Effect of Aerobics Exercise on Improving Hot Flashes among Menopausal Women

Thesis

Submitted for Partial Fulfillment of the Requirement of the Master Degree in Maternity and Gynecological Nursing

By

Laila Ahmed Nabwy Mohamed

(B.sc.Nursing), 1999

Faculty of Nursing-Ain Shams University

Faculty of Nursing
Ain Shams University
2016

Effect of Aerobics Exercise on Improving Hot Flashes among Menopausal Women

Thesis

Submitted for Partial Fulfillment of the Requirement of the Master Degree in Maternity and Gynecological Nursing

Under supervision of

Dr. Shadia Hamido

Prof. of Maternity and GynecologicalNursing Faculty of Nursing-Ain Shams University

Dr. Eman Mostafa

Assist .prof .of Maternity and GynecologicalNursing Faculty of Nursing-Ain Shams University

Faculty of Nursing
Ain Shams University
2016



Firstly, thanks to Allah, who gave me the power to finish this work.

Words can never express my feeling to **Prof Dr. Shadia Hamido** Prof. of Maternity and Gynecological Nursing Faculty of Nursing-Ain Shams University, for her meticulous supervision, and continuous encouragement throughout the whole work.

I am extremely grateful to **Dr. Eman Mostafa** Assist. Prof. of Maternity and Gynecological Nursing Faculty of Nursing-Ain Shams University for her continuous support, valuable assistance, best supervision and cooperation in all stages of this work.

Finally yet importantly, I would like to thank and appreciate targetgroupand every one who has given me an unfailing support and assistance.

Laila Ahmed Nabwy Mohamed



Table of contents

Title	Page
List of Abbreviations	I
List of Tables	ii
List of Figures	iii
List of Appendices	iv
Abstract	V
Introduction	1
Aim of the study	6
Review of literature	
• Chapter (1):Menopause	8
• Chapter (2): Aerobic exercise during Menopause	32
• Chapter (3): Role of Nurse related to aerobic	49
exercise during menopause	
Subjects and methods	62
Result	72
Discussion	83
Conclusion & Recommendations	93
Summary	95
Reference	98
Appendix	
Arabic summary	

List of abbreviation

Abbr.	Title
CAM	Complementary Alternative Medicine
VS	VasomotorSymptoms
QoL	Quality of life
HRT	Hormone Replacement Therapy
HF	Hot Flashes
BMI	Body Mass Index

List of Tables

Table No	Title	Page
Table 140	Title	No
Table 1	Frequency and distribution of studied	73
	sample according to Socio-demographic	
	characteristics	
Table 2	Distribution of studied sample according	75
	to their obstetric &gynecological history	
Table 3	Distribution of studied sample according	76
	to Menopausal history.	
Table 4	Distribution of studied sample according	77
	to severity& frequency of hot flashes per	
	week.	
Table 5	Relationship between aerobic exercise	79
	and hot flashes among the studied	
	sample	
Table 6	Correlation between severity of hot	80
	flashes and Socio-demographic	
	variables	
Table 7	Comparison of the Hot flashes severity	81
	before and after Aerobics exercises	
	intervention	

List of Figure (related to review)

Figure No	Title	Page No
Fig. 1	Acupuncture method	28
Fig. 2	Walking exercise	35
Fig. 3	Jogging exercise	36
Fig. 4	Indoor cycling exercise	37
Fig. 5	Swimming exercise	38
Fig.6	Tai chi exercise.	39
Fig.7	Yoga exercise	40
Fig.8	Fig.8 Warming up before exercise and cooling 46	
	down	
Fig.9	Side effect of exercise	48
Fig.10	Pelvic floor muscle exercises	53

List of Figure (related to results)

Figure No	Title	Page No
Fig. 1	Comparison of the hot flashes severity before and after intervention	79

List of Appendices

Appendices No	Title
Appendix I	Protocol
Appendix II	Structure interviewing questionnaire
Appendix III	Arabic Hot flashes rating scale
Appendix IV	Diary follow up record
Appendix V	Arabic leaflets about aerobics
	exercises to relive hot flashes

Abstract

Background: Menopause has been considered as one of the most critical stages of the lives of the women affecting their quality of life. Numerous studies have reported a positive effect between Aerobic exercises and menopausal symptoms, including one that found losing weight through diet and exercise decrease the severity of hot flashes and symptoms Aim of this study was aimed to assess effect of Aerobics exercise on improving hot flashes among menopausal women. Design. Intervention study was done Sample. **Purposive** sample of 150 menopausal women from Ain Shams outpatient clinic for obstetrics and gynecology were included in the study, Tools, Three tools were used for data collection; Arabic interviewing questionnaire sheet, Arabic Hot flashes rating scale, diary follow up record. In addition to supportive Arabic leaflet about Aerobic exercises. The finding of the present study reached to the women suffers from hot Flashes with different degree of severity as they suffer with mild, moderate & sever degree at 1st week (24.2%, 49.2%, 26.7%) respectively with Mean of hot flashes frequency 5.38±3.01. Post intervention by the 12th week the severity of hot Flashes changed to (71.7%) mild degree & (6.7%) moderate degree .21.7% of studied sample have not any complain of hot Flashes (at week 12) with Mean of hot flashes frequency 1.51± 1.52. Conclusion & Recommendation. Aerobic training 30 minutes a day, three days a week improved menopausal hot flashes among menopausal women. The present study recommended that. Implementing appropriate educational program about the benefits of Aerobic Exercise during menopausal period. Further studies still needed to identify the predisposing factor for menopausal symptoms& other to investigate the effect of Alternative treatment to improve hot flashes among menopausal women.

