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# EFFECTIVENESS OF STRETCHING EXERCISE ON JOINT PAIN AMONG OBESE WOMEN IN WAGHODIA VILLAGE

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## ABSTRACT

**Background of the Study:** Pain is a sign in the nervous system that something is wrong. It is an unpleasant sensation, such as a prick, tingle, sting, itching, burning, or pain. The pain may be severe or dull. It may come and go, it may cause pain in one part of your body, such as your back, abdomen, chest, pelvis, or it may be painful everywhere Regular Exercise is one of the best things to do in life. It has many benefits, including improving overall health and stamina and reducing the risk of many chronic diseases. There are many different types of Exercise. It has to choose the right types Stretching Exercises keep the muscles flexible, strong, and healthy, and we need that flexibility to maintain a series of movements in the members. Without it, the muscles become shorter and tighter. Then, when it calls for the muscle to work, it becomes weak and cannot stretch all the way. That puts joint pain, joint pain, and muscle at risk

**Aim:** To find out the effectiveness of Stretching Exercise on joint pain among Obese Women

**Material and method:** The investigator selected A quasi experimental research design. Theprimary objective was to evaluate the effectiveness of Stretching Exercises to reduce joint pain among Obese Women between control and experimental group.non-probability purposive sampling technique was used to select 40 samples are assigned to the experimental group and 40 are assigned to the control group. total sample are 80 To collect the data,

**Result:** The collected data were tabulated and analyzed by using descriptive andinferential statistics. The obtained $X^2$ value of demographic variables are less than thetablevalueof $X^2$ at0.05 level of

significance. Hence the obtained$X^2$ value is not significant. Hence, the H2 is fails to accept. It has been found that there is a significant improvement in the Stretching Exercise on joint pain among the experimental group as the calculated T value is higher than the table value at 0.05 level. Hencethe obtained$X^2$ valueis significant. Hence, the H1 is to accept.

**Conclusion:** This study conducted that the effectiveness of Stretching Exercise on joint pain among Obese Women

**Keywords: Stretching Exercise, Joint pain, Obese Women, effectiveness**

## INTRODUCTION

Pain is an unpleasant sensation, such as a prick, tingle, sting, itching, burning, or pain. The pain may be severe or dull. It may come and go, or. it may cause pain in one part of your body, such as your back, abdomen, chest, pelvis, or it may be painful everywhere. Pain is a part of human life and the mind of human life, so it has been known to mankind ever since. early periods, but the way people react and experience pain varies greatly. Pain is classified as chronic or chronic. Severe pain is usually severe and temporary and is usually a sign that the body is injured. Chronic pain can range from mild to severe, lasts a long time, and is often the result of a disease that may require further treatment.

Joints are organs of the body where bones meet. The joints allow the bones to move. Joints include shoulders, buttocks, elbows, knees. They provide support and assistance with movement. Any damage to the joints due to illness or injury can interfere with movement. [5]Joint pain can be caused by injury affecting any ligaments, bursae, or tendon around the joint. Injuries may affect the ligaments, cartilage, and bones within the joint. Pain is also a factor in inflammation of the joints (arthritis, such as rheumatoid arthritis and osteoarthritis) and infection, and it can rarely be the cause of joint cancer. Internal pain is a common cause of shoulder pain, ankle pain, and knee pain. Joint pain is also called arthralgia. Sexual Chlamydia (STD) and gonorrhea can lead to joint pain

## MATERIALS AND METHODS

### Research Approach:

The Quantitative Approach will be used for this study to assess the effectiveness of stretching exercise on joint pain among obese women in waghodia village

### Research Design

The research design chosen for this study is quasi-experimental Research Design to to assess the effectiveness of stretching exercise on joint pain among obese women in waghodia village

### Place of Study

The study will be conducted in selected waghodia village of Vadodara.

**Source of Data**

Source of data for this study are Obese Women living in waghodia village of Vadodara.

