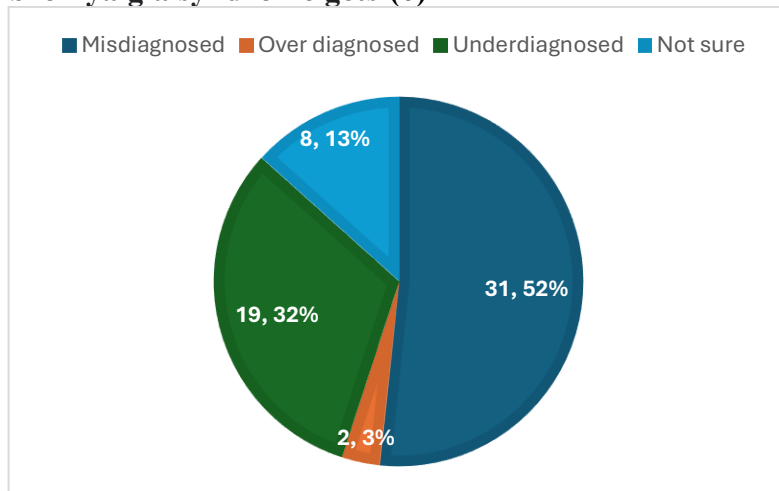
**Interpretation-**

The correct answers for the above question is (a)Lupus, (b)Chronic Fatigue Syndrome, (c)Rheumatoid Arthritis.

The majority of the respondents (36) have chosen the incorrect answers comprising 60% of the sample size and the minority of the respondents (24) have chosen the correct answer comprising 40% of the sample size.

## DOMAIN- ATTITUDE

### 1. In your experience, Fibromyalgia syndrome gets (6)



**GRAPH 3.1**

| Options         | %   | Responses |
|-----------------|-----|-----------|
| Misdiagnosed    | 52% | 31        |
| Over Diagnosed  | 3%  | 2         |
| Under Diagnosed | 32% | 19        |
| Not sure        | 13% | 8         |

### Interpretation-

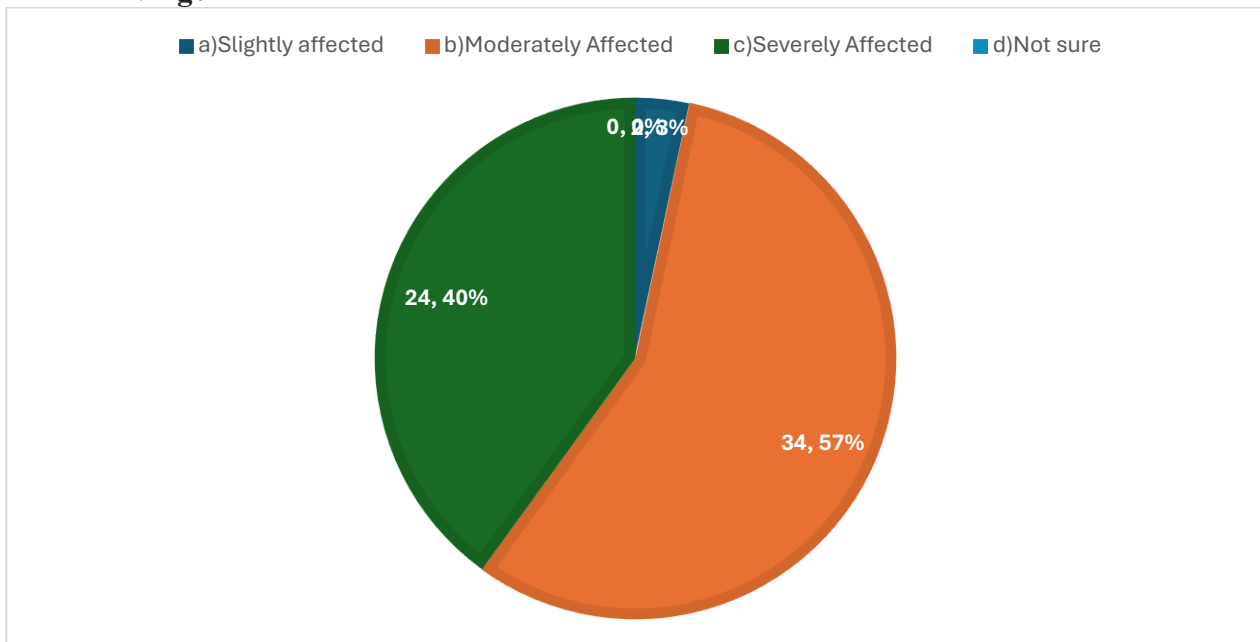
According to the above graph,

52% of the participants think that Fibromyalgia Syndrome is misdiagnosed.

32% of the participants think that Fibromyalgia Syndrome is underdiagnosed.

3% of the participants think that Fibromyalgia Syndrome is overdiagnosed.

