

FEAR AVOIDANCE OF THE PATIENT DURING PHYSICAL THERAPY
MANAGEMENT OF FROZEN SHOULDER

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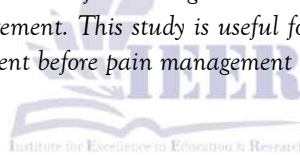
Abstract

Objective: The aim of this study to identify patients fear avoidance during physical therapy management of frozen shoulder.

Methodology: Cross sectional study were used and the data analysis by the SPSS version 22 and data collected from medical students at Isra University Hyderabad.

Results: In my study there were 100 participate out of 28% strongly agree that they get injured after manage by physical therapy and 41% strongly disagree that they are injured. Almost patient don't fear during managing by physical therapy of frozen shoulder. And result obtained by the help of TEMPA SCALE OF KINESIOPHOBIA 11 (TSK-11).

Conclusion: Most of the shoulder pain patients who are participated in this study they are strongly agree with physical therapy management for shoulder pain they could not fear during exercise. Some people are disagree with physical therapy management. This study is useful for physical therapist to identify fear avoidance of patient before pain management by physical therapy.



INTRODUCTION

1. Identification

The act of finding out who someone is or what something is the act of identifying someone or something. (1)

2. Fear-Avoidance

Fear is the sensitive reaction to a specific, identifiable and immediate vulnerability, such as a dangerous injury. (2)

Fear may protect the individual from slow down danger as it initiates the self-protective behaviour that is associated with the fight or flight response. (3)

The Fear-Avoidance Model was designed to recognize and explain why chronic frozen shoulder problems, and associated disability, develop in members of the population suffering from an onset of frozen shoulder. (4)

This model indicates that a person suffering from

pain will undergo one of two different pathways. It has been recognised that these thoughts can lead on to pain-related fear and associated safety looking for behaviours, such as avoidance. However, this could cause the pain to become worse and enter a chronic phase due to the disuse and disability. This in turn can lower the threshold at which the person will experience pain. Fear avoidance is the psychiatric model, that describe how individual develop and maintain chronic musculoskeletal pain as a result of attention process and avoidant behaviour based on pain related fear. This model helped explain how these individuals experience pain despite the absence of pathology. If an individual experience acute discomfort and delay the situation by using avoidant behaviour, a lack of pain increase strengthen this behaviour.(5)

3. Physical Therapy

A branch of rehabilitative health that uses specially designed exercises and equipment to help patients regain or improve their physical abilities. Abbreviated PT. PT is appropriate for many types of patients, from infants born with musculoskeletal birth defects, to adults suffering from sciatica or the after effects of injury or surgery, to elderly post stroke patients.(6)

Physical therapy, by exercise and stretching, is an exercise treatment method aimed at treating and healing some physical conditions. Thus eliminating the possibility of any further re-occurrence on the road at the same time. The primary purpose is to get the patient shoulder to his or her former self, free from pain or suffering, so that he or she can lead a normal life; Physical therapy is generally required for people with permanent disabilities, those who have suffered major injuries or accidents and are in rehab or those suffering from diseases such as arthritis, lower shoulder pain or cerebral paralysis. In certain instances, some diseases or medical conditions impair the patient so much that it

becomes necessary to teach them how to function within the limitations of their condition, by building upon the residual capabilities left. With prolonged treatment under the supervision of an expert physiatrist, it is possible for the patient to regain a major share of the mobility of his/her joints, achieve flexibility, and acquire better balance and coordination. Apart from this, physical therapy also helps in significantly improving the overall fitness and health of the patient. Physical therapy can also help children with conditions such as developmental delays or muscle and joint defects that arise early in life. In such cases, a physiatrist typically depends on a variety of methods such as strength training, balance and coordination exercises, relaxation exercises, MRI therapy and electrical stimulation of the affected parts of the body along with massage. But, after diagnosing the infant, the physiatrist determines the exact methods to be used. The injury takes time to heal itself, and this can be achieved through physical therapy. The circumstances in which this is done are equally

important, and a person needs to be treated as well as possible. A physiatrist tracking the progress will fix a problem if an error occurs. Physical therapy is highly effective in treating broken joints, bones, muscle defects, and many neurological disorders, but it must be done properly, under a physiatrist's guidance or otherwise it will not achieve the desired results.(7)

4. Frozen Shoulder

Frozen shoulder, also called adhesive capsulitis, involves stiffness and pain in the shoulder joint. Signs and symptoms typically begin slowly, then get worse. Over time, symptoms get better, usually within 1 to 3 years.

Having to keep a shoulder still for a long period increases the risk of developing frozen shoulder. This might happen after having surgery or breaking an arm.

Treatment for frozen shoulder involves range-of-motion exercises. Sometimes treatment involves corticosteroids and numbing medications injected into the joint. Rarely, arthroscopic surgery is needed to loosen the joint capsule so that it can move more freely.

It's unusual for frozen shoulder to recur in the same shoulder. But some people can develop it in the other shoulder, usually within five years.

Frozen shoulder typically develops slowly in three stages.

Freezing stage. Any movement of the shoulder causes pain, and the shoulder's ability to move becomes limited. This stage lasts from 2 to 9 months.

Frozen stage. Pain might lessen during this stage. However, the shoulder becomes stiffer. Using it becomes more difficult. This stage lasts from 4 to 12 months.

Thawing stage. The shoulder's ability to move begins to improve.

This stage lasts from 5 to 24 months.

The shoulder joint is enclosed in a capsule of connective tissue. Frozen shoulder occurs when this capsule thickens and tightens around the shoulder joint, restricting its movement.

It's unclear why this happens to some people. But it's more likely to happen after keeping a

shoulder still for a long period, such as after surgery or an arm fracture.

People who've had to keep a shoulder somewhat still are at higher risk of developing frozen shoulder. Restricted movement can be the result of many factors, including: Rotator cuff injury, Broken arm, Stroke, Recovery from surgery. (9)

5. Risk Factors

Age: The first attack of frozen shoulder typically occurs between the ages of 30 and 50, and shoulder pain becomes more common with advancing age. As people grow older, loss of bone strength from osteoporosis can lead to fractures, and at the same time, muscle elasticity and tone decrease. The intervertebral discs begin to lose fluid and flexibility with age, which decreases their ability to cushion the vertebrae. The risk of spinal stenosis also increases with age. (9)

Fitness level: Shoulder pain among people who are not physically fit is more common. The spine may not be properly supported by weak shoulder and abdominal muscles. "Weekend warriors"—people who go out and practice a lot after being inactive throughout the week — are more likely to suffer debilitating shoulder injuries than people who make a daily habit of mild physical activity. Studies show that aerobic exercise with low impact is beneficial to the maintaining the integrity of intervertebral discs. (9)

Weight gain: Being overweight, obese or gaining large amounts of weight quickly can put stress on the shoulder and cause frozen shoulder. (9)

