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General information

Focus and Scope

The Journal of Reproduction and Sexual Health (JRSH) is an international and multi-disciplinary journal published on a biannual basis by Delta Reproductive Health Initiative and Research Centre, Nigeria. It provides a platform for researchers working in Nigeria, Africa and other continents of the world to share and publish their research findings in the field of human reproduction (including clinical and basic sciences perspectives) and sexual health. The journal will publish original research articles, reviews, editorials, commentaries, short reports, case reports and letters to the editor. Articles are welcome in areas directly and remotely related to reproduction and sexual health including maternal and child health issues, adolescent reproductive health and andrology. Social science researchers are also invited to submit articles that document the background and intermediating sociocultural factors that impact on reproduction and sexual health globally and particularly in developing countries.

Editorial Notices

This journal will be published biannually in the months of June and December. Annual subscription fee in Nigeria is N3,000 per volume and N1,500 for a single copy. The annual subscription rate for other parts of the world is as follows: United Kingdom \$150 per volume and \$75 per copy. A \$75 extra charge is made for reprints inclusive of postage. Cheques should be made available to the Journal of Reproduction and Sexual Health and addressed to the Editor-in-Chief.

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Articles submitted for publication should be typed double-spaced with 2.5cm margins. Each of the following sections should begin on a new page: title page, abstract, introduction, materials and methods, results, discussion, acknowledgment(s), references, tables, legends to figures and illustrations. The manuscript should include:

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The title page should include the following information: 1. The title and sub-title; 2. The name(s) of the author(s); 3. The affiliation(s) of the author(s); 4. Name and address of the corresponding author and 5. Three to six key words for indexing and retrieval purposes.



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The abstract should be structured and not more than 250 words. It should carry the following headings: *Introduction, Materials and Methods, Results and Conclusion.*

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The journal welcomes articles reporting on original research, including both quantitative and qualitative studies. Full-length articles should generally not exceed 3000 words, excluding abstract, tables, figures and references. The subject matter should be organized under appropriate headings and subheadings as enunciated above.

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Comprehensive review articles on all aspects of Human Reproduction and Sexual Health will also be considered for publication in the journal. Reviews should provide a thorough overview of the topic and should incorporate the most current research. The length of review articles must not exceed 3,000 words and the organizational headings and sub-headings are as enunciated forth: there must be a structured abstract (background, methodology, results, conclusion), and the main body of the text should include Background, methodology (contents: 1. A synopsis of the articles used for this review paper in terms of (a). Duration that the articles that were searched out spanned (b). The total number of articles searched out, and their distribution by type of studies and quality. The number that were eventually deplored for the review article (c). The inclusion and exclusion criteria 2. The type of search process used to retrieve the articles i.e. a. Manual search b. Electronic search mention the specific data bases from the electronic search was done 3. The key words used for the electronic search), Discussion, Conclusion and Recommendations.

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- Moore DE, Cates W. Sexually transmitted disease and infertility. In: Holmes KK, Mardh PA, Sparling PF, Wiesner PJ (eds). Sexually Transmitted Diseases. New York: McGraw-Hill, 1990; 763-771.

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Manuscripts that are found suitable for publication in the Journal would be sent to two or more expert reviewers. During submission, the contributor is requested to provide names of two or three qualified reviewers with experience in the subject of the submitted manuscript, but the reviewers should not be affiliated with the same institutes as the contributor/s. The selection of these reviewers is however at the sole discretion of the editor. The Journal follows a doubleblind review process, wherein the reviewers and authors are unaware of each other's identity. Every manuscript is also assigned to a member of the editorial team, who, based on the comments from the reviewers takes a final decision on the manuscript. The comments and suggestions (acceptance/ rejection/ amendments in manuscript) received from reviewers are conveyed to the corresponding author. If required, the author is requested to provide a point by point response to reviewers' comments and submit a revised version of the manuscript. This process is repeated till reviewers and editors are satisfied with the manuscript. Manuscripts accepted for publication would be copy edited for grammar, punctuation, print style, and format, and the page proofs sent to the corresponding author. The corresponding author is expected to return the corrected proofs within three days. The whole process of submission of the manuscript to final decision and sending and receiving proofs is completed online. To achieve faster and greater dissemination of knowledge and information, the Journal would publish articles online as 'Ahead of Print' immediately on acceptance.





n behalf of the team of Delta Reproductive Health Initiative and Research Centre (DERHI-REC) Sapele, Nigeria, I proudly unveil and present the maiden edition of the journal of Reproduction and Sexual Health (JRSH) which is in keeping with one of our core mandate of documentation and publication in sexual and reproductive health.