## 2. In your opinion, till what extent does Fibromyalgia syndrome affect Activities of Daily Living?



**GRAPH 3.2**

| Options                    | %   | N  |
|----------------------------|-----|----|
| <b>Slightly Affected</b>   | 3%  | 2  |
| <b>Moderately Affected</b> | 57% | 34 |
| <b>Severely Affected</b>   | 40% | 24 |
| <b>Not sure</b>            | 0%  | 0  |

### **Interpretation-**

According to the above graph,

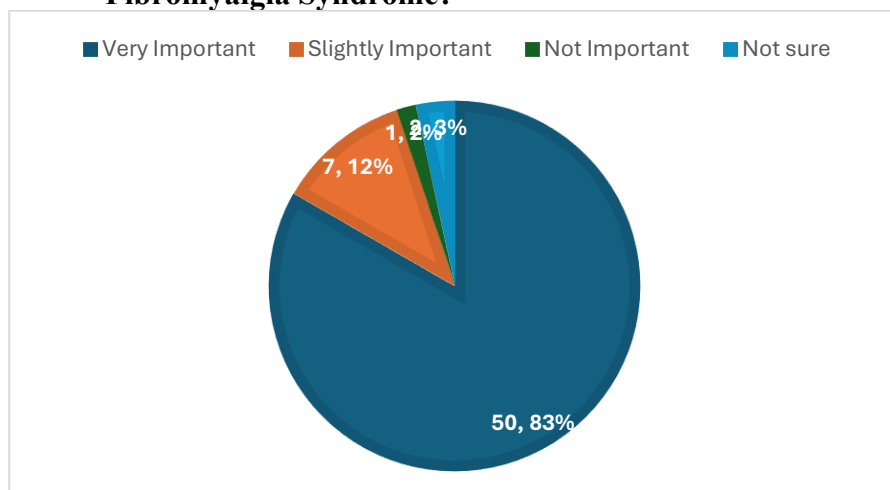
57% of the participants think that Fibromyalgia Syndrome moderately affects Activities of Daily Living.

40% of the participants think that Fibromyalgia Syndrome severely affects Activities of Daily Living.

3% of the participants think that Fibromyalgia Syndrome slightly affects Activities of Daily Living.

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### 3. According to you, how important is multidisciplinary approach for treating patients with Fibromyalgia Syndrome?



**GRAPH 3.3**

| Options            | %   | N  |
|--------------------|-----|----|
| Very Important     | 83% | 50 |
| Slightly Important | 12% | 7  |
| Not important      | 2%  | 1  |
| Not sure           | 3%  | 2  |

#### **Interpretation-**

According to the above graph,

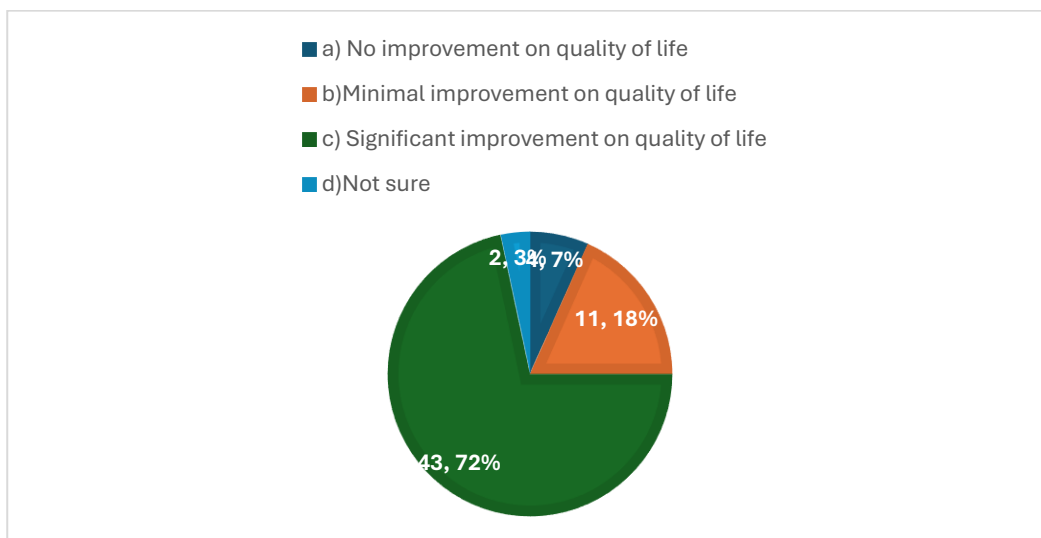
83% of the participants think that multidisciplinary approach for treating patients with Fibromyalgia Syndrome is very important.

12% of the participants think that multidisciplinary approach for treating patients with Fibromyalgia Syndrome is slightly important.

2% of the participants think that that multidisciplinary approach for treating patients with Fibromyalgia Syndrome is not important.

3% of the participants are not sure if multidisciplinary approach for treating patients with Fibromyalgia Syndrome is important.

**4. Fibromyalgia syndrome, when effectively managed in its early stages, I expect,**



**GRAPH 3.4**

| Options  | %   | N  |
|--|-----|----|
| (a) No improvement on quality of life          | 7%  | 4  |
| (b) Minimal improvement on quality of life     | 18% | 11 |
| (c) Significant improvement on quality of life | 72% | 43 |
| (d) Not sure                                   | 3%  | 2  |