Occupational risk factors; Having a job involving heavy lifting, pushing, or pulling can lead to injury and shoulder pain, especially when it involves twisting or vibrating the spine. An inactive job or a desk job can also cause or lead to discomfort, particularly if you have poor posture or sit in a chair with inadequate shoulder support throughout the day. (9)

6. Causes

The vast majority of the physical essence of frozen shoulder. Frozen shoulder is often

associated with spondylosis, a term that refers to the general degeneration of the spine associated with normal wear and tear that happens in the spine's joints, muscles, and bones as people grow older. Several examples of frozen shoulder mechanical causes include: (9)

Sprains and strains; Many acute shoulder pain is due. Sprains are caused by ligaments which stretch or tear, and strains are tendon or muscle tears. Both can occur as a result of excessive twisting or lifting something, lifting something too heavy, or exaggerating. These movements can also induce spasms in the muscles of the shoulder, which can also be painful. (9)

Intervertebral disc degeneration; It is one of the most common mechanical causes of frozen shoulder and happens as rubber disks usually lose their integrity as a normal aging process. Intervertebral discs provide height in a healthy shoulder and allow the lower shoulder to bend, stretch, and torsion. As the disks fail, they lose their ability to cushion. (9)

Herniated or ruptured discs can occur when the intervertebral discs become compressed and bulge outward (herniation) or rupture, causing frozen shoulder. (9)

Radiculopathy; A condition caused by compression, inflammation, and/or spinal nerve root pressure on the nerve root causes pain, numbness, or tingling that spreads or radiates to other areas of the body served by the nerve. Radiculopathy can occur when the root of the nerve is compressed by spinal stenosis or a herniated or ruptured disk. (9)

Spondylolisthesis is a condition in which a vertebra of the lower spine slips out of place, pinching the nerves exiting the spinal column. (9)

A traumatic injury, such as from playing sports, car accidents, or a fall can injure tendons, ligaments or muscle resulting in frozen shoulder. Traumatic injury may also cause the spine to become overly compressed, which in turn can cause an intervertebral disc to rupture or herniate, exerting pressure on any of the nerves rooted to the spinal cord. When spinal nerves become compressed and irritated, shoulder pain and sciatica may result. (9)

Spinal stenosis is a narrowing of the spinal column that puts pressure on the spinal cord and nerves that can cause pain or numbness with walking and over time leads to leg weakness and sensory loss. (9)

Skeletal irregularities; Include scoliosis, a spine curvature that typically does not cause pain until the middle ages; lordosis, an abnormally accentuated lower shoulder arch; and other congenital spine anomalies (9).

Endometriosis is the builds up of uterine tissue in places outside the uterus. (9)

Fibromyalgia, a chronic pain syndrome involving widespread muscle pain and fatigue (9)

Symptoms

The main symptoms of a frozen shoulder are pain and stiffness that make it difficult or impossible to move it.

If you have frozen shoulder, you'll likely feel a dull or achy pain in one shoulder. You might also feel the pain in the shoulder muscles that wrap around the top of your arm. You might feel the same sensation in your upper arm. Your pain could get worse at night, which can make it hard to sleep.

You'll typically go through three phases with a frozen shoulder.

Each has its own unique symptoms and timeline.

Freezing stage:

- You develop a pain (sometimes severe) in your shoulder any time you move it.
- It slowly gets worse over time and may hurt more at night.
- This can last anywhere from 6 to 9 months.
- You're limited in how far you can move your shoulder.

Frozen stage:

- Your pain might get better but your stiffness gets worse.
- Moving your shoulder becomes more difficult and it becomes harder to get through daily activities.
- This stage can last 4-12 months.

Thawing stage:

- Your range of motion starts to go shoulder to normal.
- This can take anywhere from 6 months to 2 years. (10)

LITERATURE REVIEW

This study was conducted by Darren q. Calley, pt, Dscpt, ocs1 • Steven Jackson, pt,MSPT2 • Heather Collins, pt, dpt3 • Steven z. George, PT, PhD in December 2010. The aim of this study to evaluate the accuracy with which physical therapists identify fear-avoidance beliefs in patients with frozen shoulder. The outcomes shows that, Therapist ratings of perceived patient fear-avoidance were not associated with fear-avoidance measures, but were associated with pain catastrophizing and disability scores. Two dichotomous questions related to physical activity and harm showed potential for identifying elevated fear-avoidance beliefs. (11)

This study was conducted by Steven z. George, pt, phd1 • Sandra e. Stryker, mpt, cmpt2 in 4 November 2011. The aim of this study to investigate fear-avoidance beliefs in patient with musculoskeletal pain across different anatomical regions. The outcomes shows such data suggest that fear-avoidance behaviours may have a strong effect on intake and alter ratings for pain severity and function in patients with cervical, upper extremity, lumbar or lower extremity complaints. General assessment of fear-avoidance beliefs using FABQ-PA, in particular to predict shift scores may be appropriate for use in patients with specific musculoskeletal pain conditions. (12)

The study was conducted by S. Poiraudou a,* , F. Rannou a, g. Garon b, a. le Henanff b, e. Coudeyre c, s. Rozenberg d, d. Huas e, c. Martineau f, i. Jolivet-Landreau g, j. Garcia-mace ´ g, m. revel a, p. Ravaud in 25 march 2006. The purpose of this study was to assess fear-avoidance beliefs about shoulder pain in patients with subacute LBP and to seek an association between physician or patient characteristics and level of fear-avoidance beliefs. The outcome shows that this survey suggests that fears, avoidance attitudes and beliefs are strong among

patients with subacute LBP and among spine specialists, specifically rheumatologists, in France. It sheds light on the need to propose interventions aimed at altering these fear-avoidance beliefs in such patients and their physicians. (13)

This study was conducted in year 2011 by J. Megan Sions, Gregory e. Hicks. The purpose of this study was to examine the association of FABs with self-reported disability, physical health, and falling among community-dwelling older adults with LBP in the United States. The outcome shows the Physical activity FABs are independently associated with self-reported disability and overall physical health in older American adults with LBP. High FABs may warrant balance and falls assessment. (14)

This study was conducted by Steven z. George, pt, phd1 • Julie m. Fritz, pt, phd, atc2 • John d. Childs, pt, PhD3 in February 2008. The purpose of this study to examine the Fear-Avoidance Beliefs Questionnaire (FABQ) for its ability to predict outcomes for 6 months in patients with frozen shoulder (LBP) taking part in clinical trials for physical therapy. The result shows the function scale of the FABQ was the best predictor of impairment self-report in this study of patients taking part in clinical trials in physical therapy. Future studies are required in order to further test and refine the scale of FABQ work as a screening tool alone and in combination with other findings of the examination. (15)

This study was conducted by Julie M Fritz Steven Z George in 1 October 2002. This study aimed to examine psychosocial baseline variables and their ability to predict prolonged restrictions on work. The result shows that work-related fear-avoidance beliefs were the psychosocial factor best used to predict return to work in patients with acute frozen shoulder associated with work. (16)