The overall goal of the JRSH is to provide a platform for Researchers working in Nigeria, Africa and other continents of the world to share and publish their research findings in the field of human reproduction (including clinical and basic sciences perspectives) and sexual health. Additionally, Researchers working in areas directly and remotely related to reproduction and sexual health including maternal and child health issues, adolescent reproductive health and andrology, as well as social science Researchers working on the background and intermediating sociocultural factors that impact on reproduction and sexual health globally and particularly in developing countries are welcomed to document their findings through JRSH.

In line with our cardinal objectives of exhibiting and maintaining excellence at all material times, DERHIREC team has

painstakingly put together seasoned experts into the Editorial Board of JRSH and assembled an array of international personalities as Editorial Consultants who shall ensure international best practices in Journal publication. The journal like our earlier bestselling textbook of infertility and assisted conception in the tropics, shall be of extremely high quality in terms of content and form.

Beyond publishing different types of articles, a section of the journal shall be devoted to bringing to the fore newest development and issues in the field of sexual and reproductive health, and human reproduction in general. It is our hope that Researchers particularly budding academics in Africa and developing nations will find this aspects stimulating and rewarding to furthering their research career. In this maiden issue we have an original article, and a case report. But significantly, a huge number of the papers in this edition have been devoted to review articles in topical aspects of sexual and reproductive health in Africa and Nigeria, and will provide clearer understanding in these areas to the reading audience.

Finally, I therefore solicit and welcome submissions to this biannual journal with expeditious review process in good time.

Prof. Lawrence Omo-Aghoja Executive Director (DERHIREC) & Editor-in-Chief

Male and Female Challenges of Climacteric and Menopause in Africa

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Background: The climacteric and menopause is an exceptional period in the life of a woman. It is associated with unique challenges which may affect the quality of life. Recent evidence suggest that there is a similar entity in males the "andropause" which also has its own inherent clinical entities and challenges. There is paucity of the knowledge of the clinical entities and their symptomatology during this period in Africa.

Methodology: A Literature search for studies on climacteric, menopause and andropause published between 1995 to 2016 was performed using the google scholar search data base. The bibliographies of included studies were also searched for additional references. About 150 articles were identified and after the elimination of articles unrelated to the subject matter, 42 related articles were available for the review.

Result: There are numerous challenges faced by men and women in Africa during the climacteric period and they are accentuated by several intermediating factors

which range from ignorance, to cultural taboos and even lack of adequate facilities to cater for their health needs. During this period, the men and woman's age, education, economic status, family structure, health status, social relationships, sexual experiences development style, living conditions and cultural factors impact on individual differences in menopausal adaptation.

Conclusion and recommendation: Men and women faces many challenges of menopause and andropause in Africa. This is related to poor knowledge and health seeking behaviour of this group of males and females. Therefore, all tiers of government in collaboration with Non-Governmental Organizations (NGOs) should provide necessary facilities and enabling environments to conduct proper advocacy, counselling, evaluation and treatment of affected individuals.

Keywords: Menopause, Climacteric, Andropause, Africa

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Introduction

Menopause is considered a natural biologic event that affects all women all over the world; regardless of culture and country of origin should they live to that point in their lives. [1] Technically, it refers to a woman's last menstrual period: a woman can be said to have reached menopause when she has had 1 year without menstruating. The menopause is derived from the Greek words "men" (month) and "pausis" (cessation). The climacteric, or climacterium, is used to refer to the wide variety of physiological changes occurring in the years immediately surrounding menopause.[1] Climacteric is from a Greek word for ladder. Climacteric period including premenopausal, menopausal, post-menopausal periods is a phase that marks transition from woman's reproductive age into the era of post reproductive age. [1] While male

menopause has always existed, it has only recently been acknowledged and given its own identity as "andropause" which is formed by combining two Greek words "andras" meaning human male, " pause" meaning ceasation.

The terms "male menopause", "viropause", "andropause", "male climacteric" and, more recently, the acronym ADAM (androgen decline in the aging male) have all been used in medical literature. Male menopause is a term used to refer to an age related decline in testosterone levels in older men (traditionally > 50 years). However, male Menopause is a misleading description because it suggests a comparison with the dramatic end of reproductive function experienced by women.