**Interpretation-**

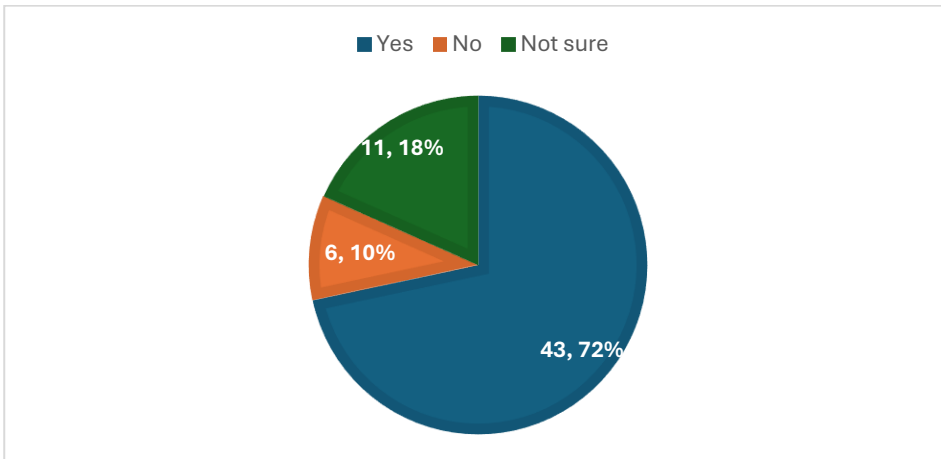
According to the above graph,

72% of the participants think that Fibromyalgia Syndrome when effectively managed in its early stages there is, significant improvement on quality of life.

18% of the participants think that Fibromyalgia Syndrome when effectively managed in its early stages there is, minimal improvement on quality of life

7% of the participants think that Fibromyalgia Syndrome when effectively managed in its early stages there is, no improvement on quality of life.

**5. According to you, is Fibromyalgia Syndrome a serious medical condition?**



**GRAPH 3.5**

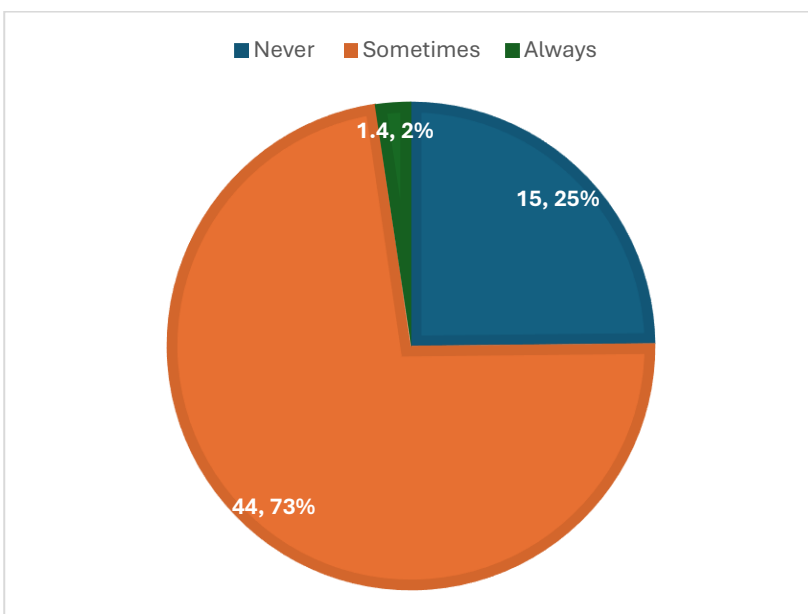
| Options  | %   | N  |
|----------|-----|----|
| Yes      | 72% | 43 |
| No       | 10% | 6  |
| Not Sure | 18% | 11 |

**Interpretation-**

According to the above graph, 72% of the participants think that Fibromyalgia Syndrome is a serious medical condition. 10% of the participants think that Fibromyalgia Syndrome is not a serious medical condition.

**DOMAIN- Practice**

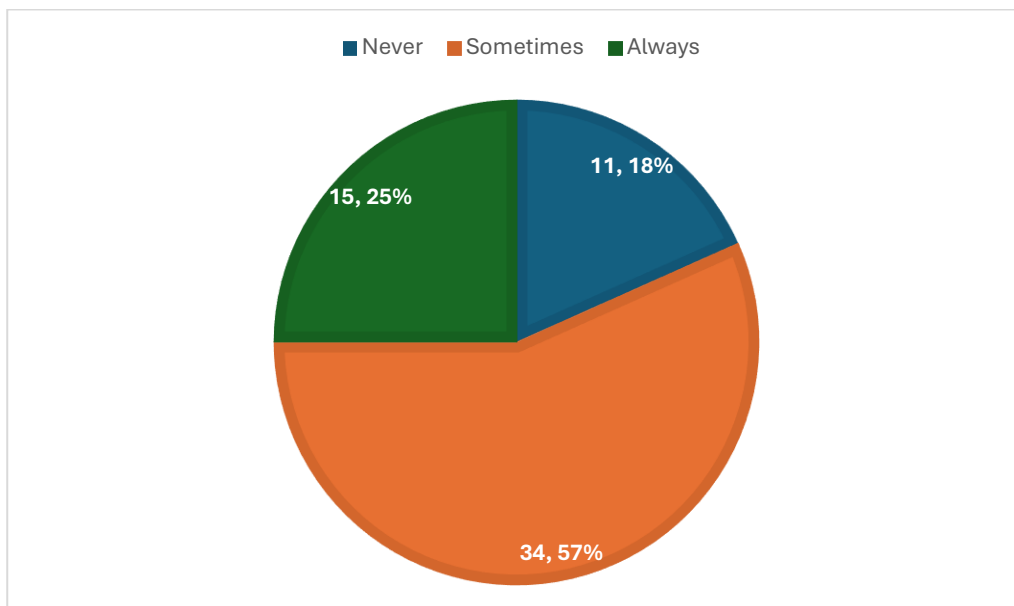
**1. How often patients come with diagnosis of Fibromyalgia syndrome?**



**Interpretation-**

The above graph reveals that the majority of the respondents (44) comprising 73% of the total sample size have seen cases of Fibromyalgia in the practice sometimes. The graph reveals that 25% of the total sample size have never seen cases of Fibromyalgia and 2% of the sample size have always seen a case of FMS.

