

PHYSICAL ACTIVITY AND EXERCISE AS PRECURSORS OF WELLBEING OF MENOPAUSAL WOMEN IN THE COMMUNITY

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Abstract

Ageing or menopausal women do come up with variety of physical, psychological and social health related challenges in various community settings including educational institutions. This paper examined the impact of physical activity and exercise as a tool for the wellbeing of ageing and menopausal women in the community which they can use to manage or cope with their health related conditions at midlife period. Physical activity or exercise have been viewed by many experts as a coping menopausal coping strategy against various symptoms, women experience during the period that affect their quality of life.

Key words: *physical activity, exercise, menopause, wellbeing*

Introduction

Promoting and attaining women's health status particularly with regard to their reproductive health is one of the essential elements of development (Omokhabi, 2016). The most health indicator celebrated in maternal and child health. Many women in several communities in Nigeria and other developing countries have many challenges relating to reproductive health care, poor access to education, poor participation in politics and low social economic status. This, do have significant impact on their roles as mothers and wives with the burden of caring for the entire family or households. One of the significant health challenges facing middle age women everywhere across varying social economic divides is menopausal conditions. Okonofua, Lawal and Bamgbose (1990) investigated the age at menopause and the clinical features of menopause through questionnaire survey among 563 Nigerian women of Yoruba descent who have been menopausal for at least five years. The mean and median ages of menopause were 48.4 and 48.0 years, respectively and no relationship was established between menopausal age and various biosocial factors such as age of menarche, social class, parity, smoking and place of residence. The commonest menopause related symptoms were joint pains and hot flush and only 42% of them still practiced sexual intercourse. These findings, when compared to those from other populations indicated that there is need for more work on menopause in Nigerian women.

Also, Ozumba, Obi, Obikili, and Waboso,(2004) found out that the mean age at menopause in their study was 49.4 ± 3 years and median age was 49 years. 18.9% reached menopause at 49 years and 14.9% at 48 years and most frequent complaints were hot flushes (79.6%), fatigue (74.8%), joint pains (69.6%), irritability (68.4%), anxiety (68.1%), poor memory (52.2%), dyspareunia (44.7%), urinary symptoms (43.5%), depression (37.3%) and post-menopausal bleeding (29.8%). Twenty-five percent (n=101) of the women

had a feeling of relief and a positive attitude towards menopause while 70% (n=281) were apprehensive and felt frustrated. Stable home and good counselling on menopause were associated with positive attitude while increased frequency of vasomotor symptoms, low level of family support, limited information about menopause and being a professional woman were associated with negative attitude towards menopause. The use of medical services for menopause was also found to be low. The researchers concluded that greater access to information, counselling and support are needed to promote a positive attitude to menopause. Hence there is need for information about this challenge facing women in midlife. This review paper for information dissemination on the need for engagement in physical activities and exercise by women as the critical mass of them in various communities (including the schools) are workers or as home makers and their welfare is paramount to adequate welfare and stability which may be seriously affected not for themselves but other people in the workplace, homes and communities who may depend on their support or cooperation..

Physical activity (PA) is any deliberate muscle movement through utilisation of energy which can be planned or structured exercise like early morning walk, playing tennis in the evening, working out in the fitness gymnasium or in form of such activities that may be embedded in work schedules and recreational pursuit. PA categorisation is usually based on the kind of movement and intensity while exercise is bodily exertion one participates in that usually is accompanying with movements of the body characterising with heart rate beyond resting level so as to be fit for health or to develop or improve on ones sports skills. (Moronkola,2024). People across different communities globally, differ in how they do age and react to aging process and this is the more reasons that children of the same parents and even in some cases among twins differ in their growing pattern and other facets of life. Some age slowly, while some faster. However, from gender perspective, there are differences in how male and female age, which starts noticeable during adolescence period. For example, among female adolescents, they have the following characteristics; development of the mammary gland, menstruation which is the period when monthly flow of blood starts to occur, the voice will be tiny, pubic hair begins to grow at the area of their vagina and under their armpit, usually the hips increase in size and so on while male adolescents come up with the following characteristics; voice becoming deeper, grow of the hair under armpit and around their genitals, the testes begin to produce sperm, they experience wet dreams, grow hair under their chins which is known as moustache etc.