Menopause is a condition that brings many physical

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and psychological changes, and affects the sexual life quality of men and women. $^{\tiny{[3]}}$ The average age of natural menopause has been reported as being at 51.5 years in developed countries. [4] In general, it occurs between the ages of 45 and 55 years. Studies by Nigerian authors shows that the average age at menopause was 48.4 and 46.16 years in South-western and Northern Nigeria respectively. [5,6] The climacteric complaints and the severity of menopause are associated with how these symptoms affect a woman's quality of life not only physically but also psychologically and socially. During this period, the woman's age, education, economic status, family structure, health status, good and bad habits, social relationships, sexual experiences development style, living conditions and cultural factors impact on individual differences in menopausal adaptation.[3] Similar to menopause, the effects of andropause are not uniform; each man's response to it is "unique". There are commonly reported symptoms, many of which are considered part of the "normal" aging process but which are also accelerated by a testosterone deficiency. [6] Symptoms of testosterone deficiency tend to fall into one of four categories: physical, cardiovascular, mental, or sexual, with some of them overlapping. For example, feeling too weak or tired to engage in sex could be related to impaired cardiovascular health, feelings of insecurity, and decreased libido, all of which may be related to a testosterone deficiency. One of the most troubling symptoms men encounter as they age is an enlarged prostate. The prostate gland goes through a second growth spurt as men reach their 40s, 50s, or 60s, often resulting in benign prostatic hyperplasia (BPH). [6]

The challenges in Africa are further compounded by inadequate knowledge on menopause since men and women may perceive the challenges as age related event that does not necessitate medical consultation. Some women may find relief from menopausal symptoms with herbal or alternative remedies. Women with lower levels of education and literacy generally lack access to and knowledge of medical information and medical assistance. Women are taught to remain "silent" and are usually forced to remain in the home or work very close to it. Topics that were once forbidden in Western society: menstruation, reproduction, and health matters including menopause are still not discussed. As a result, women's health issues are given little attention and hardly any funding.

This review article is undertaken with the overall goal of identifying challenges of diagnosis and management

of male and female climacteric and menopause in Africa, and we believe that it will unearth factors that can be harnessed in designing appropriate interventions that will help reduce the burden of climacteric and menopause in Africa.

Methodology

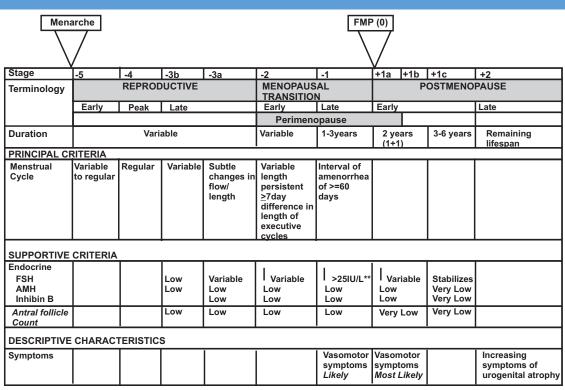
Literature search for studies on climacteric, menopause and andropause published between 1995 to 2016 was performed using the google scholar search data base. The bibliographies of included studies were also searched for additional references. About 150 articles were identified and after the elimination of less relevant articles 42 related articles available for review were examined. The key words used in the electronic search include management of climacteric and menopause in Africa, challenges of climacteric and menopause in Africa, challenges of management of male menopause (andropause) in Africa.

Discussion

Endocrine changes during the climacteric

Menopause occurs because the ovaries run out of eggs. The basic reproductive unit of the ovary is the ovarian follicle. Each ovarian follicle contains a single oocyte. A female infant at birth has approximately 300,000 ovarian follicles. By approximately 37 years of age, this number is depleted to about 25,000, and at menopause few/none remain. Loss of ovarian follicles is associated with diminished estradiol (E2) and ovarian inhibin production, and increased production of pituitary follicle stimulating hormone (FSH) 9. Loss of follicles also results in a fall in the production of anti- Mullerian hormone (AMH). AMH is produced by developing ovarian follicles. When follicle numbers decline, AMH levels fall. Hence, AMH levels decline with age. [9] Changes in FSH, E2, inhibin B and AMH may precede or coincide with the development of menstrual irregularity or symptoms. The menstrual cycle begins to lengthen about five years before menopause. However, menopause occurs without prior lengthening of the menstrual cycle in about 10% of women.[10]

