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 Original Research Paper
 Physiotherapy

 AWARENESS ON BENEFITS OF WEIGHT BEARING EXERCISE AMONG ADULT WOMEN
 AUULT WOMEN

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ABSTRACT

Background: Weight bearing exercises are the best for the bones. It works against gravity and it is important for treating and preventing osteoporosis as well as it increase strength, coordination, and

### balance. Objectives

• To check the routine activities and exercises followed by adult women in their daily life.

• To screen the adult women with reference to awareness of weight bearing exercises.

Material and methods: In this observational study, 200 subjects were assessing using Physical activity readiness questionnaire and self framed questionnaire.

**Results:** In the present study out of 200 womens 28% have consult their physician before engage in physical activity.52% aware of regular walking is essential.81% of population are aware of regular exertion activity.81% of population are aware of involving in lifting weights.71% of population are restricted in any of the activities.80% of populations are aware of doing weight bearing exercise is essential.96% of population are aware of doing household activities.38% of population are aware of spinal exercise is important.

**Materials and method:** The present study was carried out in June 2018 in the area around karad. A total of 200 participant were included in the study by conventional samping method. Results: In the present study out of 200 women's 28% have consult their physician before engage in physical activity.52% aware of regular walking is essential.81% of population are aware of regular exertion activity.81% of population are aware of involving in lifting weights.71% of population are restricted in any of the activities.80% of populations are aware of doing weight bearing exercise is essential.96% of population are aware of doing household activities.38% of population are aware of spinal exercise is important.

Conclusion: we concluded that some people are aware of weight bearing exercise while some of not.

# **KEYWORDS :** Benefit, Weight bearing, Exercise

# INTRODUCTION

Obesity and other life style disorders, Postmenopausal Osteoporosis in women is an ever-increasing percentage of the population. Post menopausal have a risk of lower level of estrogen as age advances, mainly post menopausal women are at risk for a number of health conditions mainly Osteoporosis. Hormonal changes start earlier.

Postmenopausal women comprise an ever-increasing percentage of the population. The alteration in ovarian function with loss of cyclic hormonal activity after menopause appears to be an actual endocrinopathy that produces definite metabolic effect.

Osteoporosis is a significant health problem which needs compulsory physical activity guidelines. The benefits of weight bearing exercises needs to be educated in order to eliminate potential health risk. Postmenopausal women comprise an ever-increasing percentage of the population. The alteration in ovarian function with loss of cyclic hormonal activity after menopause appears to be an actual endocrinopathy that produces definite metabolic effects.

Although weight-bearing activity are important in maintaining overall health, and may contribute to maintenance of healthy bone, resistance exercise seems to have a more significant impact on bone density.

Resistance weight training suggest that the efficacy of HRT is enhanced by combining it with weight-bearing exercise. Not only do estrogen and exercise have additive effects by increasing bone mineral density, but the increase in muscular strength and functional capacity that occurs in response to exercise also reduces the incidence of osteoporotic fractures by reducing the risk of fall. Another benefit of exercise is that it improve balance and coordination. This becomes especially important as we get older because it helps to prevent falls and the broken bone that may result.

## AIM & OBJECTIVE:

## Aim:

• To determine the awareness on benefits of weight bearing exercise among adult women.

# **Objectives:**

- To check the routine activities and exercises followed by adult women in their daily life.
- To screen the adult women with reference to awareness of weight bearing exercises.

# MATERIALS AND METHODOLOGY MATERIALS

- Physical activity readiness questionnaire
- Self framed question

### METHODOLOGY

- Study type: Observational study
- Sampling method: Convenience sampling method
- Sample size: 200 adult women
- Study duration: 3months
- Place of study: Karad

### INCLUSION CRITERIA

- Age group 40-50 years
- Only rural women
- · Both employed or unemployed

### EXCLUSION CRITERIA

- Women with chronic illness, who are dependent for ADL, Psychiatric disorder, long term hospitalization in the past 6 months.
- Women with any form of physical disability.

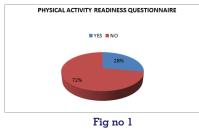
# **OUTCOME MEASURES**

- Physical activity readiness questionnaire.
- Self framed questionnaire

# PROCEDURE

- As per exclusion and inclusion criteria 200 subjects belonging to age group of 40-50 will be screened to know the outcome measures during their leisure hours.
- Physical activity status is recorded as per PARQ.
- Their awareness related to weight bearing exercises as per self frame question.
- Health education guidelines will be educated regarding benefits of weight bearing exercise and prevention of osteoporosis on individual basis after screening procedure which will be used for statistical analysis.

## DATA PRESENTATION



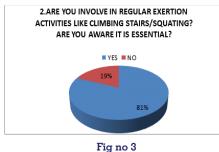
### **INTEFERANCE:**

- 28% OF POPULATION HAVE CONSULT THEIR PHYSICIAN BEFORE ENGAGE IN PHYSICAL ACTIVITY.
- 72% OF POPULATION HAVE NOT CONSULT THEIR PHYSICIAN BEFORE ENGAGE IN PHYSICAL ACTIVITY.