**2. How often do you counsel your patients to seek treatment for psychological symptoms associated with Fibromyalgia syndrome?**

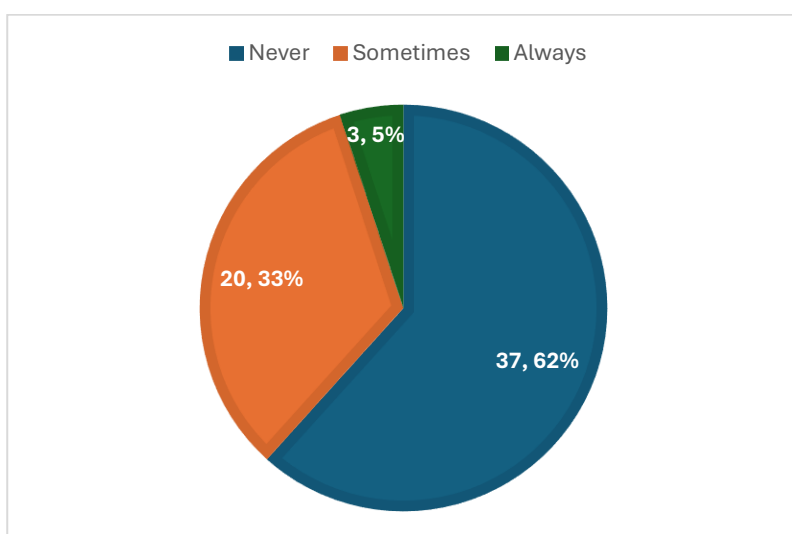


**Interpretation-**

The above graph depicts how often do the Physiotherapists counsel the FMS patients to seek treatment for psychological symptoms associated with FMS. The graph reveals that the majority of the respondents (57%) sometimes counsel the patients for the psychological associations whereas 25% of the respondents always counsel the patients.

**3. A) As a Physiotherapist,**

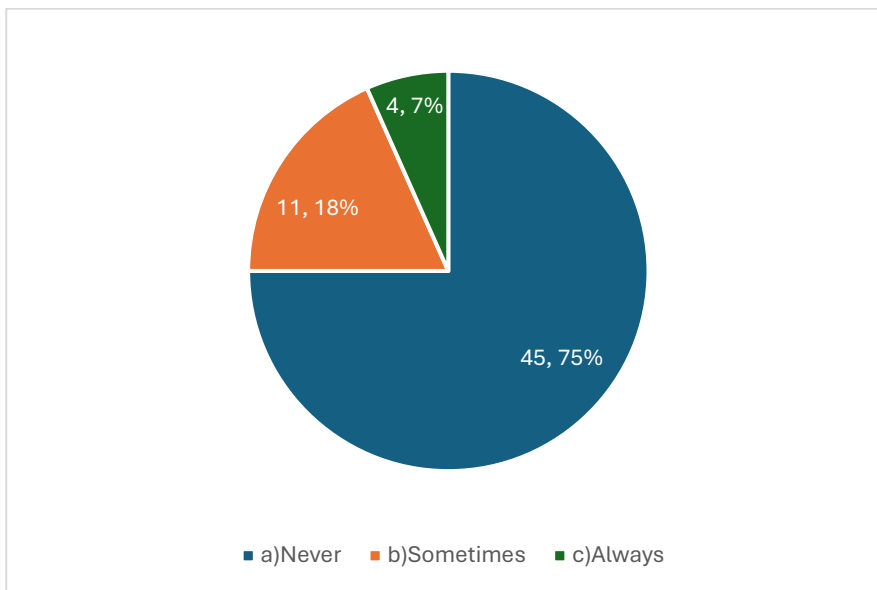
**(A)how often do you come across any workshops, webinars or seminars on Fibromyalgia syndrome and/or treatment strategies for Fibromyalgia syndrome**



**Interpretation-**

The above graph reveals that 62% of the sample size have never come across any workshops, webinars or seminars on Fibromyalgia Syndrome and/or treatment strategies for Fibromyalgia syndrome. The graph also reveals that 33% have sometimes and 5% have never come across any workshops, webinars or seminars on Fibromyalgia Syndrome and/or treatment strategies for Fibromyalgia syndrome.

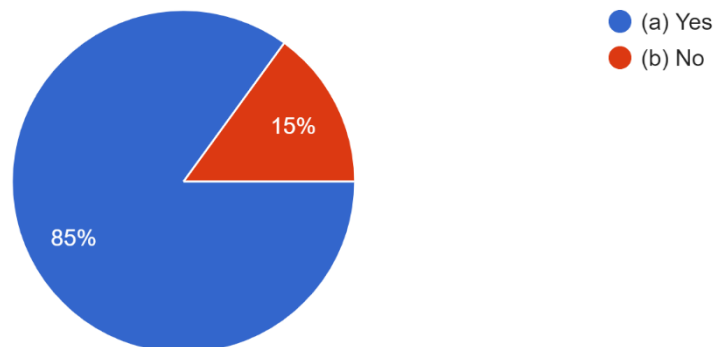
3. **B) if you have come across, have you attended workshops, webinars or seminars on Fibromyalgia syndrome and/or treatment strategies for Fibromyalgia syndrome**



**Interpretation-**

The above graph reveals that 75% of the sample size have never attended any workshops, webinars or seminars on Fibromyalgia Syndrome and/or treatment strategies for Fibromyalgia syndrome. The graph also reveals that 18% have sometimes and 7% have never come across any workshops, webinars or seminars on Fibromyalgia Syndrome and/or treatment strategies for Fibromyalgia syndrome.