This study was conducted by Jennifer A. Klaber Moffett, MSc, PhD, MCSP,* Jane Carr, MSc,* and Elaine Howarth, MSc† in 11 November 2004. This research is aimed at evaluating whether patients with high scores gain most from measures of fear-avoidance and distress / depression. The result shows that the Shoulder to Fitness plan can significantly benefit patients

with high levels of fear-avoidance beliefs. The benefits of the exercise program tend to be short-term in patients with high levels of distress / depression. (17)

This study was conducted by Joshua A. Cleland, PT, PhD, OCS, FAAO, MPT Julie M. Fritz, PT, PhD, ATC John D. Childs, PT, PhD, MBA, OCS, FAAO, MPT in 2008. In a cohort of patients with mechanical neck pain, the purpose of this study is to examine selected psychometric properties of these instruments. The results suggest weaker relationships among patients with mechanical neck pain between fear and avoidance beliefs and pain / disability compared to patients with frozen shoulder. (18)

This study was conducted by Dennis L. Hart, Mark W. Werneke, Steven Z. George, James W. Matheson, Ying-Chih Wang, Karon F. Cook, Jerome E. Mioduski, Seung W. Choi in August 2009. The purpose of this study was to establish successful and reliable screening methods to recognize high levels of fear-avoidance beliefs in people receiving outpatient treatment regarding work or physical activity. The result shows that the study suggested that FABQ screening might be useful in routine clinical practice and encouraged the development of single-item screening to prevent fear. (19)

This study was conducted by Saud M. Al-Obaidi, PhD, PT,* Roger M. Nelson, PhD, PT, FAPTA, † Sumer Al-Awadhi, PT,* and Nadia Al-Shuwaie, PT* in 1998. The purpose of the study is to explore variations in spinal isometric strength that may be accounted for by pain anticipation, sensory perception of pain, belief in functional disability, and fear-avoidance beliefs in patients with chronic frozen shoulder. The results of this study strongly support the hypothesis that the sensory perception alone does not explain the spinal physical capacity in chronicity. (20)

This study was conducted by Heinz -Dieter Basler, PhD,* Judith Luckmann, MSc,* Udo Wolf, MSc,w and Sabine Quint, PhD* in September 2008. The goal of this research was to test the efficacy of FABM in older patients with chronic frozen shoulder. The findings are consistent with the results reported for younger age groups in the literature and support the belief

that the FABM often applies to elderly people. (21)

This study was conducted by Swinkels-Meewisse IE, Roelofs J, Verbeek AL, Oostendorp RA, Vlaeyen JW January 2006. The aim of the current study was: 1) to investigate the factor structure of the Fear-Avoidance Beliefs Questionnaire in a population of patients with acute frozen shoulder by means of confirmatory factor analysis; 2) to examine the relationship between fear-avoidance beliefs and perceived disability, as well as participation in daily and social life. The outcome shows that in the early stage of frozen shoulder, the reduction of pain and fear-avoidance beliefs might increase the level of activity, which might foster increased participation in daily and social life activities. (22)

This study was conducted by Nina Buera,b,*, Steven J. Lintonc. The purpose of this study is to investigate the incidence of fear-avoidance and neuropathic beliefs in groups with varying degrees of non-chronic spinal pain in a general population, and secondly to determine whether fear-avoidance and neuropathic beliefs are linked to current pain ratings and daily living activities (ADL). The overall objective of this study was to investigate the role of fear-avoidance. (23)

This study was conducted by Rim Maaoui*, EmnaBahlouli, ImenKsibi, HanenKhiari, HajerRahali in 2016. The purpose of this study is to evaluate anxiety, beliefs and fear of movement in patients with chronic low-shoulder pain about to begin a rehabilitation centre training program. The result shows that psychosocial causes in the population with chronic low-shoulder military pain are very common. Through these factors, rehabilitation programs may improve patient care. (24)

This study was conducted by MargrethGrotlea,*, Nina K. Vøllestad, Marit B. Veierøda,b, Jens IvarBrox in 14 September 2006. The purpose of this study was to compare the level of fear-avoidance beliefs and distress in acute LBP patients with chronic LBP patients and to determine the relationship between fear-avoidance beliefs and distress to acute and chronic LBP impairment. The outcome of this study shows that patients with patients at an early

stage of LBP associated fear-avoidance beliefs and distress. (25)

This study was conducted by Julie M. Fritz,*, Steven Z. Georgeb, Anthony Delitto in 2 May 2001. The purpose of this study was to investigate the role of frozen shoulder-related fear-avoidance beliefs in patients. The result shows that the theory that beliefs in fear-avoidance are formed early in a pain encounter and are likely to be primarily influenced by the psychological sense in which the injury occurs. (26)

This study was conducted by Johan W.S. Vlaeyen,a,b,*, Ank M.J. Kole-Snijders,a,c, Ruben G.B. Boeren a and H. van Eek in 16 December 1994. The aim of this study as to how fear of movement/(re)injury relates to biographical variables (age, sex, length of pain complaints, use of supportive equipment and compensation status), variables related to pain (pain-intensity, pain-coping, pain-cognition) and variables related to distress (fear and depression). The finding reveals that fear of movement / re-injury can be assessed in a reliable way. (27)

This study was conducted by Tamar Pincus, PhD,* Rob J.E.M. Smeets, MD, PhD, w Maureen J. Simmonds, PhD, PT, z and Michael J.L. Sullivan in 9 December 2010. The aim of the research is to hinder recovery through fear of movement in patients with shoulder pain and lead to increased impairment over time. Actions should therefore be specifically based on fear of movement. The result shows that future research will explain whether patients with avoidance behaviour should be beneficial in subgrouping. Additional research will focus on the study. (28)

This study was conducted by J.M. Sieben et al. / Pain in 6 June 2005. The aim of this study to check the hypothesis that pain associated with fear predicts potential impairment effectively at an acute stage of frozen shoulder. In explaining the transition from acute frozen shoulder, the result did not clearly support the fear avoidance model. (29)

This study was conducted by Steven J. Linton, 1, 3 Johan Vlaeyen, 2 and Raymond Ostelo in 4 November 2002. The purpose of this study was to examine the extent of fear-avoidance beliefs for general practitioners and physical therapists and

to link this to self-reported patterns of care for shoulder pain patients. The results indicated that, on average, these medical practitioners generally held views consistent with the current evidence, but there were also signs. (30)

Objective of the Study

The aim of study was to identify patients fear avoidance during physical therapy management of frozen shoulder

Significance of the Study

Frozen shoulder is one of the most common and extremely painful condition. Severe pain is major reason that many patient do not adhere to physical therapy treatment, that may leads to formation of contracture due to long term immobilization. Therefore this study may help to identify patients fear avoidance during physical therapy management of frozen shoulder.

