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ORIGINAL ARTICLE

THE EFFECTS OF WALKING EXERCISE IN COPING WITH MENOPAUSAL SYMPTOMS

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Abstract:

This project explores the effects of walking exercise in coping with menopausal symptoms. Quasi experimental research design was used in this study. The study population comprised of 30 women between the age group of (45-55) years who were residing in RPC Layout Vijayanagara, Bangalore .The data on menopausal symptoms was collected by means of a semi- structured interview schedule and mothers dairy. The study was based on Pender's Health Promotion model

KEYWORDS:

Menopause, Women, Coping, Walking, Menopausal Symptoms, Exercise

INTRODUCTION AND RELEVENCE

India has a large population, which has already crossed 1 billion mark with 71 million people over 60 years of age and the number of menopause women about 43 million. Projected figure in 2026 have estimated the menopausal population is 103 million. Due to declining fertility and increase in life expectancy, the population of middle and older aged persons is increasing. Menopause is a natural part of women's aging that occurs as a result of termination of ovarian follicular function. The average age of menopause is 47 in Indian women with an average life expectancy of 71(jyothi U.2008)

Menopausal symptoms affect about 70% of women approaching menopause. Symptoms of menopause vary from women to women and they include physical, psychological and urological symptoms .Many women go through the menopausal transition with few or no symptoms, while some have significant or even disabling symptoms. When a woman approaches this stage of her life, it's the apt time for her to start planning a midlife wellness strategy. Porter et al. (1996) found middle-aged women to be highly health conscious about their changing bodies and eager to obtain accurate medical information. Others found that women consistently want information on the menopause and its management, but are often unsure how to get it (Mahon & Williams, 2000)

Physical activity has been shown to enhance quality of life among menopausal women and some studies suggest that physical activity is associated with a decrease of hot flushes. The effect of physical activity in decreasing hot flushes has been explained by β-endorphin theory. It is known that increase of hypothalamic β-endorphin production may stabilize thermoregulation known to be disturbed during menopausal hot flushes. Physical activity may help in controlling body weight, which is associated with more frequent vasomotor symptom reporting. It has been shown that weight gain in midlife is not only specifically related to menopause but to aging , and gaining weight may impair quality of life The question whether menopausal transition could be considered as 'window of opportunity', i.e. whether there is any lifestyle modification during menopausal transition, is left open. These findings highlight the need for greater dissemination of information on the use of self- help measures. Findings from this study show profound impact on women's general sense of well-being and day-to-day life activities.

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During the community posting the investigator witnessed many women with menopausal discomforts. It is found that there are only a few studies conducted on the discomfort of menopause and effect of walking exercises. So it is important in identifying and interpreting the various life style modification programs. This will help in designing care and health promotion practices among menopausal women.

OBJECTIVES

1. To identify the prevalence of menopausal symptoms.
2. To evaluate the effectiveness of walking exercise on coping with menopausal symptoms
3. To determine the association between selected demographic variables with menopausal symptoms

OPERATIONAL DEFINITION:

1. Effects:-
In this study, the word 'effects' implies the outcome of walking exercise on coping with menopausal symptoms
2. Menopausal symptoms
Physical and psychological symptoms perceived by the menopausal women
3. Women:
With age range 45-55 years
4. Walking exercise
It refers to 30 minutes of walking with good posture and maintain interval of 30 minutes with normal speed

INCLUSION CRITERIA

Women aged 45-55 residing in RPC layout Vijayanagara, Bangalore.
Those who are having some menopausal symptoms

ASSUMPTION

It is assumed that menopausal women will willingly participate in the study.
It is assumed that women will experience some menopausal problem.
It is assumed that women will follow some exercise to coping with menopausal symptoms.

CONCEPTUAL FRAME WORK

The conceptual framework of the study was based on the concept of “Health Promote on Model”, of Becker, extended by Pender in 1987, which focuses on explaining health promoting behavior.

REVIEW OF LITERATURE

Menopausal symptoms affect about 70% of women approaching menopause. Typical menopausal symptoms such as hot flashes or night sweats are caused by changing hormonal levels in the female reproductive system. Other symptoms may include: insomnia, limb numbness, fatigue, head ache, urological symptoms, psychological symptoms like mood swings, irritability, anxiety, vaginal dryness, loss of libido, osteoporosis, itch skin, digestive problem (Hutchinson, Susan MD2007)
Menopause refers to cessation of ovarian follicular activity and is manifest by the cessation of menstrual flow lasting at least 12 months. The transition from reproductive to non-reproductive years in women is characterized by increased reporting of psychological, somatic, vasomotor, and urogenital symptoms (Green 1998) .Ovarian aging and hormonal changes have been consistently linked to vasomotor symptoms, such as, hot flashes, night sweats, and some urogenital symptoms (NIH 2005). The causes of other symptoms reported by women in the menopausal transition are multifaceted; moreover it is unclear to what degree these are related to aging generally or other life circumstances coinciding with menopause. Recent reports have also linked musculoskeletal pain, headaches, depressed mood, and perceived stress to menopausal stage and changes in reproductive hormones (Freeman et.al;2007) but these associations have not been consistently reported in other studies.