Key words: Menopause, Aerobic, Exercise, Hot flushes

Introduction

Menopause has been considered as one of the most critical stages of the lives of the women affecting their quality of life. This transitional stage is known the end of the productive stage in the life of a woman and occurs when the menstrual cycle stops. Starting this stage, Estrogen produced irregularly. Its production has some swings and then declines. Such a situation has been called pre menopause (*Bahri and et al.*, 2013).

Menopause is not a disease but is a natural and physiological state and the age of the onset is variable (Mardokhi, 2009). The start up the menopause is a new stage in the lives of the women; although, many women believe that the menopause is the decline stage, disability, oblivion and loneliness. Night sweats. headaches, irritability and nervousness, impaired memory, depression, palpitations and cardiovascular disease, hypertension, diabetes, dry skin, muscle and joint pain, poor sleep, fatigue, anxiety and fear are some factors which may cause the negative attitudes in the women. Upon the appearance of the first symptoms of the menopause, the women feel that they lose their femininity passion and love and become indifferent towards the sexual relations. Some

postmenopausal women are so terrified this stage that they will lose their mental balance and feel depression, anxiety and social dysfunction (*Hematkhah*, 2010).

Today, sports and the physical activities have been highly regarded as a therapeutic technique (*Zarshenas and et al.*, 2009) and have been known as a positive factor to increase the sense of well-being, self esteem and the social adjustments (*Mohamadi Nasrabad*, 2011). The researchers have believed that the physical activities, through a number of mental and psychological mechanisms such as the increase of self- efficacy, behavioral activation, the sense of success and the prevention of the negative moods, have affected the mental health (*Air and et al.*, 2012).

On the other hand, the participation of the persons in the physical activities cause that they close to each other and gain so many opportunities to be skilled in the society (*Firoozabadi*, 2010).

Therefore the researchers have increasingly paid attention to the control of the menopausal symptoms by using the behavioral approaches such as participating in the physical activities (*Tartibian and et al., 2010*).

The aerobic exercises are the basic way to protect the health and well-being of the humans. The aerobic exercises have been performed in the form of the regular motor sets with the special rhythm and plan in order to improve the quality life of the persons and increase their tolerance, patience and optimism (*Mohamadi Nasabad*, 2011).

Aerobic exercises give the persons some chance to express their particular ways. An important part of this physical activity is associated to new forms and motions. The persons are thinking about new activities to experience the innovative ways. Aerobic exercises help the persons to improve their self- esteem, confidence, the social relations and mental status and reinforce the sense of teamwork and cooperation and reduce the anxieties derived by the life and the workplace (*Veisi*, 2010).

Numerous studies have reported a positive effect between Aerobic exercises and menopausal symptoms, including one that found losing weight through diet and exercise decrease the severity of hot flashes and symptoms. Hot flashes and night sweats are among the most disturbing menopause symptoms, and the most common reason that women seek medical help for menopause (*Manson et al.*, 2013).

Due to the complexity of menopausal symptoms, many different alternatives to hormone replacement therapy have been developed to control menopausal symptoms. They include the use of herbal drugs, diet/nourishment, exercise programs, and lifestyle modification programs. It is evident that exercise is becoming one of the most important alternative treatment procedures (*Manson et al.*, 2013).

One of the most significant challenges for contemporary nursing is helping women preserve health during menopause. The modern approach to menopause has changed dramatically to reflect both the complexity of the changes that occur during this transition and the potential for improved quality of life in the years beyond. Not only are the standards of normal aging being revised, but there are also new therapeutic options that can help women prevent a number of disabling conditions (*Haskell et al.*, 2009).

There are many different roles of nurses for managing hot flashes. Both types of nurses; practitioners as well as other nurses specifically educated in menopausal care can be of great benefit in providing care and counseling to menopausal women. Nurses can spend more time to practice in the nursing philosophy that employs a holistic

model of care, focusing on wellness and quality of life issues. It is a perfect fit for providing care to women during the menopausal transition. In terms of managing hot flashes through life style measures, nurses should be given health instruction, such as drinking cold liquids, staying in cool rooms, using fans, removing excess clothing layers when a hot flash strikes, and avoiding hot flash triggers, such as hot drinks, spicy foods, etc., and encourage women to practice regular exercises (*Welton et al.*, 2010)

Magnitude of the problem:

Hot flashes are most common menopausal symptoms as it represents 85-90% of women in menopausal period as signs of menopause (*VNE ditor*, *2012*). Menopausal symptoms can affect women's health and wellbeing. It is important to develop interventions to alleviate symptoms, especially given recent evidence resulting in many women no longer choosing to take hormone replacement therapy. Exercise may prove useful in alleviating symptoms as hot flashes which the most common menopausal symptoms and improve quality of life. No previous studies are undertaken in Egypt to investigate the effect of exercise on improving hot flashes among menopausal women. So, the research will conduct this study

Aim of the study

-To assess effect of aerobics exercise on improving hot flashes among menopausal women

Through the following:

- -Assess frequency and degree of hot flashes before intervention.
- -Implement program of aerobics exercise.
- -Evaluate the effect of exercise on frequency and degree of hot flashes after intervention.

Research Question:

Do aerobic exercises improving frequency and severity of hot flashes among menopausal women?