Rational of the Study

The frozen shoulder is severe painful condition, that disturb the patients adherence to physical therapy treatment. Without the treatment condition get worse and affect persons quality of life in negative way, therefore this study is being conducted.

MATERIAL AND METHODS

1. Study Design

This study was Cross sectional study

2. Study Setting

The study was conducted from patients in different hospitals and private clinic of Hyderabad.

3. Duration of the Study

The duration was 6 months after the approval of proposal.

4. Sampling Technique

Convenient sampling was used

5. Sample Size

Sample size was 100 medical practitioners for data collection.

5.1 Inclusion Criteria

Shoulder pain patients from different hospitals in Hyderabad.

5.2 Exclusion Criteria

Patients who suffer from other musculoskeletal conditions.

6. Data Collection Tool

The tool for collecting data was standard questionnaire, named Tempa scale of kinesiophobia 11 (TSK 11). Used the study conducted by [Woby et al, 2005].

7. Data Analysis Procedure

Data was analyzed by Statistical Package for Social Sciences (SPSS) version 22.

8. Ethical Consideration

Attached consent form with all the ethical consideration will be placed.

Data was used for the research purpose only and data was kept confidential anonymous.

9. Budget

The budget of the study was around 25000 to 30000 PKR.

RESULT

Out of 100 completely questionnaire. The result was made from 100 questionnaire. Table IV-1 and figure IV-1 indicate that I am that I might injury myself if I exercise. Out of 100, 28(28%) were strongly agree, 13(13%) were somewhat agree, 18(18%) were somewhat disagree, 41(41%) were strongly disagree.

Table IV-2 and figure IV-2 indicate that if I were to try to overcome it, my pain is increase. Out of 100, 30(30%) were strongly agree, 33(33%) were somewhat agree, 13(13%) were somewhat disagree, 24(24%) strongly disagree.

Table IV-3 and figure IV-3 indicate that my body

is telling me I have something dangerously wrong. Out of 100, 30(30%) strongly agree, 34(34%) somewhat agree, 10(10%) somewhat disagree, 26(26%) strongly disagree.

Table IV-4 and figure IV-4 indicate that people are not taking my medical condition serious enough. Out of 100, 12(12%) were strongly agree, 34(34%) were somewhat agree, 19(19%) somewhat disagree, 35(35%) were strongly disagree.

Table IV-5 and figure IV-5 indicate that my accident / problem as put my body at risk for the rest of my life. Out of 100, 20(20%) were strongly agree, 28(28%) were somewhat agree, 28(28%) somewhat disagree, 24(24%) were strongly disagree,

Table IV-6 and figure IV-6 indicate that pain always means I have injured my body. Out of 100, 29(29%) were strongly agree, 32(32%) somewhat agree, 16(16%) somewhat disagree, 23(23%) strongly disagree.

Table IV-7 and figure IV-7 indicate that simply being careful that I do not make any unnecessary movement is the safest thing I can do to prevent my pain from worsening. Out of 100, 48(48%)

were strongly agree, 40(40%) were somewhat agree, 6(6%) somewhat disagree, 6(6%) were strongly disagree.

Table IV-8 and figure IV-8 indicate that I would not have this much pain if there was not something potentially dangerous on in my body. Out of 100, 32(32%) strongly agree, 51(51%) somewhat agree, 9(9%) somewhat disagree, 8(8%) strongly disagree.

Table IV-9 and figure IV-9 indicate that pain lets me know when to stop exercising so that I don't injure myself. Out of 100, 57(57%) were strongly agree, 26(26%) were somewhat agree, 8(8%) were somewhat disagree, 9(9%) strongly disagree,

Table IV-10 and figure IV-10 indicate that I can't do all things normal people do because it's too easy for me to get injured. Out of 100, 16(16%) were strongly agree, 32(32%) were somewhat agree, 23(23%) were somewhat disagree, 29(29%) were strongly disagree.

Table IV-11 and figure IV-11 indicate that no one should have to exercise when he/she is in pain. Out of 100, 26(26%) strongly agree, 18(18%) somewhat agree, 21(21%) somewhat disagree, 35(35%) were strongly disagree.

Table IV-1: I am that I might injury myself if I exercise.

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------------|-----------|---------|---------------|--------------------|
| Valid strongly agree | 28 | 28.0 | 28.0 | 28.0 |
| somewhat agree | 13 | 13.0 | 13.0 | 41.0 |
| somewhat disagree | 18 | 18.0 | 18.0 | 59.0 |
| strongly disagree | 41 | 41.0 | 41.0 | 100.0 |
| Total | 100 | 100.0 | 100.0 | |

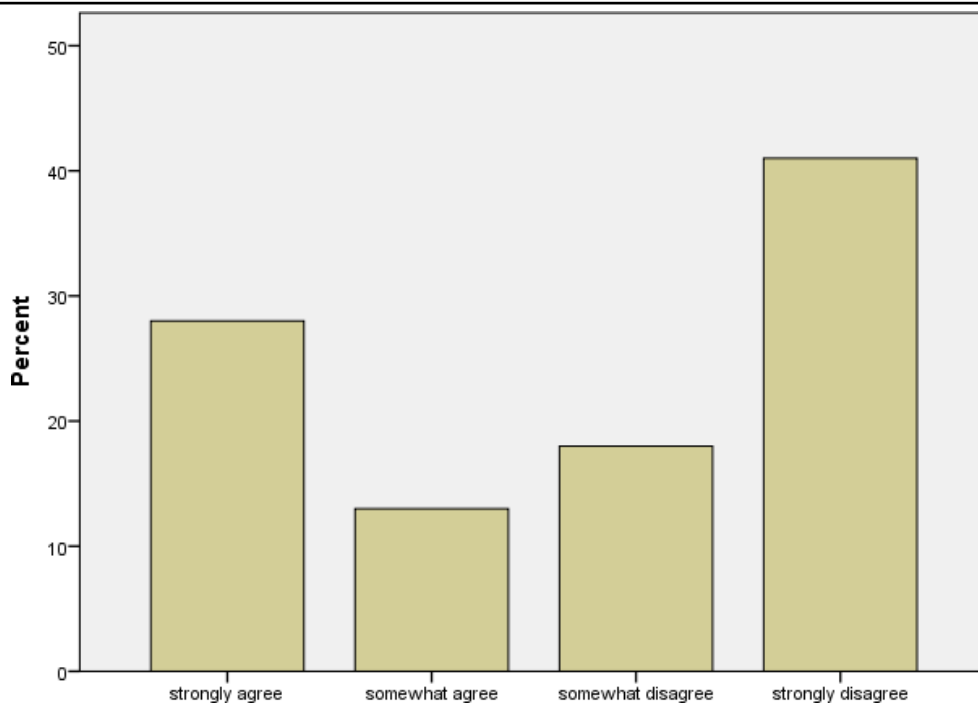


Figure IV-1: I am that I might injury myself if I exercise.