It is believed that estrogen deficiency, lipid profile alterations, body weight gain, and sedentary lifestyle are strongly associated with the increased incidence of arterial hypertension in postmenopausal women. Continuous exercise has been used as an important approach in management cardiovascular disease and endocrine-metabolic disorders. Continuous exercise prescription is characterized by, at least, 30 minutes of moderate-intensity physical activity (60 to 70% of maximum heart rate), three days of the week. Intermittent exercise is characterized by low intensity exercise periods, alternating with high-intensity exercise periods, ranging of 50 to 85% of the maximum heart rate, during ten minutes. Intermittent exercise has been employed as training program in weight loss therapy and personal training because previous studies have shown similar metabolic adaptations and aerobic capacity after continuous or intermittent exercise. This review focused on the relevance of continuous and intermittent exercise on the blood pressure control, discussion of the data found in experimental model of menopause and in women and the relationship between incidence of arterial hypertension and its genesis in postmenopausal women.

A quasi experimental study on QOL in 48 menopausal women, included cardiovascular training, starching ,strength and relaxation exercise, results shows that improvement in menopausal symptoms 50% using Kuppermen-Batt menopausal index tool(Villaverde-Guierrez.et.al,2006)

The health benefits of physical activity are believed to be related more to exercise volume than to intensity. In a 24-wk study, examined the effect of walking volume on aerobic fitness, serum lipids, and body composition in women post-menopause, a population at risk for coronary artery decease . Of 79 women randomly assigned to groups at the outset, 56 completed the study (mean age 61.3 +/- 5.8). Participants walked at an intensity of 60% peak oxygen uptake (VO2peak) for 60 min, 3 d.wk-1 (N = 19) or 5 d.wk-1 (N = 17), or remained sedentary (N = 20). Walking 3 or 5 d.wk-1 increased VO2peak (ml.kg-1.min-1) by 12% and 14%, respectively ($P < 0.01$). There were no changes in serum lipids in response to either program. Percent body fat decreased by 1.1% and 1.3% in those walking 3 and 5 d.wk-1 respectively. both changes significantly different from the control group ($P < 0.05$). (Ready AE etal1996)

METHODOLOGY

Research Design

Quasi experimental design

Setting:

RPC layout, Vijayanagara, Bangalore.

SAMPLE AND SAMPLING TECHNIQUE:

A total of 30 samples women were included in the study by convenience sampling who were willingly participated in the study.

Inclusion criteria

Women with mild and moderate menopausal symptoms

Description of the tool

The tool for data collection has 3 sections.

Section I: It consisted of items seeks information in age, marital status education, number of conception, age at menopause, practice of exercise, medical illness

Section II: Consists of items seeking assessment of menopausal symptoms by menopausal index scale.

Section III: Instructions for doing walking exercise.

Section IV: Mothers diary to note the exercise details

RESULTS

This deals with the analysis and interpretation of the data collected from 30 samples. For the purpose of analysis, the data was tabulated, analyzed and interpreted using descriptive and inferential statistics. The focus of the study was to assess the effects of walking exercise in coping with natural menopausal symptoms.

Comparison of pretest and posttest level of menopausal symptoms score

Test	Very minimal symptoms score (1-6)	Mild score- (7-13)	Moderate score (14-20)	Mean	SD	DF	"t" value
Pretest	0	5	25	16.5	2.983	29	23.45
Post test	26	4	0	4.3			

Assessment of menopausal symptoms before the intervention (walking exercise) reveals that majority 25 women had moderate menopausal symptoms, whereas 5 women only had moderate symptoms.
After practicing the walking exercise majority 26 women had only very minimal symptoms and 4women revealed mild menopausal symptoms. It also revealed that by walking exercise, majority of women 21 relieved from joint pain. But there was no change in the symptoms of urinary incontinence. The paired t value =23.45, shows that there is a significant difference in menopausal symptoms before and after practice of exercise.
Association between selected demographic variables with menopausal symptoms
Association was found between age at first conception ($\chi^2$10.5 at $p<0.01$), number of conception ($\chi^2$12.359 at $p<0.01$), medical problems ($\chi^2$11.35 at $p<0.01$), with pretest menopausal symptoms score. No association was found between age and pretest menopausal symptoms ($\chi^2$2.38 at $p<0.01$) score.

CONCLUSION

As the menopausal health demand priority in Indian scenario due to increase in life expectancy and growing population of menopausal women, Large efforts are required to educate and make the women aware of menopausal symptoms and coping strategies. This will help in early recognition of symptoms, reduction of discomfort and enable them to seek appropriate care. In the present study the investigator intended to evaluate the effects of walking exercise in coping with menopausal symptoms. The researcher framed objectives and assumptions, on the basis of above context30 samples were selected by convenient sampling method. Research reveals that walking exercise can be used to cope symptoms in menopausal women and improve their quality of life.

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