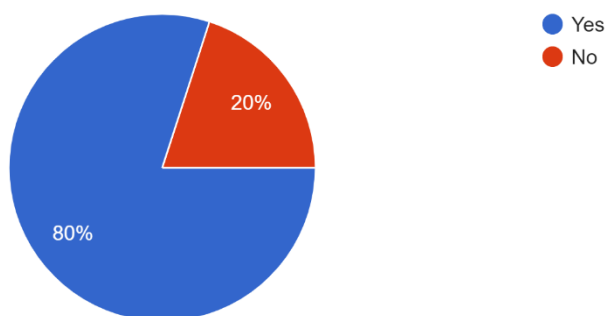
4. **In your practice while treating a patient with Fibromyalgia syndrome, (A) You have educated the patient regarding his/her condition**



**Interpretation-**

The above graph reveals that 85% of the sample size have educated the FMS patient about his/her condition. The graph also reveals that 15% don't educate the FMS patient about his/her condition.

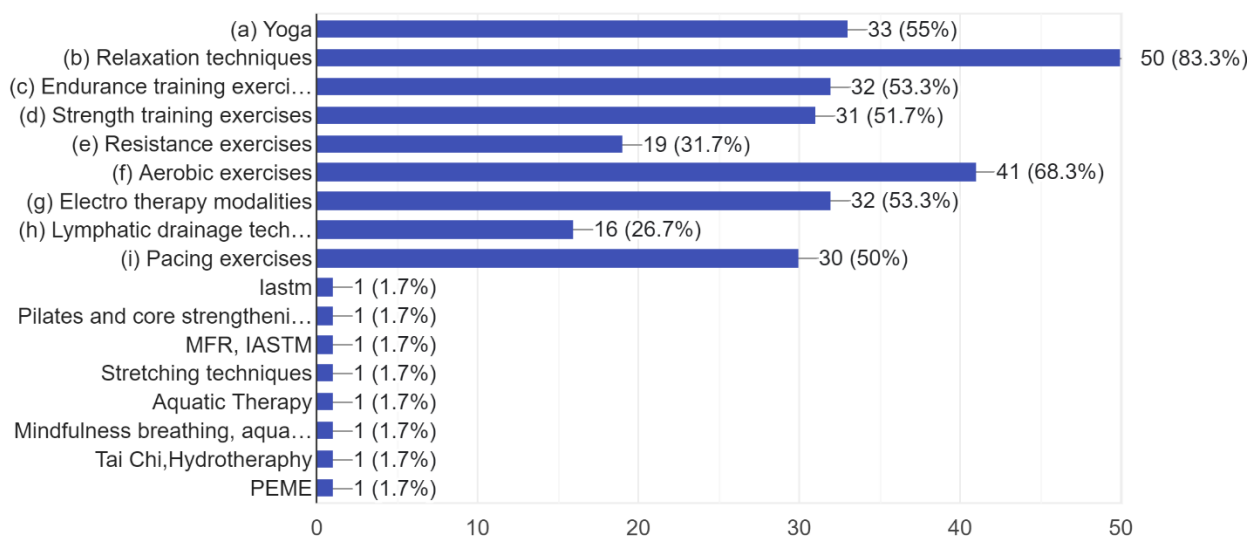
**4 (B) You have educated the patient’s relative regarding his/her condition**



**Interpretation-**

The above graph reveals that 80% of the sample size have educated the FMS patient’s relative about his/her condition. The graph also reveals that 20% don’t educate the FMS patient’s relative about his/her condition.

**5. Which treatment method do you prefer for treating patients with Fibromyalgia syndrome,(select all applicable, if other mention)**

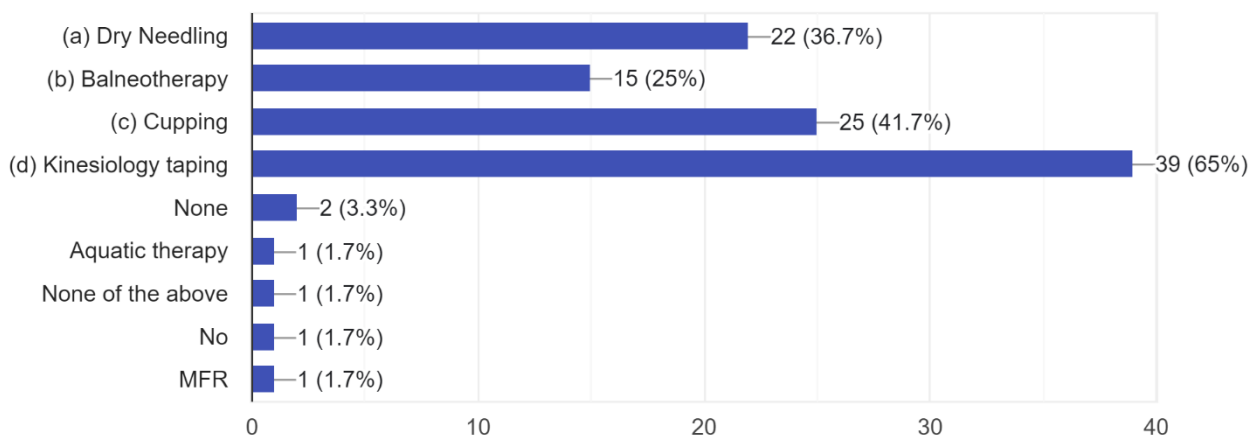


**Interpretation-**

The above graph reveals that majority of the respondents have chosen Relaxation Techniques as a treatment for FMS patients in their practice.