Table IV-2: If I were to try to overcome it, my pain is increase.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | strongly agree | 30 | 30.0 | 30.0 | 30.0 |
| | somewhat agree | 33 | 33.0 | 33.0 | 63.0 |
| | somewhat disagree | 13 | 13.0 | 13.0 | 76.0 |
| | strongly disagree | 24 | 24.0 | 24.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

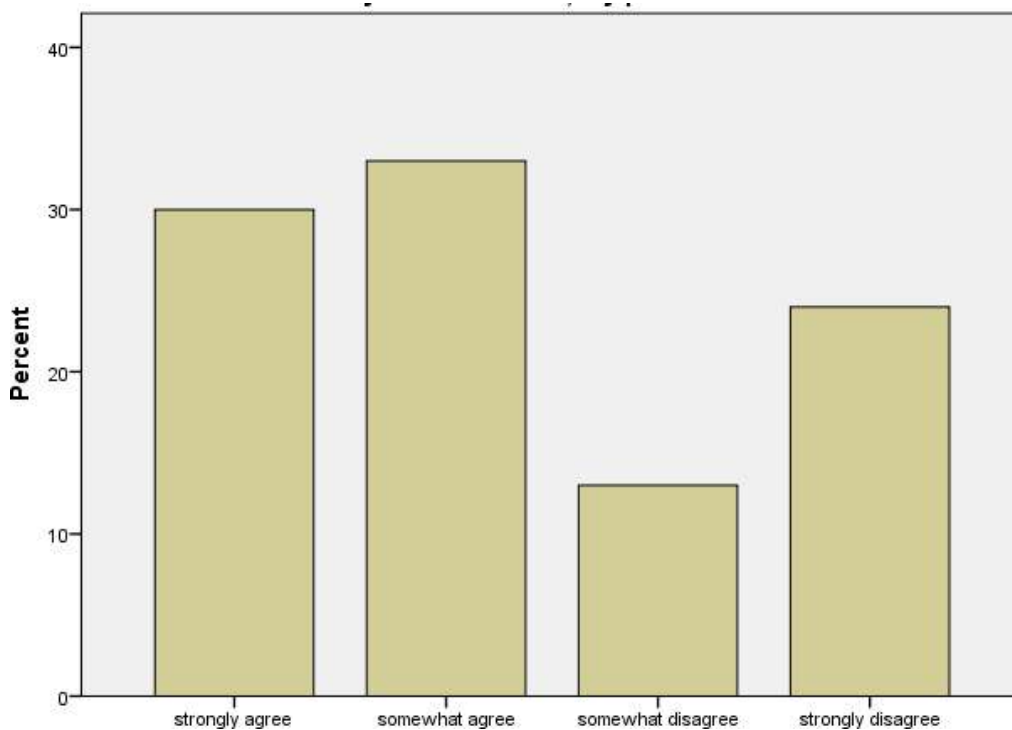


Figure IV-2: If I were to try to overcome it, my pain is increase.

Table IV-3: My body is telling me I have something dangerously wrong.

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------------|-----------|---------|---------------|--------------------|
| Valid strongly agree | 30 | 30.0 | 30.0 | 30.0 |
| somewhat agree | 34 | 34.0 | 34.0 | 64.0 |
| somewhat disagree | 10 | 10.0 | 10.0 | 74.0 |
| strongly disagree | 26 | 26.0 | 26.0 | 100.0 |
| Total | 100 | 100.0 | 100.0 | |

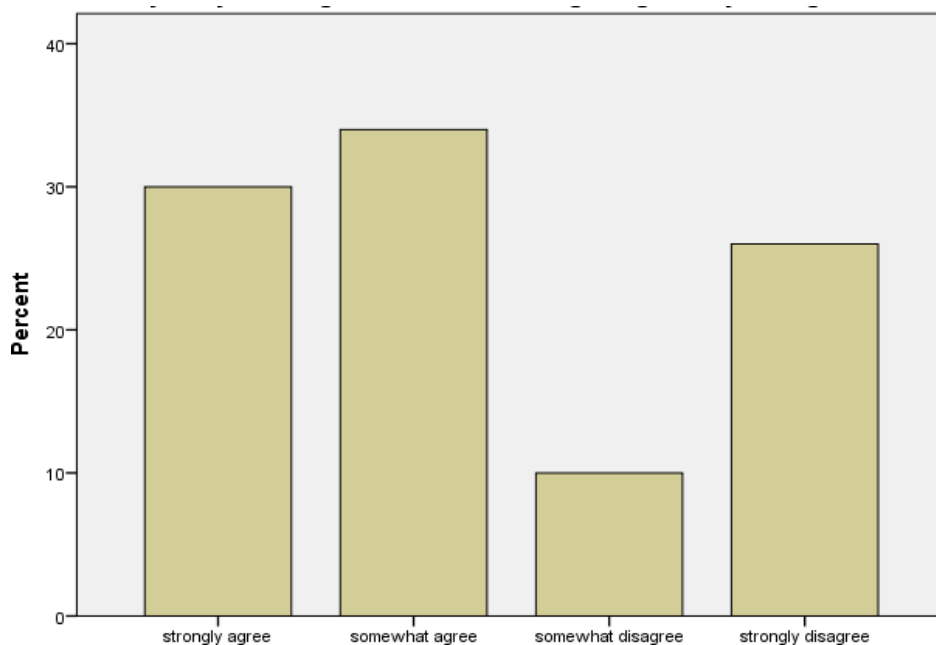


Figure IV-3: My body is telling me I have something dangerously wrong.

Table IV-4: People are not taking my medical condition serious enough.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | strongly agree | 12 | 12.0 | 12.0 | 12.0 |
| | somewhat agree | 34 | 34.0 | 34.0 | 46.0 |
| | somewhat disagree | 19 | 19.0 | 19.0 | 65.0 |
| | strongly disagree | 35 | 35.0 | 35.0 | 100.0 |
| Total | | 100 | 100.0 | 100.0 | |

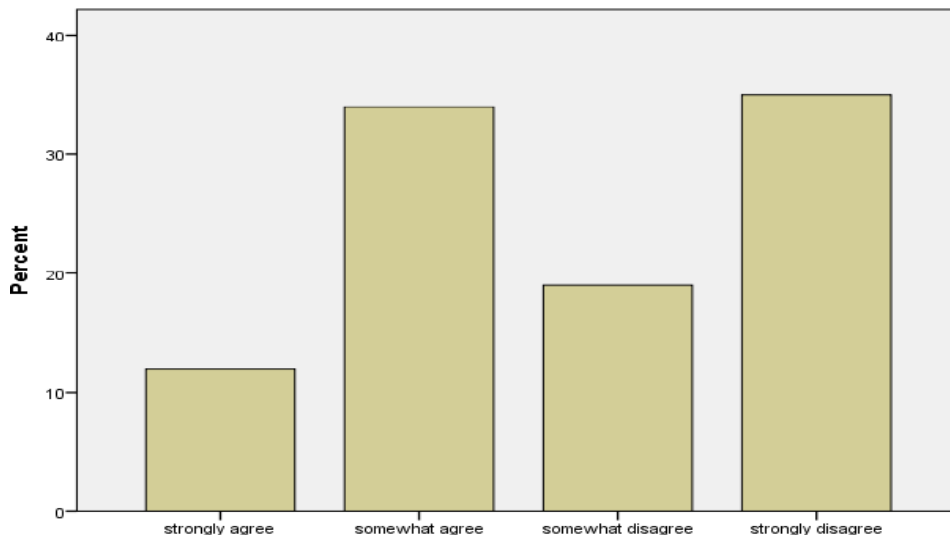


Figure IV-4: People are not taking my medical condition serious enough.

