

SELF CARE TO MINIMIZE RISK OF OSTEOPOROSIS AMONG PREMENOPAUSAL WOMEN

Thesis

*Submitted to partial fulfillment of Master degree on Maternity
& Neonatal Nursing*

By

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العناية الذاتية للحد من خطر هشاشة العظام بين السيدات في مرحلة ما قبل سن اليأس

رسالة

مقدمة ايفاء جزنيا للحصول على درجة الماجستير
فى تمريض الأمومة وحديثى الولادة

مقدمة من

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٢٠١١

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Abstract

In Egypt, osteoporosis is a major health problem. In the 40-50 years age group, 42% of females had low BMP. The **aim** of this study was to assess premenopausal woman self care directed for minimizing osteoporosis. The study was **conducted** at the bone density out patient clinic at Ain Shams University Hospital as it is mainly specialized for such cases .The **subjects** involved 245 women. Less than 45 years, still menstruate and agreed to participate in the study. The **tools** used for data collection involved a structured interview questionnaire to collect biosocial and, Obstetric, gynecological and medical data, the women concepts regard premenopause & osteoporosis and self care regard osteoporosis. The **results** of the study revealed that premenopausal women have a marked deficiency in their knowledge and self-care practices regarding menopausal changes and osteoporosis. Statistically significant relations were revealed between women's education and knowledge ($p=0.02$), and practice ($p<0.001$) so the researcher **recommended** counseling programs for premenopausal women before and during the premenopausal phase to motivate them to enhance their self care capabilities regarding osteoporosis.

Key words: Osteoporosis Pre menopause Self care

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List of Abbreviations

ACOG	American College of Obstetricians and Gynecologist
BMC	Bone mineral content
BMD	Bone mineral density.
BMI	Body mass index
ERT	Estrogen replacement treatment.
HRT	Estrogen plus progestin replacement treatment.
IU	International Units.
NHANES	National Health and Nutrition Examination Survey
NOF	National Osteoporosis Foundation.
NWHIC	National Women's Health Information Center
pDXA	Peripheral and single energy X-ray absorptiometry
QCT	Quantitative computed tomography.
QOL	Quality of life
QUS	Quantitative ultrasound
RA	Radiographic absorptiometry
RCN	Royal college of nursing.
TSCD	Therapeutic self –care deficit demand.
VAS	Visual analog scale
WHO	World Health Organization.
FDA	Food and Drug Administration

INTRODUCTION

Osteoporosis is generally a silent and a symptomatic disease until a fracture occurs. It is estimated that more than one-third of the adult women will sustain one or more osteoporosis fractures in their life time they cause significant burden to health care systems worldwide. The majority of the research available was conducted in developed countries and little is known regarding the magnitude of osteoporosis in women at risk in the Arab countries (*Sandison et al., 2004*).

The risk of osteoporosis increases with age as bones become thinner. Osteoporosis is most common in women after menopause, between the ages of 45 and 55. The BMD decreases, and consequently the risk of osteoporosis increases with age. Loss of bone mass begins at around age 30. After age 30, the rate at which bone dissolves and is absorbed by the body slowly increases, while the rate of bone building decreases. Both men and women lose a small amount (approximately 0.4%) of bone each year after age 30. A significant increase in prevalence with each decade after age 60 has been demonstrated (*American College of Obstetricians and Gynecologists [ACOG], 2008*).

Osteoporosis has costly consequences financially, physically, socially, and psychologically. Ultimately a fracture of the bone is the major consequence of this disease. Complications that occur from fracture include acute and chronic pain, depression, anxiety, loss of mobility ,independence, and even death. Because late-life fractures significantly affect the duration and quality of life, risk assessment, prevention, and treatment of osteoporosis are important components of comprehensive primary health care in women and men (*Barker et al., 2003*).

Osteoporosis is a principal cause of morbidity in post –menopausal women. Patients’ awareness of the risks associated with post-menopausal osteoporosis is poor, and osteoporotic fracture rates are set to double within the next 50years (*Louise et al., 2004*).

Premenopausal, often referred to as per menopause, is the phase in a woman’s life just before the onset of menopause, which is when a female’s menstrual cycle permanently ceases. The average age for a woman to begin experiencing premenopausal symptoms is 45, but women as young as 25 and as old as 70 can also exhibit signs of pre menopause. The length of pre menopause varies from woman to woman, but typically lasts from one to six years (*Foster, 2011*).

Premenoposal women can decrease risks of osteoporosis through physical activity, proper nutrition, and adequate exercises. Lifestyle prevention of osteoporosis is in many aspects inversions from potentially modifiable risk factors .the proportion of premenoposal women with osteoporosis who know their condition may increase in response to changes in health-care practices and treatment options (*National Osteoporosis Foundation, 2008*).

The nurse play very important role in health promotion, identification of people at risk for developing osteoporosis& recognition of problems associated with osteoporosis not only that but also the nurse as care giver, educator, counselor& researcher on the community could play very important role to increase self awareness among pre-menopausal women to decrease risk of osteoporosis & its related problems. Through patient teaching focuses on factors influencing the development of osteoporosis, adequate dietary or supplemental calcium, regular weight-bearing exercise, modification of life-style, help to maintain bone mass. (*Smeltzer and Bare 2004; WHO, 2003*).

Significance of the Study

- Based on **WHO (2001)** study that osteoporosis is a major health problem in Egypt. In the 40 to 50 years age group 42% of females had low BMP.
- Osteoporosis now causes an estimated 2 million fractures each year. The most common fractures associated with osteoporosis occur at the hip, spine and wrist. The incidence of these fractures particularly fractures with the mean interval between first and second fracture being 3.3% at the hip & spine, increases with age. A 50 years old woman has a 2.8% risk of death related to hip fracture only.
- The risk of osteoporosis increases with age. Osteoporosis is most common in menopausal women, between the ages of 45 and 55 years old. *National Osteoporosis Foundation (2008).*