Menarche or the first experience of menstruation in female adolescents occurs around 13 years and it signifies puberty and the beginning of menstrual cycle that cannot be found in male adolescents. Menopause is a natural and universal event in women's lives, bringing about a variety of biological, psychological, and social changes in their life trajectories that can negatively impact health and well-being and increase the risk of health conditions (Pereira and Molina 2018). However, adopting a healthy lifestyle can help women to manage both menopause- and aging-related changes and promote a better quality of life and healthier aging (Mehrnoosh, Darsareh, Roozbeh and Ziraeie,2021). A natural common aging process in all females is menopause which signifies end of menstruation after the last menstrual periods in the previous 12 months. It is a gradual process that indicates in the

transition from the reproductive to the end of ability of a woman to procreate. In the cyclical nature of the reproductive life of a sexually mature lady, whenever there is no fertilization of the egg or there is no pregnancy, the thickened endometrium is shed along with a flow of blood which is known as menstruation that passes through the vagina (Gava, Orsili, Alvisi, Mancini, Seracchioli and Meriggiola, Moronkola and Madaki, 2022).

Menopause is a biological issue which occurs in women. It is known to be experienced in older or aged women between the ages of 45 years to 50 years and above. It is a phase of life, which affects older women physically, psychologically, sociologically and physiologically. It is popularly known as the change of life or the permanent cessation of the monthly menstrual period. The term is generally used to include a much larger set of events, however, both before and after the end of menstruation. All of these events (physical, emotional and social) are related to a woman's changing hormone levels at midlife, which end the phase of life when child bearing is possible. It is also the cessation of the ovarian and uterine cycle of growth, death, and repair. It's occurrence varies with different women, however it is rare for menstruation to persist in normal cycle much beyond the age of 50 years. Between the ages of 45 and 55 years, menstrual cycle first becomes irregular and then ceases. This process is actually not the reverse of menarche because the secretion of gonadotropin continues and is greatly increased due to the loss of interest in sexual activity. The mechanism and cause of menopause is not known, however, the phenomenon shows an array of interplay between hormones and nervous system on one hand, and the interaction between the cultural and psychological factors on the other.

Menopause is characterised by the permanent absence of menstruation, determined after 12 months of amenorrhea from the Final Menstrual Period (FMP). The menopausal transition stage is often referred to as "perimenopause," which is characterized by changes or cessation of the menstrual cycle for less than 12 months after the FMP (Harlow, Gass, Hall, Lobo, Maki, Rebar, Sherman, Sluss, de Villiers, and STRAW+ 10 Collaborative Group. 2012). Women progress through various stages during menopause, from "late reproductive" to "early and late menopausal transition" to "post-menopause," which are characterized by changes in menstrual cycle length, increasing follicle stimulating hormone levels (FSH), and depletion of estrogen levels (Santoro, Roeca, Peters, and Neal Perry, 2021)).

Menopause is one such midlife stage which might be overcome easily or make a lady miserable depending on her luck. This phase of life is shrouded with lots of myths and taboos (Sultan, Sharma and Jain 2017). İkişik, Turan, Kutay, Karamanlı, Özdemir, Taşdemir and Maral (2020) who were of the view that in women, the climacteric is the phase that occurs after the period of sexual maturity as part of the ageing process. One of the reasons why menopause has recently become a leading women's health issue is that it has to do with changing demographics. Whereas a woman's average life expectancy at the turn of the twentieth century was only 50 years, today women can expect to live on average to about 78 years. Given that the typical woman undergoes menopause around age 51, this means that most women still have as much as a third of their life remaining after menopause begins. Menopause is also being taken more seriously because of a better understanding of the serious impact it can have on a woman's health, as well as a renewed respect for

quality of life issues. The problems of menopause were once dismissed as either vain or emotional, unworthy of serious medical attention (Carlson, Eisenstat and Ziporyn, 1999).