Table IV-5: My accident / problem as put my body at risk for the rest of my life.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | strongly agree | 20 | 20.0 | 20.0 | 20.0 |
| | somewhat agree | 28 | 28.0 | 28.0 | 48.0 |
| | somewhat disagree | 28 | 28.0 | 28.0 | 76.0 |
| | strongly disagree | 24 | 24.0 | 24.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

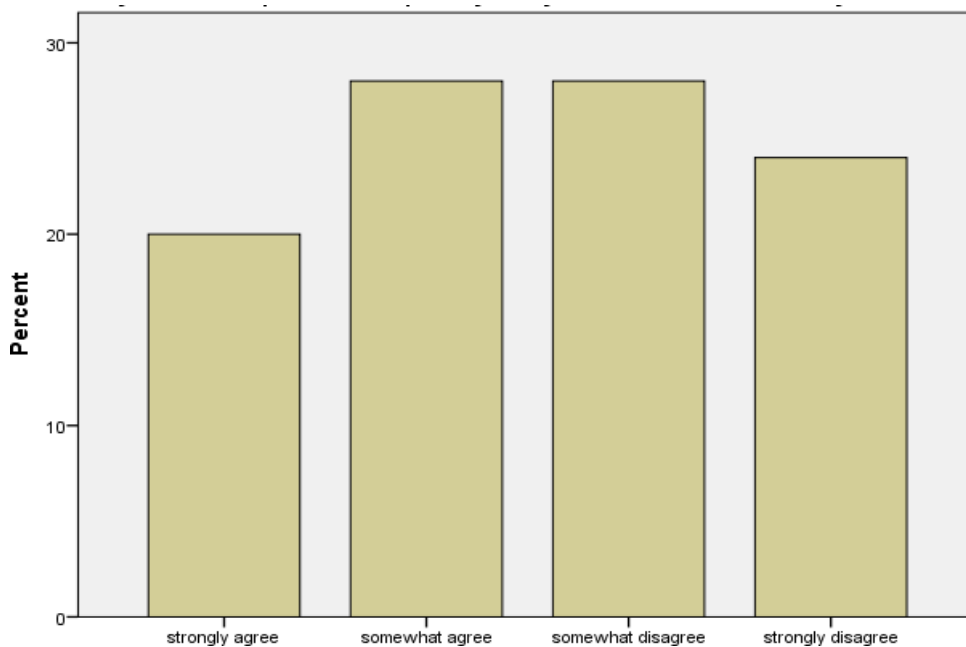
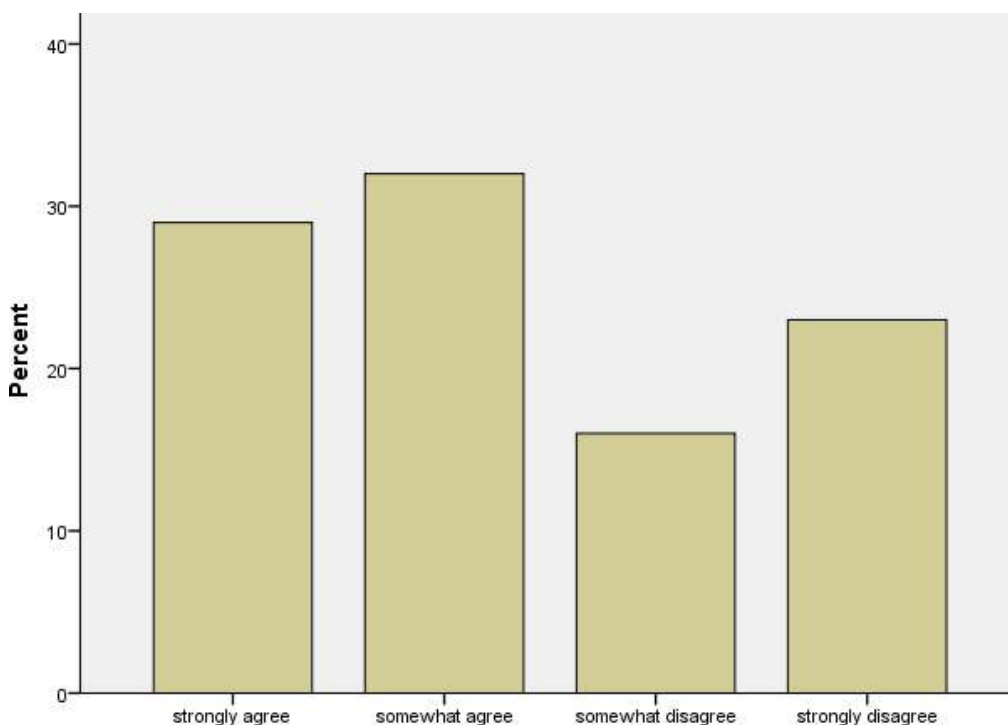


Figure IV-5: My accident / problem as put my body at risk for the rest of my life.

Table IV-6: Pain always means I have injured my body.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | strongly agree | 29 | 29.0 | 29.0 | 29.0 |
| | somewhat agree | 32 | 32.0 | 32.0 | 61.0 |
| | somewhat disagree | 16 | 16.0 | 16.0 | 77.0 |
| | strongly disagree | 23 | 23.0 | 23.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

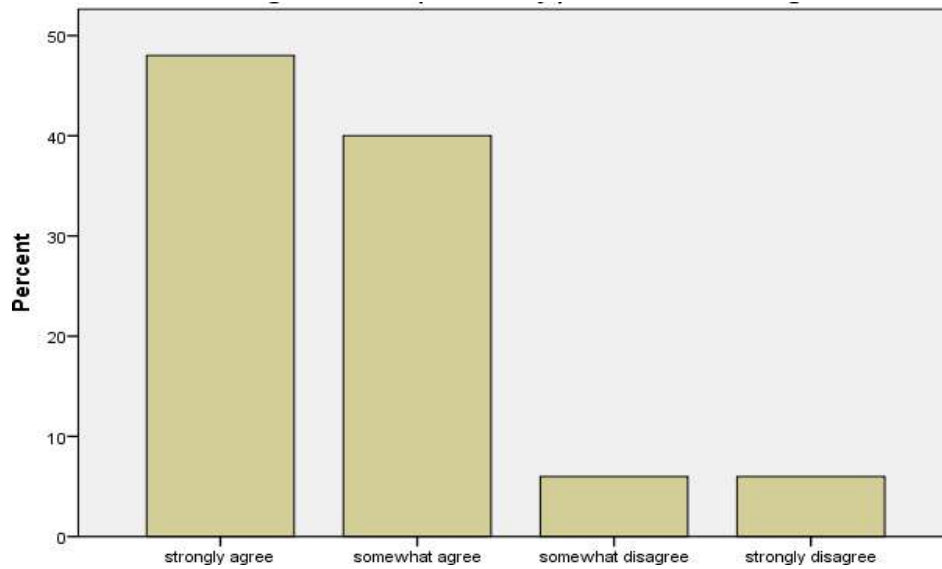


FigureIV-6: Pain always means I have injured my body

Table IV-7:

Simply being careful that I do not make any unnecessary movement is the safest thing I can do to prevent my pain from worsening.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | strongly agree | 48 | 48.0 | 48.0 | 48.0 |
| | somewhat agree | 40 | 40.0 | 40.0 | 88.0 |
| | somewhat disagree | 6 | 6.0 | 6.0 | 94.0 |
| | strongly disagree | 6 | 6.0 | 6.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |



FigureIV-7: Simply being careful that I do not make any unnecessary movement is the safest thing I can do to prevent my pain from worsening.

Table IV-8: I would not have this much pain if there was not something potentially dangerous on in my body.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | strongly agree | 32 | 32.0 | 32.0 | 32.0 |
| | somewhat agree | 51 | 51.0 | 51.0 | 83.0 |
| | somewhat disagree | 9 | 9.0 | 9.0 | 92.0 |
| | strongly disagree | 8 | 8.0 | 8.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

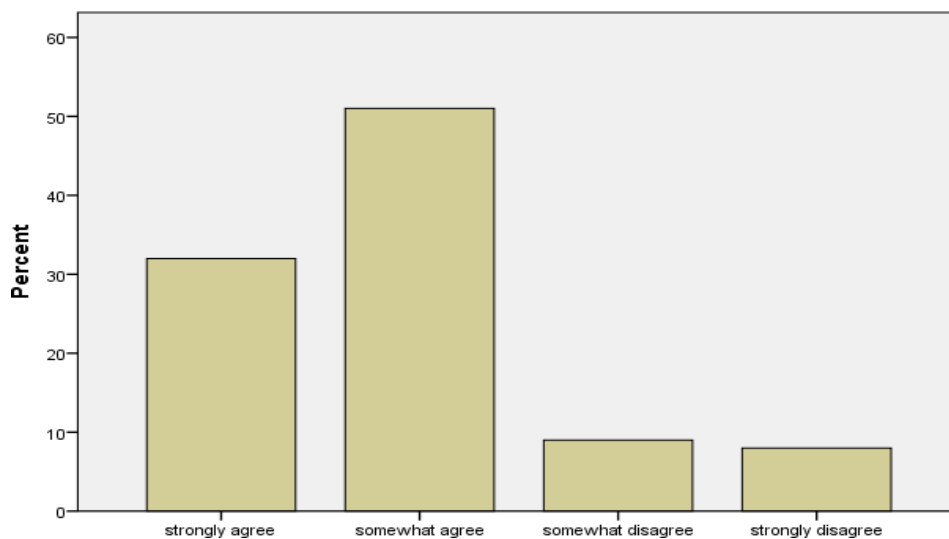


Figure IV-8: I would not have this much pain if there was not something potentially dangerous on in my body.

Table IV-9: Pain lets me know when to stop exercising so that I don't injure myself.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | strongly agree | 57 | 57.0 | 57.0 | 57.0 |
| | somewhat agree | 26 | 26.0 | 26.0 | 83.0 |
| | somewhat disagree | 8 | 8.0 | 8.0 | 91.0 |
| | strongly disagree | 9 | 9.0 | 9.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

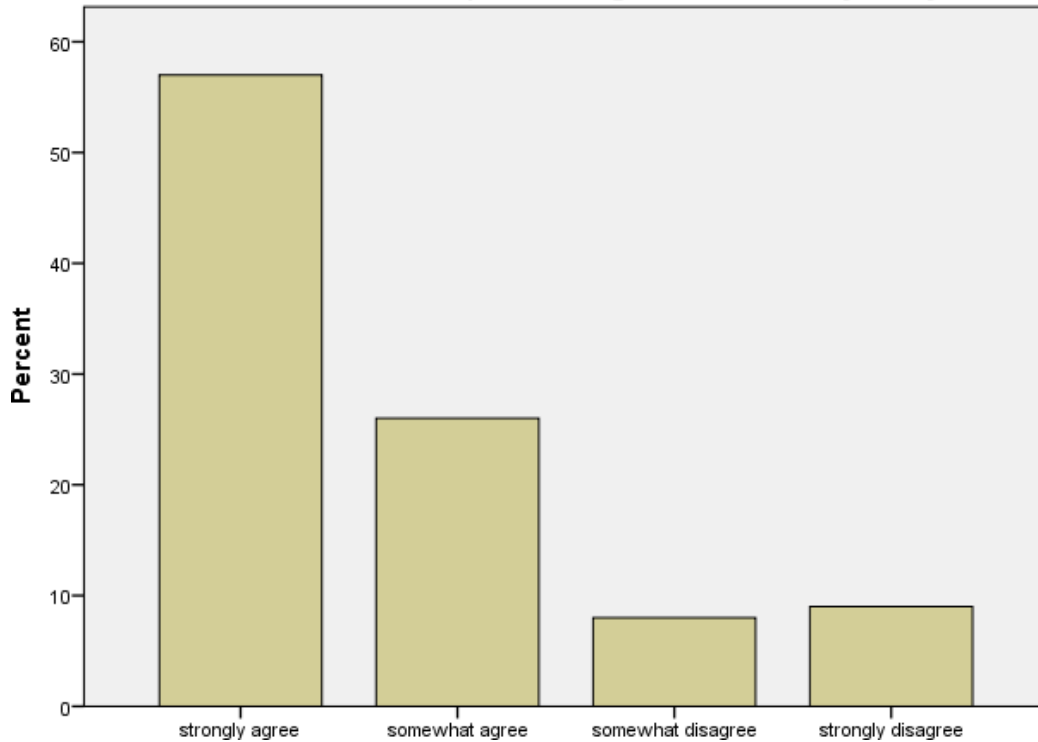


Figure IV-9: Pain lets me know when to stop exercising so that I don't injure myself.