The minority of the respondents have chosen IASTM, Pilates, MFR, stretching, Aquatic Therapy, Tai Chi, PEME, Hydrotherapy, Mindfulness breathing.

**6. Do you apply advanced techniques in the treatment of Fibromyalgia syndrome ?( select all applicable, if other mention)**



**Interpretation-**

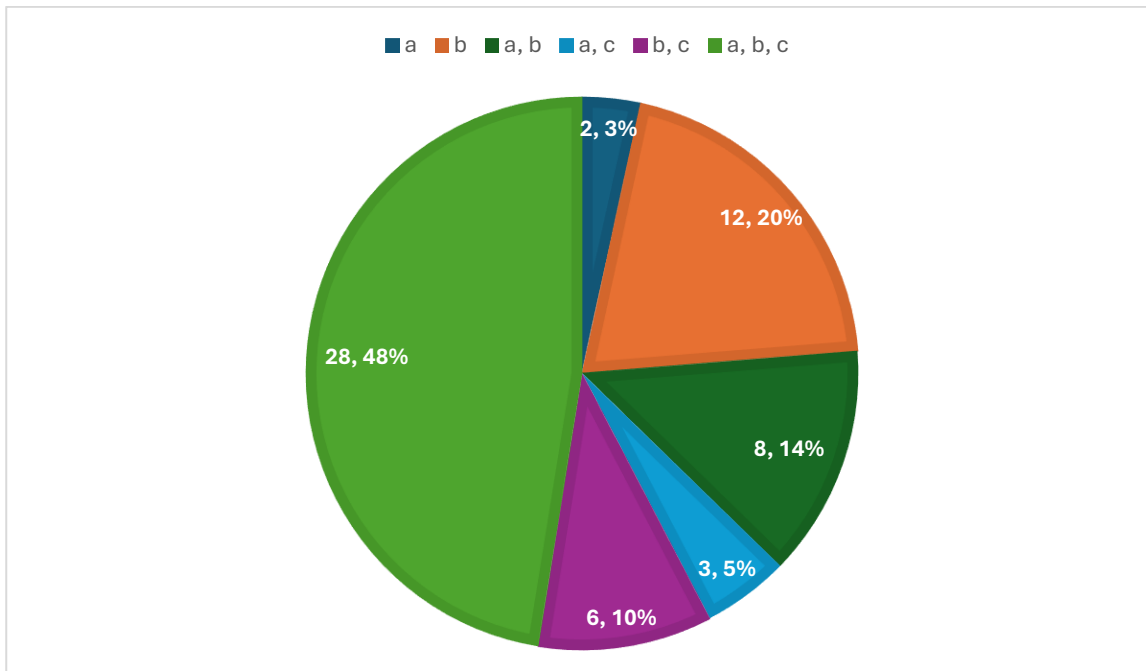
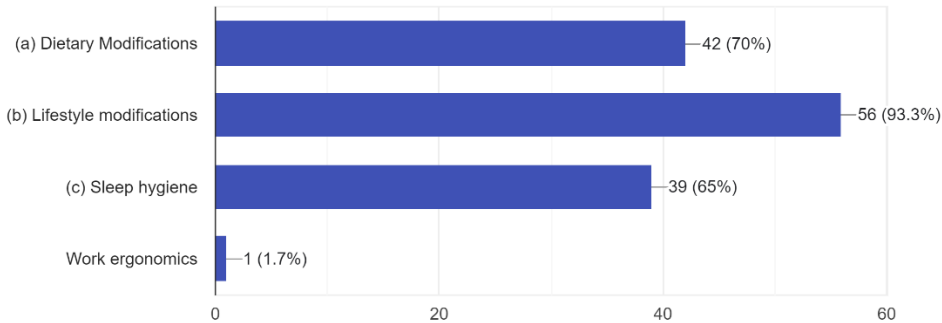
The above graph reveals that majority of the respondents use Kinesiology Taping in treatment for Fibromyalgia Syndrome.

The minority of the respondents use Aquatic therapy, Dry needling, cupping, balneotherapy in treatment for Fibromyalgia Syndrome.

**7. Do you advise any of the following modifications along with your main treatment protocol (select all applicable, if other mention)**

7)Do you advise any of the following modifications along with your main treatment protocol (select all applicable,if other mention)

