



Universidad  
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# EXERCISES FOR MANAGEMENT OF OSTEOPOROSIS ON MENOPAUSAL WOMEN

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## INTRODUCTION

- ▶ Menopause takes around 1/3 of women's lives and impacts on important medical conditions such as osteoporosis. Osteoporosis affects approximately 1/3 of all postmenopausal women in the USA and UE, being the most prevalent systemic skeletal disease worldwide (1).
- ▶ Medications aimed at increasing bone mineral density are often the initial approach to treating osteoporosis, but available treatments are not very effective once osteoporosis is set and have no other positive effects (1, 2)
- ▶ Physical training reflects high bone mineral density changes on different exercises and also contributes to better balance, muscle force, and cardiorespiratory improvement (1, 3). However, the rate of physical inactivity is highest among women and the elderly, who face a higher risk of osteoporosis, so a promotion of physical activity in this sector of the population could be a key component of osteoporosis management (4)

## OBJECTIVE

The aim of this narrative review is to identify effective physical exercises for osteoporosis management in menopausal women.

## RESULTS

### Prevention:

Emphasis on developing efficient preventative measures due to limited treatment options once osteoporosis is established (1).  
Regular exercise significantly reduces osteoporosis rates and delays its onset, especially with exercises that are high impact and weight-bearing (5).

### Treatment:

Resistance and weight-bearing activities are recommended to enhance bone mineral density and prevent fractures (5).  
High-intensity, progressive resistance, and impact weight-bearing training (HiRIT) showed more effective results in increasing bone density and improving physical function in postmenopausal women (6).  
Dynamic resistance training (DRT) demonstrated positive impacts on bone mineral density at various skeletal sites (7).

### Alternative Exercises:

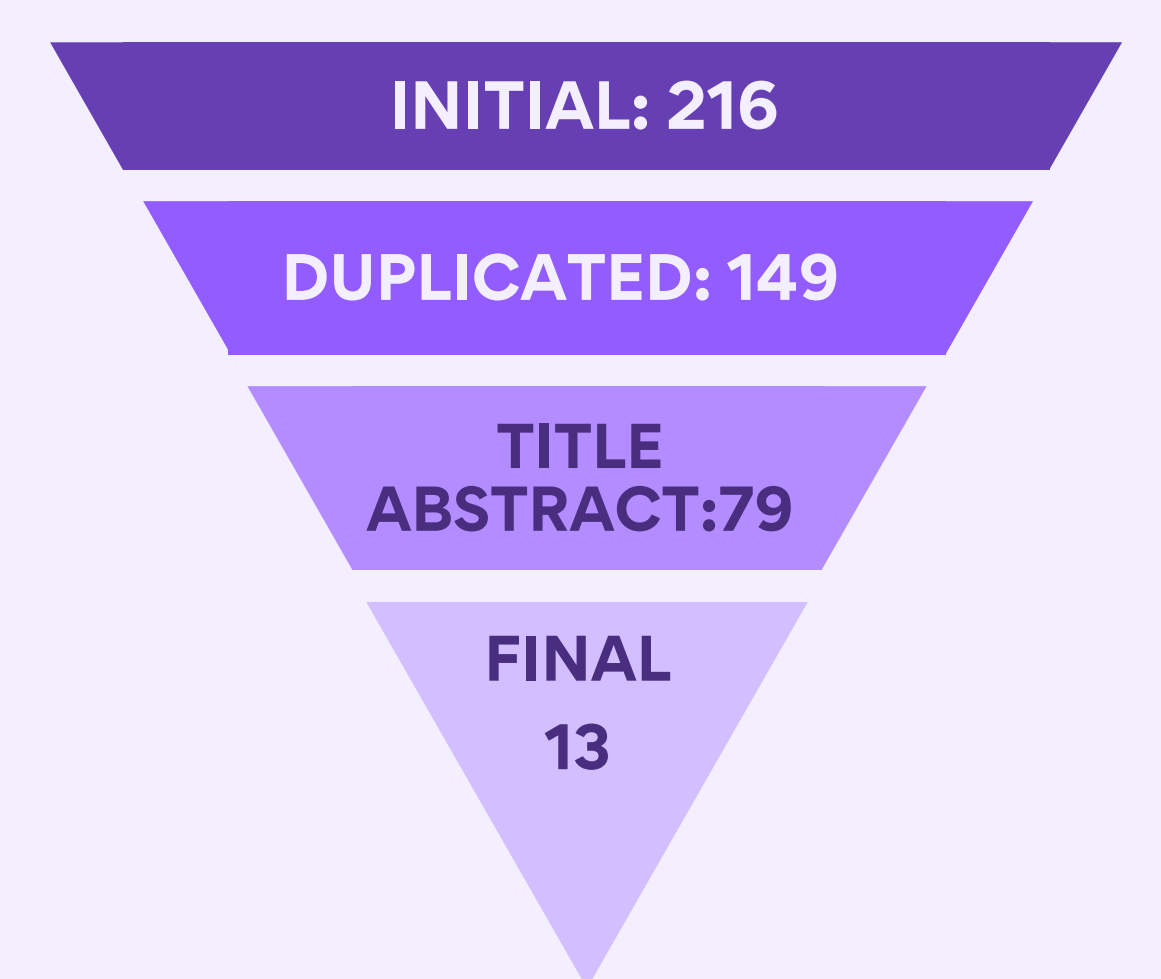
Aquatic therapy offers a viable alternative for maintaining bone density in postmenopausal women, though further research is needed (8).  
Jumping programs have shown to effectively increase bone mineral density, especially in premenopausal women (9).  
High-impact training positively influences bone density through repetitive exercises that apply substantial mechanical forces on bones (10).

## METHODOLOGY

PiCo question: What types of physical exercises should a postmenopausal woman do in order to manage osteoporosis?

Terms: Menopause, Physical exercise, Prevention, Treatment, Osteoporosis  
Mesh: Menopause, Exercise, Primary Prevention, Therapy, Osteoporosis

Limits: English and Spanish, last 10 years, >45 old women, diagnosis of osteoporosis.



FLOWCHART

## CONCLUSION

This review outlines effective osteoporosis management strategies, emphasizing an active lifestyle with weight-bearing and high-intensity resistance exercises for prevention and treatment. It also highlights alternative exercises like aquatic therapy. The significance and intensity of weight-bearing exercises are noted for their positive impact on bone mineral density.

## REFERENCES