**Sample description**

**Population**

Populations for the study will be Obese Women with joint pain living in waghodia village of Vadodara

**Sample size**

40 samples were assigned to the experimental group and 40 were assigned to the control group. Total number of samples were 80.

**Sampling Technique**

In this study non-probability purposive sampling technique will be used.

**Selection Criteria**

**Inclusion Criteria: -**

- Obese Women who were willing to participate in the study.
- Obese Women who were having joint pain.
- Obese Women whose age group >30 years.

**Exclusion Criteria: -**

- Obese Women who have mental and physical illness during data collection.
- Obese Women with fracture and recently undergone for surgery.
- Un co-operative people.
- Those who were bed ridden, unable to sit Women.

**Description of Tools**

The tool is prepared by the investigators, after an extensive study of the related literature and with the guidance of experts. The tool consists of two section.

**Section 1: Demographic Data:**

This section includes demographic variables like age, religion, marital status, education, source of income, food habits child bearing age, menopause attained, type of family planning method used.The baseline data were collected by using semi structured interview schedule if people areilliterate.

**Section 2:Tegner Lysholm knee scoring scale**

This scale includes 8 items limp, support, instability, pain, swelling, stair climbing, squatting. Excellent 95 ± 100, Good 84 - 94, Fair 65 - 83, Poor less than 64. The Lysholm knee pain scale takes 5 to 10 minutes for a patient to complete and is the only reliable and valid region – specific.

**Table 1: Frequency and percentage distribution of selected demographic variables of Obese Women in the experimental and control group**

| Sr no | Demographic data | Experimental group | | Control group | |
|---|---|---|---|---|---|
| | | Frequency | Percentage | Frequency | Percentage |
| 1 | AGE | | | | |
| | A. 40-49 years | 22 | 55.0% | 25 | 62.5% |
| | B. 50-59 years | 16 | 40.0% | 14 | 35.0% |
| | C. Above 59 years | 02 | 5.0% | 01 | 2.5% |
| 2 | RELIGION | | | | |
| | A. Hindu | 29 | 72.5% | 33 | 82.5% |
| | B. Christian | 03 | 7.5% | 01 | 2.5% |
| | C. Muslim | 08 | 20.0% | 06 | 15.0% |
| | D. Other | 00 | 00% | 00 | 0.0% |
| 3 | EDUCATION | | | | |
| | A. Illiterate | 23 | 57.5% | 28 | 70.0% |
| | B. Higher | 03 | 7.5% | 03 | 7.5% |
| | C. Secondary | 12 | 30.0% | 08 | 20.0% |
| | D. Degree | 00 | 5.0% | 01 | 2.5% |
| 4 | OCCUPATION | | | | |
| | A. Unemployment | 24 | 60.0% | 27 | 67.5% |
| | B. Business | 08 | 20.0% | 06 | 15.0% |
| | C. Professional | 08 | 20.0% | 07 | 17.5% |
| 5 | FOOD HABITS | | | | |
| | A. Vegetarian | 25 | 62.5% | 31 | 77.5% |
| | B. Non vegetarian | 15 | 37.5% | 09 | 22.5% |
| 6 | CALCIUM INTAKES | | | | |
| | A. Diet | 23 | 57.5% | 21 | 52.5% |
| | B. Tablet | 17 | 42.5% | 19 | 47.5% |
| 7 | MARITAL STATUS | | | | |
| | A. Married | 31 | 77.5% | 33 | 82.5% |
| | B. Unmarried | 00 | 0.0% | 00 | 0.0% |
| | C. Divorced | 02 | 5.0% | 05 | 12.5% |
| | D. Separated | 03 | 7.5% | 00 | 0.0% |
| | E. Widow | 04 | 10.0% | 02 | 5.0% |
| 8 | FAMILY PLANNING METHOD | | | | |
| | A. Temporary | 20 | 50.0% | 18 | 45.0% |
| | B. Permanent | 17 | 42.5% | 21 | 52.5% |
| | C. Not applicable | 03 | 7.5% | 01 | 2.5% |
| 9 | MENOPAUSE | | | | |
| | A. Yes | 30 | 75.0% | 37 | 82.5% |
| | B. No | 10 | 25.0% | 03 | 17.5% |
| 10 | CHILD BEARING | | | | |
| | A. Below 20 years | 00 | 0.0% | 00 | 0.0% |
| | B. 20-25 years | 27 | 67.5% | 33 | 82.5% |
| | C. 26-30 years | 13 | 32.5% | 07 | 17.5% |
| | D. Above 30 years | 00 | 0.0% | 00 | 0.0% |
| 11 | NUMBER OF CHILDREN | | | | |
| | A. 1Children | 03 | 7.5% | 03 | 7.5% |
| | B. 2 Children | 22 | 55.0% | 26 | 65.0% |
| | C. 3 Children | 12 | 30.0% | 09 | 22.5% |
| | D. 4 Children | 03 | 7.5% | 02 | 5.0% |