Menopausal signs and symptoms

Menopause is the end of a woman's reproductive life and is caused by reduced ovarian hormone secretion (Jehan Masters-Isarilov Salifu Zizi Jean-Louis Pandi-Perumal Gupta Brzezinski and McFarlane 2015). Since post menopausal women live longer the number of postmenopausal women worldwide is expected to reach 1.1 billion by 2025 (Al-Safi and Santoro 2014). Many symptoms have been associated with menopause with a significant impact on quality of life while severe vasomotor symptoms (VMS) and sleep disorders may increase cardiovascular risk severe VMS and depression may also affect cognitive function. (Monteleone Mascagni Giannini Genazzani and Simoncini 2018).

The onset of menopause usually begins around the ages of 45 to 55 (National Health Service (NHS), 2021), However factors such as Body Mass Index (BMI), smoking status, use of oral contraceptives, number of pregnancies, physical activity (PA), socio-economic status, and genetic factors can all affect when menopause begins (Ceylan and Özerdoğan 2015). Menopausal women may also have a variety of symptoms which fall into four main categories in addition to not having a menstrual cycle, vasomotor (for example hot flushes, night sweats); somatic (for example head and body aches, fatigue); psychological (for example anxiety, depression, memory and concentration problems) and; sexual (for example vaginal dryness and reduced libido) (Monteleone, Mascagni, Giannini, Genazzani, and Simoncini. 2019).

When women approach menopause, they start to notice some changes in the body and unconsciously affecting their pattern of life style which should notify them that they have reach the stage of menopause, however many are ignorant of it and attribute such experiences to the attacks of their enemies or generational curses. Menopausal signs and symptoms occur because of hormonal shift affect women everyday lives and professional activity of women as the vast majority of them are still professionally active. It has being observed that it has affected relationships within the family and the general public at large. When the family does not show interest or render support, and their partners are unwilling to assist them due to ignorance or non-challant attitudes. The most dramatic event of menopause is the cessation of monthly bleeding cycles associated with hot flashes, insomnia, night sweats, dryness of hair or scalp, low libido, moodiness, vagina dryness and psychic complaints. However, depression is one of the most frequent complaints, though anxiety and irritability are usually associated with menopause.

Osarenren, Ubangha, Nwadinigwe, Ogunleye (2009) explained some of the common symptoms of menopause include; memory lapses and loss of concentration as well as, headaches which may be caused by fluctuating hormone levels, mood swings due to changes in hormone levels that may actually interfere with the production of mood regulator serotonin, dry skin, this is due to decrease in the protein collagen, bone loss declining reproductive hormones translates to less protection for bones. This is actually at its worse, after menopause, hot flashes, period of intense warmth, flushing and perspiration, erratic menstrual cycles which may vary from 18 days to missed periods, excessive bleeding

is also common, vaginal dryness as vaginal wall thins and becomes less elastic, urinary incontinence occurs as the vaginal wall weakens, the bladder loses support and urination is harder to control, weight gain, some women also report depression, irritability and other emotional problems.

In a research carried out by Madan, Chhabra, Gupta and Madan (2019), a high prevalence of decrease in physical strength (85.7%), decrease in stamina (84.7%), and lack of energy (83.8%) was found among the respondents. In the age group of 40—50 years, feeling tired (77.2%) and aches in the back of head or neck (75%) were the most prevalent menopausal symptoms. Decrease in physical strength (100%) and decrease in stamina (96.6%) were the most prevalent symptoms in the 51 – 60 years' age group and in women years of age. Also, Mozghan, Faranak, Mina, Sara and Maryam (2020) in their study report, concluded that their study participants reported hot flashes (82.6%) and psychological complications especially hopelessness (82.57%) and depression (80.28%) were the most common menopausal complications associated with various factors.