Androgen production by the adrenal glands decreases gradually with age, but persists for at least 10 years after menopause. ^[9] In postmenopausal women, low estrogen levels are mainly maintained by conversion of androgens in the peripheral adipose tissue. The more subcutaneous fat women have, the higher estrogen levels are. ^[11] In obese women, the occurrence of climacteric symptoms is less frequent, and they have a relatively higher bone mineral density than in slender women, partly because of the production of estrogen by the adipose tissue. ^[11,12] The *stages of menopause* have been classified by the Stages of



^{*} Blood draw on cycle days 2-5 | = elevated

Fig.1. Stages of Reproductive Aging Workshop + 10 staging system for reproductive aging in women

Reproductive Aging Workshop + 10 (STRAW +10)^[13] Using this guide, the following phases are characterized as follows. (Fig.1)

Late reproductive phase

- * Changes in menstrual cycle flow/length
- * FSH, E2 variable
- * AMH, inhibin B low
- * Some women develop intermittent symptoms.

Menopause transition (perimenopause)

- * Increased cycle variability
- * FSH increased
- * E2 variable
- * AMH, inhibin B low
- * Symptoms more likely.

Postmenopause

- * Cessation of menstruation
- * FSH elevated
- * E2, AMH, inhibin B low, progesterone continually low
- * Symptoms much more likely:

In the males, the causes of a decline in testosterone production with age are complex and divergent. The most important change appears in the testes, where there is a decline and an alteration of Leydig cell number. [11] In older men, decrease in the number of Leydig cells, and a moderate rise in luteinizing hormone levels have been reported. [12,14] Unlike the ovaries in females, the testis continues gamete production and secretion of considerable amount of testosterone throughout life. Significant reduction in sperm parameters has been reported with increasing age due to a reduction in number of sertoli cells. Furthermore, young adult men exhibit a circadian rhythm in their serum levels of total testosterone, with peak levels in the morning and falling slowly by about 35% during the day. This daily fluctuation in serum testosterone is attenuated in older men. [2] There is evidence that age-related alterations in hypothalamopituitary function also contribute to the decline in testosterone production. Elderly men fail to demonstrate an appropriate increase in luteinizing hormone (LH) secretion in response to a hypo-

^{**} Approximate expected level based on assays using current international pituitary standard 67-69

androgenic state. Older men with low testosterone levels have gonadotropin levels (especially LH levels) that are within the normal range for young adult men, resulting in a relative hypogonadotropic hypogonadism. It has been also clearly demonstrated that the hypothalamo pituitary compartment of the gonadal axis is more sensitive to the negative feedback effects of sex hormones than is the case in young adults.^[14,15]

Another aspect of the physiopathological mechanisms responsible for the age-related changes in circulating testosterone levels, in addition to primary testicular factors and deficient neuroendocrine feedback regulation, consists of a progressive increase of plasma sex hormone binding globulin (SHBG) binding capacity. The increase in SHBG reduces the amount of free (unbound) testosterone in the blood that is available to the tissues. A plausible explanation is that the increase in SHBG levels is related to the age-dependent decline in circulating growth hormone or insulin-like growth factor level. [2]

Aging might also reduce androgen effect by causing a loss of sensitivity of target tissues to testosterone or dihydrotestosterone (DHT). Both decreased and increased sensitivity of pituitary gonadotropin secretion to feedback regulation by androgens has been reported in older men. Binding of DHT to exhormone responsive skin is also decreased with age, suggesting than an age-related reduction in responsivity to androgens may result from alterations in receptor number or affinity. ^[15,16] The pineal hormone melatonin is also secreted in reducing amounts with aging, which is responsible for the disturbances of sleep and biorhythms. [17] These phenomena are attributed to some extent to the declining levels of serum testosterone with aging. The levels of growth hormone also decline with aging leading to a decline in muscle mass and strength, again the features seen in those with hypoandrogenism. [18] The levels of estrogens and corticosteroids in men do not show significant changes with aging. Recently, it has been found that a hormone produced by adipocytes, leptin, may act in conjunction with androgens in maintaining a lean body mass. Decreased level of total testosterone is seen in men only in the sixth decade of life.[17] Reduction of free testosterone levels occurs earlier (1% decline per year between ages 40 years and 70 years). This reduction is due to the increasing SHBG concentrations at a rate of 1.2% per year.