**Table 2: Findings related to t Frequency and percentage distribution of pre -test and post- test score of joint pain in the experimental group**

| Lysholm knee scoring scale | | Pre test | Post test |
|---|---|---|---|
| <65 Poor | No. | 34 | 00 |
| | % | 85.0% | 0.0% |
| 65-83 Fair | No. | 06 | 00 |
| | % | 15.0% | 0.0% |
| 80-90 Good | No. | 00 | 30 |
| | % | 0.0% | 75.0% |
| >90 Excellent | No. | 00 | 10 |
| | % | 0.0% | 25.0% |

**Table 3: Frequency and percentage distribution of pretest and post test score of joint pain in the control group**

| Lysholm knee scoring scale | | Pre test | Post test |
|---|---|---|---|
| <65 Poor | No. | 34 | 36 |
| | % | 85.0% | 90.0% |
| 65-83 Fair | No. | 06 | 04 |
| | % | 15.0% | 10.0% |
| 80-90 Good | No. | 00 | 00 |
| | % | 0.0% | 00.0% |
| >90 Excellent | No. | 00 | 00 |
| | % | 0.0% | 00.0% |

## DISCUSSION

In this study a quantitative research approach with quasi-experimental Research Design was used. Data was collected from 80 obese women with joint pain living in waghodia village ofVadodara in that 40 samples were assigned to the experimental group and 40 were assigned to the control group .Consent form was signedby each participant prior before conducting the study.The tool was prepared by the investigators, after an extensive study of the related literature and with the guidance of experts. The tool consists of two sections. section one The demographic tool includes demographic variables like age, religion, marital status, education, source of income, food habits child bearing age, menopause attained, type of family planning method used. The baseline data were collected by using semi structured interview schedule if people are illiterate. Section two Tegner Lysholm knee scoring scale. This scale includes 8 items limp, support, instability, pain, swelling, stair climbing, squatting. Excellent 95 ± 100, Good 84 - 94, Fair 65 - 83, Poor less than 64. The Lysholm knee pain scale takes 5 to 10 minutes for a patient to complete and is the only reliable and valid region – specific The statistical chi square test was usedto find out the association between pretest level of joint pain with thedemographic variables in the experimentalgroupTables and diagrams were used to represent the demographic variables The result of the analysis shows that the, some of them are associated with the demographic variables too. But only few variables had significant association, hence null hypotheses arerejected.

## CONCLUSION

The findings from the study revealed that all 80 participants had joint pain. From which some had an association with certain demographic variables. The findings from the Post test was conducted at the end of the intervention schedule, that in the experimental group, the pre-test mean score was 1.15 with S.D 0.36 and the post test mean score was 3.25 with S.D 0.43. The calculated' value of 22.491 was statistically significant at $p<0.05$ level which clearly shows that there is a

significant decrease in the level of joint pain among Obese Women before and after giving the Stretching Exercise in the experimental group. Hence, the research hypothesis $H_1$is accepted.

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