Some factors influencing menopause among women

Several factors may influence the intensity or otherwise of menopausal conditions among women. These, include level of physical activity, tobacco and alcohol use, genetic makeup or hereditary traits or characteristics of a present disease current health challenges effect of radiation especially on the pelvics, ovarian diseases, nutritional status and hormonal imbalances especially as it relates to fluctuations in oestrogen which may affect mood during the perimenopause and postmenopause periods of life.

Concepts of physical activity and exercise

Corbin, Welk, Corbin, Welk (2019) believed that physical activity can be regarded as a general broad term about all forms of large muscles movements including sports, dance, games, work, lifestyle activities and exercise for fitness and often use interchangeably with exercise (physical activity done to get fit). While preparing for physical activity, it is important for one to be screened to establish medical readiness, get good shoes for safe and effective exercise as well as dress properly for physical activity for example, avoiding too tight clothing that restricts movement. A typical bout of physical activity should include; the warm up phase that prepares the body for more vigorous activity, the workout phase which is the principal component design consisting of physical activities for fitness, health recreation or fun and a cool-down after workout that promotes an effective recovery from physical activity.

Exercise may be explained as the activities that an individual engages in so as to improve personal health. It can be described as the movement that one engages in, so as to burn calories and ensure general fitness. Amuzie (2022) documented the opinion of Gremeaux, Gayda, Lepers, Sosner, Juneau and Nigam (2012) that exercise is important for maintaining physical fitness and can contribute to maintaining a healthy weight, regulating digestive health, building and maintaining healthy bone density, muscle strength and joint mobility, promoting physiological well-being, reducing surgical risks and strengthening the immune system. Winter and Fowler (2009) noted that it is often assumed that exercise

involves only movement represented by activities such as walking, running, jumping and swimming. But it can also involve movement assisted by machines or other devices such as those found in cycling, wheelchair racing, rowing, skiing and skating. Among others.

Evidence in literature on physical activity and exercise as precursors of wellbeing of menopausal women

Exercise is one of the ways people maintain good health. There are various benefits of exercise to human beings generally but especially menopausal women such as improvement in physical strength, bone density, good heart rate, normalising blood pressure and so on. Buchanan,(2024) recorded that menopause brings about various changes, both physical and emotional, and it is important not to allow it to end of vitality or health and it must be taken seriously that one powerful tool for managing menopausal symptoms and promoting overall well-being is exercise. Benefits of exercise on menopausal women include mood regulation, bone health, heart health ,weight management (together with balance/adequate healthy diet) and hot flash relief. Engaging in aerobic exercises like cross-country skiing, cycling, and hiking improves cardiovascular fitness, lowers blood pressure, and reduces the risk of heart disease, regular exercise, combined with a balanced diet, can help women manage their weight and prevent the onset of obesity-related health issues, such as type 2 diabetes and hypertension, regular exercise may reduce the frequency and severity of hot flashes, improving, overall quality of life. Generally, the following are activities for menopausal women; (a) high-intensity interval training ((b) Strength training (c) flexibility and balance exercises (d) mind-body practices like meditation, mindfulness, or deep breathing exercises that helps to overcome stress, promote quality sleep and overall well-being.

Mishra, Mishra and Devansh (2011) suggested the following as the benefits of exercises; increases the cardiorespiratory function, reduces the metabolic risks associated with declining estrogen, increases HDL, reduces LDL, triglycerides and fibrinogen, help create a calorie deficit and minimize midlife weight gain, increases the bone mass, strength training and impact activities (like walking or running) help to offset the decline of bone mineral density and prevent osteoporosis, reduces low back pain, reduce stress and improve the mood and reduces hot flashes, thereby minimizing the “Domino effect.” Kim, Cho, Ahn, Yim and Park, (2014) reviewed literature and documented that menopause is a physiological phase that is characterized by the permanent cessation of menstrual periods in women due to loss of ovarian follicular function and during its transition, women experience various physical, psychological, and social changes that may affect their quality of life .Several symptoms frequently characterised this period of life which include, hot flushes, night sweats, vaginal dryness, depression, irritability, headache, and sleep disturbance. However, their study revealed that moderate level of physical activity was associated with reduced psychosocial and physical menopause symptoms in perimenopausal Korean women. Nevertheless, these findings must be confirmed by prospective longitudinal studies, but it is important to place on record that physical activity may improve the symptoms of menopause, thereby increasing quality of life.