60 responses

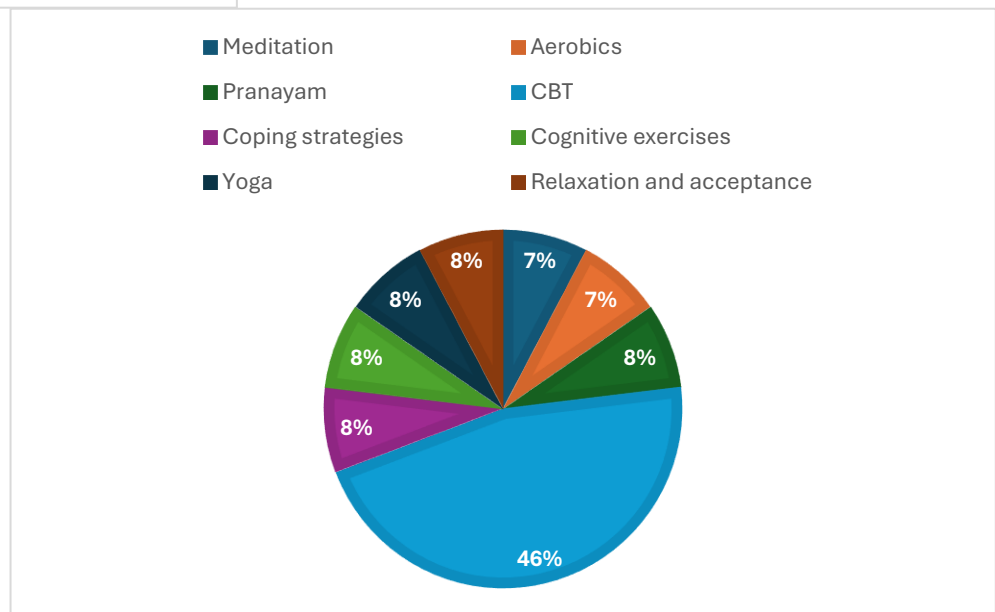
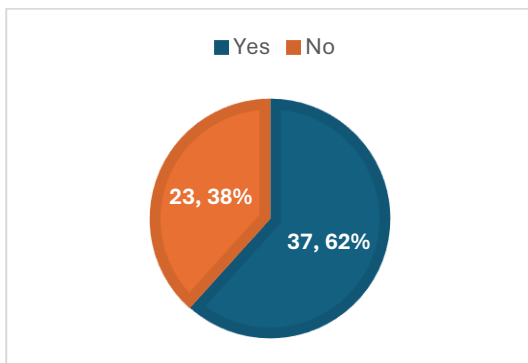


**Interpretation-**

The above graph reveals that 48% of the total sample size advise Dietary Modifications, lifestyle modifications and sleep hygiene.

About 20% of the sample size advise only lifestyle modifications, 14% of the sample size advise Dietary Modifications and Lifestyle modifications, 10% of the sample size advise lifestyle modifications and sleep hygiene, 5% of the sample size advise dietary modifications and sleep hygiene, 3% of the sample size advise only dietary modifications and 2% of the sample size advise work ergonomics.

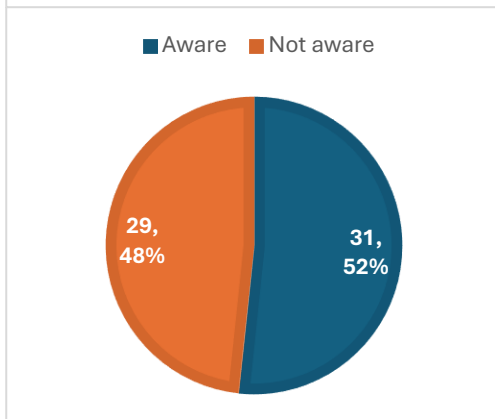
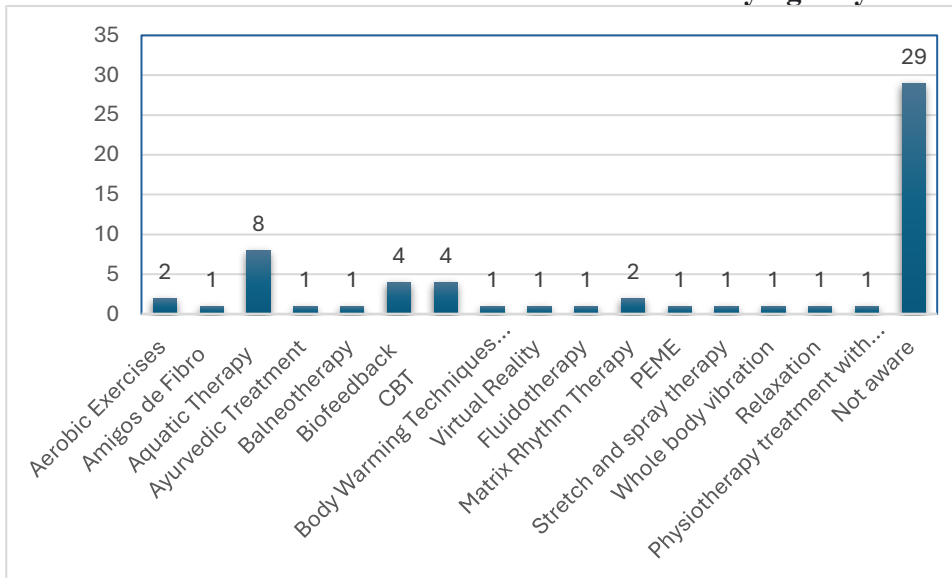
**8. While treating a patient with Fibromyalgia syndrome, do you consider cognitive impairments? If yes, what treatment modifications do you implement?**



**Interpretation-**

The above graph reveals that the majority of the respondents (37) consider the cognitive impairments of Fibromyalgia Syndrome and the most common advice they give for patients is Cognitive Behavioral Therapy(CBT) which comprises 46% of the total sample size.

**9. What recent advances in treatment of Fibromyalgia Syndrome are you aware of?**



**Interpretation-**

The above graph depicts the recent advances for Fibromyalgia Syndrome that the respondents are aware of. The graph reveals that majority of the respondents (31) are aware about the recent advances that are available for treating Fibromyalgia syndrome and minority of the respondents (29) are not aware.