# INTERFERANCE:

- 52% OF POPULATION ARE AWARE OF WALKING REGULARLY IS ESSENTIAL.
- 48% OF POPULATION ARE NOT AWARE OF WALKING REGULARLY IS ESSENTIAL



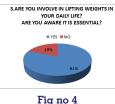
## **INTERFERANCE:**

1. 81% OF POPULATION ARE AWARE OF REGULAR EXERTION ACTIVITIES LIKE CLIMBING STAIRS/SQUATING

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# IS ESSENTIAL.

2. 19% OF POPULATION NOT AWARE OF REGULAR EXERTION ACTIVITIES LIKE CLIMBING STAIRS/SQATING IS ESSENTIAL.



### **INTERFERANCE:**

- 81% POPULATON ARE AWARE OF INVOLVING IN LIFTING WEIGHTS IN DAILY LIFE IS ESSENTIAL.
- 19% POPULATION ARE NOT AWARE OF INVOLVING IN LIFTING WEIGHTS IN DAILY LIFE IS ESSENTIAL.

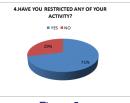


Fig no 5

### **INTERFERANCE:**

- 71% POPULATION ARE RESTRICTED IN ANY OF THE ACTIVITIES.
- 29% OF POPULATION ARE NOT RESTRICTED IN ANY OF THE ACTIVITIES.



### **INTERFERANCE:**

- 76% OF POPULATION ARE AWARE OF FULL ROM EXERCISE IS ESSENTIAL.
- 24% OF POPULATION ARE NOT AWARE OF FULL ROM EXERCISE IS ESSENTIAL.



### INTERFERANCE:

- 80% OF POPULATION ARE AWARE OF INVOLVING DOING EXERTIONAL DUTIES LIKE LIFTING BASKET,LIFTING BUCKETS.
- 20% OF POPULATION ARE NOT AWARE OF INVOLVING DOING EXERTIONAL DUTIES LIKE LIFTING BASKET,LIFTING BUCKETS.

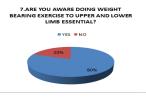


Fig no 8

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#### **INTERERANCE:**

- 80% OF POPULATION ARE AWARE OF DOING WEIGHT BEARING EXERCISE TO UPPER AND LOWER LIMB IS ESSENTIAL.
- 20% OF POPULATION ARE NOT AWARE OF DOING WEIGHT BEARING EXERCISE TO UPPER AND LOWER LIMB.

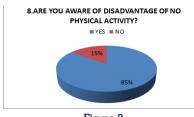


Fig no 9

# **INTERFERANCE:**

- 85% OF POPULATION ARE AWARE OF DISADVANTAGE OF NO PHYSICAL ACTIVITY.
- 15% OF PPULATION ARE NOT AWARE OF DISADVANTAGE OF NO PHYSICAL ACTIVITY.

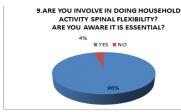


Fig no 10

#### **INTERFERANCE:**

- 96% OF POPULATION ARE AWARE OF DOING HOUSEHOLD ACTIVITY SPINAL FLEXIBILITY IS ESSENTIAL.
- 4% OF POPULATION ARE NOT AWARE OF DOING HOUSEHOLD ACTIVITY SPINAL FLEXIBILITY IS ESSENTIAL.

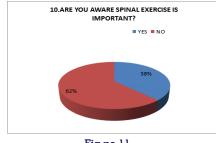


Fig no 11

#### **INTERFERANCE:**

- 38% OF POPULATION ARE AWARE OF SPINAL EXERCISE IS IMPORTANT.
- 62% OF POPULATION ARE NOT AWARE OF SPINAL EXERCISE IS IMPORTANT.

#### DISCUSSION

This project was done in 3 months with sample size 200 and age group 40-50 years this subjects were taken randomly from Karad population.

This research was undertaken with the aim to find out the awareness on benefit of weight bearing exercise among adult women.

Weight bearing exercise helps in energy balance in body, helps in metabolism, strengthens bones, maintaining healthier muscles, joints and bones, reduce the risk of stress, and reduce the risk of chronic disease like degenerative and and progressive disease like osteoporosis.

Another benefit of exercise is that it improve balance and coordination. This becomes especially important as we get older because it helps to prevent falls and the broken bone that may result.

**CONCLUSION:** The current study concluded that some People are aware of the weight bearing exercise while some of not.

**CONFLICT OF INTEREST:** There is no conflict of interest concerning the content of the study.

SOURCE OF FUNDING: This study was self funded.

ETHICAL CLEARANCE: The study was approved by the institutional ethics committee of KIMSDU.

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