Atapattu, Fernando, Wasalathanthri, and Silva, (2015) came to the conclusion that most health problems in women after midlife are due to the declining levels of estrogen due to physical inactivity, dietary deficiencies, and other changes associated with ageing. Though, the key factor responsible for menopause-related health problems appears to be low estrogen levels, decreased progesterone, androstenedione, androstenedione/SHBG ratio among others, however, physical activity and exercise training are beneficial in postmenopausal women as they exert positive influences on the pathophysiology of menopause-related health problems, especially body composition changes, increased CVD risk and osteoporosis. Rodrigues, Carvalho and Gonçalves, (2019) in a review article came to the conclusion that the practice of physical exercise in postmenopausal women brings benefits and prevents health problems, especially cardiovascular and metabolic diseases. Analysis of the literature studied included in the paper showed that physical exercise can promote the health benefits for postmenopausal women through the improvement of the plasma lipid profile, controlling blood pressure and risk factors for heart disease. It also leads to the psychological improvement and fitness acquired through this non-pharmacological strategy. Health professionals therefore, should consider the inclusion of the physical exercise in their care strategies, promoting well-being and preventing health problems for women.

Myer, Kushner, Brent, Schoenfeld, Hugentobler, Lloyd, Chu, Harbin, and McGill (2015) also noted that the squat movement pattern is required for essential activities of daily living, such as sitting, lifting, and most sporting activities. It is also a staple exercise in training regimens designed to enhance performance and to build injury resilience. Dabrowska-Galas, Dabrowska, Ptaszkowski and Plinta (2019) in their study established that perimenopausal women experience more severe symptoms than pre and postmenopausal women and the level of peri and postmenopausal women was satisfying, while premenopausal women were inactive. Physical activity during leisure time was associated with menopausal symptoms in Polish women. Women with high and moderate PA levels were found to have less severe menopausal symptoms when compared to inactive women. They found that working middle-aged women with low PA levels at work suffered from more severe somato-vegetative symptoms. They recommended that, it is important to be motivating women to be more active at work which can reduce somato-vegetative symptoms, while motivating them to an increase physical activity in leisurely times to help them in reducing the severity of menopausal symptoms.

Nguyen, Do, Tran and Kim (2020) in summarising the outcome of their study explained that menopause is the permanent cessation of menstrual periods that can be categorized into premenopausal, perimenopausal, and postmenopausal stages which may either occur naturally between 42 to 58 years or be induced by medical treatments. It is associated with great variety of menopausal symptoms, of which the four most frequently reported by middle-aged women are vasomotor symptoms (i.e., night sweats and hot flashes), difficulty sleeping/insomnia, vaginal dryness/dyspareunia, and adverse mood/depression. These symptoms may last for years in the postmenopausal period that do affect the quality of life. Menopausal symptoms are associated with deterioration in physical, mental, and sexual health, lowering women's quality of life (QoL). However,

exercise has proved to be an inexpensive intervention that has many significant health benefits during the menopausal period as well as help in the prevention of several chronic diseases.

Thomas and Daley (2020) study revealed that all their participants talked positively about physical activity as a treatment for their menopausal symptoms, with most that participation in physical exercises had improved their hot flushes and night sweats. They reported that they had experienced improved sleep, physical health and psychological well-being. Those who received the physical activity plus social support intervention reported their ability to cope with their menopausal symptoms had improved. Several participants suggested that medical doctors should first recommend physical activity as a possible treatment for hot flushes and night sweats, before prescribing medication healthcare professionals should ensure they prepare, support, and encourage these women both physically and emotionally.