Table IV-10: I can't do all things normal people do because it's too easy for me to get injured.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | strongly agree | 16 | 16.0 | 16.0 | 16.0 |
| | somewhat agree | 32 | 32.0 | 32.0 | 48.0 |
| | somewhat disagree | 23 | 23.0 | 23.0 | 71.0 |
| | strongly disagree | 29 | 29.0 | 29.0 | 100.0 |
| | Total | 100 | 100.0 | 100.0 | |

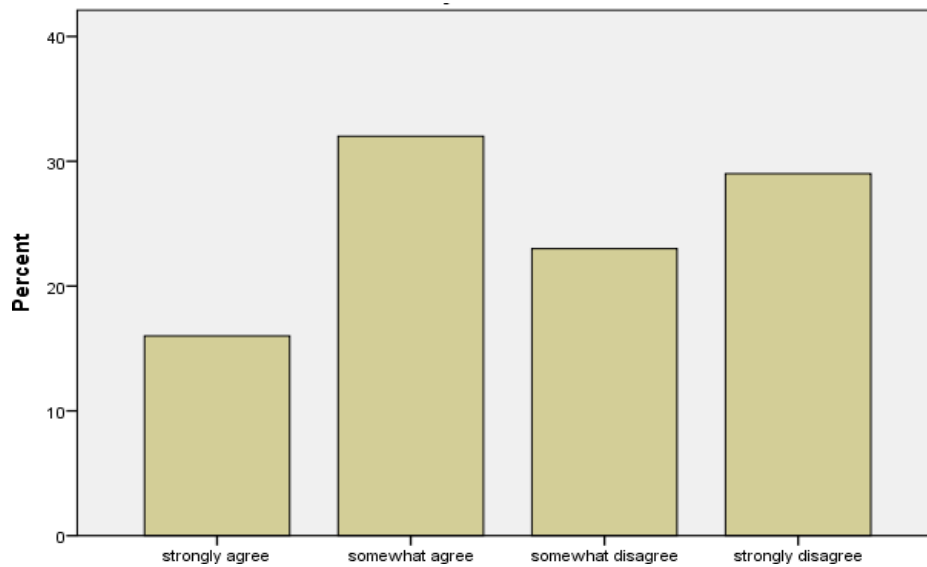


Table IV-10: I can't do all things normal people do because it's too easy for me to get injured.

Table IV-11: No one should have to exercise when he/she is in pain.

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | strongly agree | 26 | 26.0 | 26.0 | 26.0 |
| | somewhat agree | 18 | 18.0 | 18.0 | 44.0 |
| | somewhat disagree | 21 | 21.0 | 21.0 | 65.0 |
| | strongly disagree | 35 | 35.0 | 35.0 | 100.0 |
| Total | | 100 | 100.0 | 100.0 | |

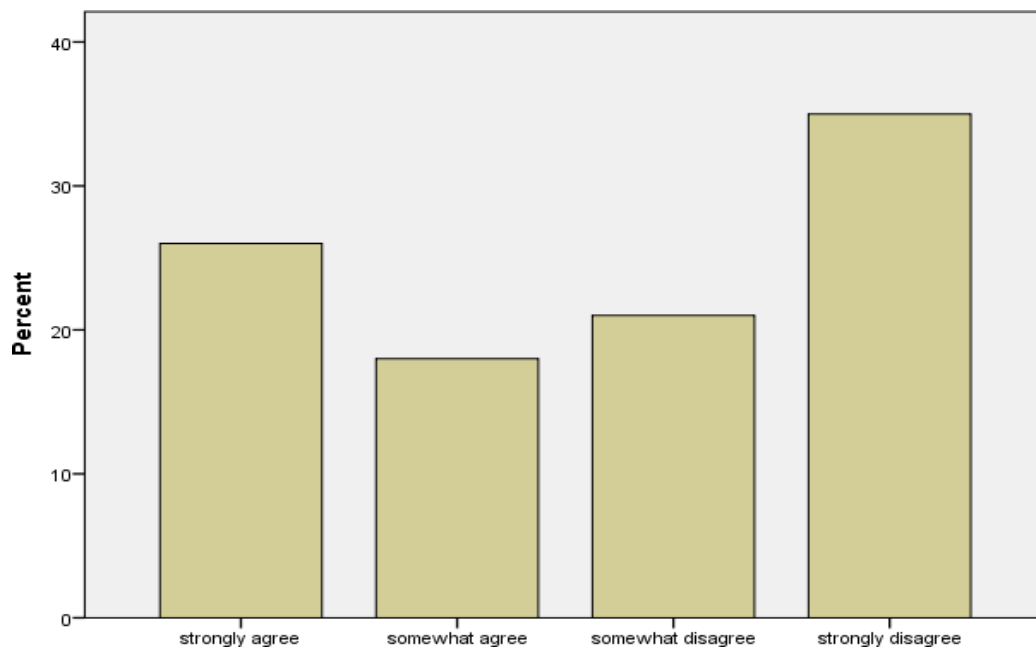


Table IV-11: No one should have to exercise when he/she is in pain.

DISCUSSION

The aim of this study was to evaluate the accuracy with which physical therapists identify fear-avoidance beliefs in patients with frozen shoulder conducted by Darren q. Calley, pt, Dscpt, Ocs1 • Steven JackSon, PT, MSPT2 • HeatHercollinS, PT, DPT3 • Steven Z. GeorGe, PT, PhD4 in December 2010. According to this study the result shows that Therapist ratings of perceived patient fear-avoidance had fair to moderate interrater reliability (ICC2,1 = 0.663). Therapist ratings did not strongly correlate with FABQ or TSK-11 scores. In- stead, they unexpectedly had stronger associations with ODQ and PCS scores. Both 2-item screening questions were associated with FABQ-physical activity scores, while the fear of physical activity question was also associated with FABQ-work, TSK-11, PCS, and ODQ scores.

The objective of the present study was to investigate the validity of the FABM in older patients with chronic frozen shoulder (CLBP) conducted by Heinz-Dieter Basler, PhD,* Judith Luckmann, MSc,* Udo Wolf, MSc, wand Sabine Quint, PhD* in 2008 the result show of this study In the patient group, FAB, pain intensity, and age predicted functional capacity, but not physical activity. Lumbar flexion was predicted by FAB and age. Patients were more fear- avoidant, reported more disability, and displayed less lumbar flexion than the pain-free individuals. No differences between the groups could be detected in regard to energy expenditure measured either by the questionnaire or by diary data. The findings are consistent with results reported in the literature for younger age groups and confirm the assumption that the FABM is also valid for the elderly.

CONCLUSION

Most of the shoulder pain patients who are participated in this study they are strongly agree with physical therapy management for frozen shoulder they could not fear during exercise. Some people are disagree with physical therapy management and they feel something wrong with their body they feel injured after physical therapy

management. This study is useful for physical therapist to identify fear avoidance of patient before pain management by physical therapy.

RECOMMENDATIONS

This study was conducted in Hyderabad hospitals in the patient with frozen shoulder with the sample size 100. If somebody wants to proceed this type of research he/she should take large sample size from different cities also because this will cause variations in their results. This type of research will help the patients to withdraw their fears about physical therapy.

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