## 5. Discussion:

The present study aimed to assess the knowledge, attitude, and practice (KAP) regarding Fibromyalgia Syndrome (FMS) among practicing physiotherapists in Pune. The findings provide valuable insight into current awareness levels and clinical approaches, while also highlighting important gaps that need to be addressed.

In the knowledge domain, the results indicate that while a moderate proportion of physiotherapists possess basic knowledge about Fibromyalgia, there are still noticeable deficiencies. Most participants correctly identified key aspects such as the involvement of the hypothalamic-pituitary-adrenal (HPA) axis and the hallmark symptom of widespread musculoskeletal pain. However, significant gaps were observed in areas such as sensory manifestations, associated conditions, and differential diagnoses. For example, more than half of the respondents were unable to correctly identify sensory symptoms like hyperalgesia and allodynia, and many were unaware of commonly associated conditions such as anxiety. This suggests that although foundational knowledge exists, deeper clinical understanding remains limited.

The attitude domain revealed largely positive perceptions among physiotherapists. A majority of participants recognized Fibromyalgia as a serious condition that significantly impacts activities of daily living. Most respondents also emphasized the importance of a multidisciplinary approach and believed that early management can lead to meaningful improvements in quality of life. Interestingly, a large proportion perceived Fibromyalgia to be misdiagnosed or underdiagnosed, reflecting awareness of diagnostic challenges associated with the condition. This positive attitude is encouraging, as it indicates readiness among physiotherapists to engage in effective management if provided with adequate knowledge and training.

In terms of practice, the findings show a mixed pattern. On one hand, many physiotherapists reported that they educate patients and their families about the condition, which is a crucial component of management. They also frequently incorporate relaxation techniques, lifestyle modifications, and psychological considerations such as cognitive behavioral therapy into treatment plans. On the other hand, there is limited exposure to continuing education opportunities, as a majority of participants reported not attending workshops or seminars on Fibromyalgia. This lack of professional development may contribute to the knowledge gaps observed earlier.

Additionally, while some advanced techniques like kinesiology taping are being used, awareness and application of other evidence-based interventions such as aquatic therapy, mindfulness-based approaches, and multidisciplinary rehabilitation appear to be limited. The inconsistent counseling for psychological symptoms further suggests that the biopsychosocial nature of Fibromyalgia is not fully integrated into routine clinical practice.

Overall, the study highlights a disconnect between knowledge and practice. While physiotherapists demonstrate a positive attitude and basic awareness, their clinical application and depth of understanding are not always aligned with current evidence-based recommendations. This emphasizes the need for structured educational programs and training initiatives.

## 6. Conclusion:

The present study concludes that practicing physiotherapists in Pune demonstrate moderate knowledge, positive attitudes, and variable clinical practices regarding Fibromyalgia Syndrome. Although most physiotherapists are aware of the condition and recognize its impact on patients' quality of life, there are notable gaps in detailed clinical knowledge, particularly in areas related to symptomatology, associated conditions, and differential diagnosis. Encouragingly, the overall attitude toward Fibromyalgia is positive, with strong support for multidisciplinary management and early intervention. However, practical implementation does not always reflect this understanding, as evidenced by limited exposure to continuing education programs and inconsistent use of advanced, evidence-based treatment strategies. Therefore, there is a clear need for enhanced educational initiatives, workshops, and training programs to improve knowledge and bridge the gap between theory and practice. Strengthening these areas will

ultimately enable physiotherapists to deliver more comprehensive, evidence-based care, thereby improving outcomes and quality of life for individuals with Fibromyalgia Syndrome.

## 7. References:

8. 1. Alatawi A, Moria HA, Alharfy AA, Sehly MJ, Alotaibi JTA, Alshammari YS, et al. Knowledge, Attitude, and Practice Regarding Fibromyalgia Among Primary Care Physicians in Tabuk, Saudi Arabia. *Cureus*. 2023 Feb;15(2):e35097.
9. 2. Van Houdenhove B, Egle U, Luyten P. The role of life stress in fibromyalgia. *Curr Rheumatol Rep*. 2005 Oct;7(5):365–70.
10. 3. Ruschak I, Montesó-Curto P, Rosselló L, Aguilar Martín C, Sánchez-Montesó L, Toussaint L. Fibromyalgia Syndrome Pain in Men and Women: A Scoping Review. *Healthcare*. 2023 Jan 11;11(2):223.
11. 4. Harrison's Principles Of Internal Medicine, 19 E ( 2015) [Internet]. [cited 2023 Oct 10]. Available from: <http://archive.org/details/HarrisonsPrinciplesOfInternalMedicine19E>
12. 5. Bradley LA. Pathophysiology of Fibromyalgia. *Am J Med*. 2009 Dec;122(12 Suppl):S22.
13. 6. Fibromyalgia syndrome: under-, over- and misdiagnosis - PubMed [Internet]. [cited 2024 Feb 10]. Available from: <https://pubmed.ncbi.nlm.nih.gov/30747096/>
14. 7. Kelley & Firesteins Textbook Of Rheumatology 10e [Internet]. [cited 2023 Oct 10]. Available from: <http://archive.org/details/KelleyFiresteinsTextbookOfRheumatology10e>
15. 8. Wolfe F, Smythe HA, Yunus MB, Bennett RM, Bombardier C, Goldenberg DL, et al. The American College of Rheumatology 1990 Criteria for the Classification of Fibromyalgia. Report of the Multicenter Criteria Committee. *Arthritis Rheum*. 1990 Feb;33(2):160–72.