Son, Park, Jeon, and Ha, (2023) established that moderate intensity walking is an effective therapeutic expected at improving percent body fat, tumor necrosis factor- α (TNF- α) and High-sensitivity C-reactive protein (hs-CRP), in postmenopausal women with obesity. In addition, since vascular endothelial growth factor (VEGF) showed a tendency to increase in participants that exercised, they anticipated that additional research may provide evidence for a similar improvement in vascular endothelial growth factor (VEGF) levels as a result of moderate intensity walking exercises. These results supported that moderate intensity walking exercise can be expected to prevent CVD by reducing obesity and vascular inflammatory factors in postmenopausal women with obesity. Denby and Jones (2023) argued that there are three types of exercise that are beneficial during perimenopause and menopause which are ; strength-based, steps and restorative. Each is equally important. Strength exercise helps to build and maintain muscle mass, which increases metabolic rate which is essential as decreased oestrogen levels during menopause leads muscle mass to decline, leading to decrease in metabolism rate (the rate the body uses calories, if metabolic rate slows down, one need fewer calories and if it increases, one need more calories) which is one reason why weight gain is seemingly so much easier during perimenopause and menopause.

Also in their review of literature, Berlin (2023) in her dissertation concluded that resistance training could be effective for decreasing vasomotor symptoms and improving some aspects of health-related quality of life in motivated postmenopausal women. The vasomotor symptoms themselves spurred motivation to exercise, indicating they present an opportunity to increase physical activity. Also, women who performed more physical activity and exercise had better skin microvascular function, but no association with VMS was found. Therefore, there is the need for future studies to investigate what type and dose of exercise is the most effective to reduce vasomotor symptoms and whether there is a way to predict for whom exercise will or will not be an effective intervention. Also, the benefits of exercise on physical health are numerous. Regular physical activity or exercise lowers the risk of cancer and other diseases like cardiovascular disease. Numerous research indicate that physical activity can lessen menopausal complaints. Both aerobic exercise and exercise involving the breath can help prevent the loss of bone tissue lessen hot flash

complaints in addition exercise can affect menopausal women's physical and psychological adaptation. Any movement of the body caused by skeletal muscles that demands the use of energy is considered physical activity. These physical activities range in intensity from mild to strenuous (Amansyah, Naurah Al'Ariqoh, and Meldawati. 2023).

Money, MacKenzie, Norman, Eost-Telling, Harris, and McDermott and Todd, (2024) documented that women experiencing problematic menopausal symptoms do report lower health-related quality of life and greater healthcare use than women without symptoms and not all women will likely not take hormone replacement therapy. This situation strengthening the evidence for menopause symptom-management options, to include physical activity for women. There is some evidence that yoga, and to lesser extent, aerobic exercise may be beneficial for some menopause symptoms, although there is insufficient evidence to recommend a particular form of exercise. Goldson (2024) explained the following benefits of exercise (and better still with other healthy lifestyle changes) helps menopausal women to have among others; healthy heart through menopause and beyond, lowering of high blood pressure and high cholesterol.

Conclusion

Menopausal women do have changes resulting in hot flushes, night sweats, vaginal dryness, depression, irritability, headache, and sleep disturbance among others that are very debilitating which may have serious implications for their quality of life. Exercise during all phases of menopause offers many benefits such as, weight gain prevention, strengthens bones and increases muscle mass and reduces the risks of other diseases (cancer, diabetes, heart disease). It has shown to minimize symptoms associated with menopause which include insomnia, depression, low libido, cardiovascular diseases, numbness. mental and social health problems and metabolic related diseases. Therefore all health workers including health educators as well as community development workers among women or husband who complain about sudden nagging episodes among their wives who are in midlife should popularise exercise during and after menopause for overall quality of life. Overall, the evidence suggests that exercise is a useful coping strategy for women during and post menopause to alleviate symptoms and more importantly, physical activity and exercise do have numerous safe benefits with no reported side-effects.

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