Clinical features of climacteric

The reduction of estrogen production accounts for

many of the biological changes during climacteric. There is overlap between changes due to the loss of estrogen and other ageing processes. Various symptoms that appear during climacteric are called climacteric symptoms or climacteric syndrome. Climacteric symptoms are listed in Table 1

Vasomotor symptoms are most closely associated with the decrease of estrogen production, including hot flushes and sweating.

Hot flushes: are the most common symptoms of the menopause. These are most prevalent during the first year after the menopause ¹⁹.

They are described as sudden feelings of warmth (on the chest, face and neck), often associated with perspiration, palpitations and anxiety, which are variable in frequency, duration and severity (lasting < 5 minutes). The mechanism causing vasomotor symptoms is not fully understood. They can be triggered by warm environments, hot food or drinks and stress, and can interfere with activities or sleep. Leading to insomnia, irritability and difficulties with memory and concentration. They last for 0.5 - 5 years in up to 90% of women who experience them, after the natural menopause, but may persist for as long as 15 years in a small percentage of women. They last longer and are more severe in those women who have had a surgically induced menopause.

Urogenital symptoms: such as vaginal dryness, itching and dyspareunia are caused by physiological responses to low concentrations of estrogen and androgens. They can lead to numerous symptoms including atrophic vaginitis, vaginal irritation, dysuria, nocturia and frequency, which can have an effect on quality of life. Unlike vasomotor symptoms, urogenital symptoms do not diminish over time.

Other issues: In addition to the menopausal symptoms experienced by women, there are also long-term health impacts. The loss of ovarian function and the drop in estrogen levels also affects other parts of the body in particular the bones and cardiovascular system.^[21]

The skin also becomes thin and dry, which is considered to be caused by a decrease of cutaneous collagen fibers due to estrogen deprivation.

Clinical presentation in Africa: The clinical features in African women are not too different from other parts of the world but presentation of symptoms vary from place to place. Some are in agreement with

| Table 1: Climacteric symptoms | | | | |
|---|---|--|--|--|
| Climacteric symptoms in African females | | | | |
| 1. General physical | 2. Vasomotor symptoms (VMS) | | | |
| fatigue | hot flushes | | | |
| headache, dizziness | night sweats | | | |
| muscle/joint pains | | | | |
| 3. Psychological | 4. Urogenital and sexual | | | |
| depressive symptoms | loss of libido, | | | |
| anxiety/irritability | vaginal itching, burning | | | |
| insomnia | dryness and dyspareunia | | | |
| forgetfulness | Urinary frequency, urgency and incontinence | | | |

hot flushes as the commonest symptom while some observe that body and joint pains are the most common mode of presentation with hot flushes and night sweats coming second. [23-31] It was observed that African women related health problems to menopause only if they had serious illness accompanied by unexplained pains, irritability, unusual emotional behaviour or unexplained signs and symptoms. [25]

There is paucity of hospital consultations for menopausal symptoms in Nigeria and in the past it was assumed that most Nigerian women do not develop menopausal symptoms or the symptoms were mild and the women could cope without medical treatment. [26] Most African women believe that menopause is a normal issue and this influences their health seeking behaviour during the period. [25,31] There are urban rural differences in the presentation of menopausal problems and literacy status was the significant predictor of vasomotor and vaginal symptoms in some settings. [31] Women with high literacy status presented themselves to the hospital for treatment. [29] Most of the common menopausal symptoms are experienced by Nigerian women but due to socio-cultural factors which have been reported those with mild to moderate symptoms are able to cope without medical consultations. [30] In some instances menopause mimics common disease conditions like malaria and enteric fever such that patients get repeated treatment for these.

In the males: considering the role of testosterone on different organs of the body and on metabolism, its deficiency or decrease in the body will effect multiple organ systems and depending upon the organs there may be mixed clinical picture there by leading to a combination of different diseases ranging from bones, joints and erectile issues. Table 2 shows various symptoms associated with male menopause.

Factors such as smoking, obesity, alcohol use, sedentary lifestyle patterns and various chronic illness states accentuate the testosterone decline. Smoking increases total serum testosterone levels. Obesity correlates with total testosterone levels. Obese men have reduced total testosterone and SHBG levels (63% lower in very obese and 25% lower in mildly obese). Decline in the free testosterone level is less prominent. Alcohol results in a 19-27% reduction in testosterone levels. [32]

The clinical presentation of male climacteric in Africa is similar to that in other parts of the world however, there is paucity of knowledge by both men in general African population and health care providers regarding andropause. [31,33,34] The main symptoms of andropause most commonly reported to have a negative impact on the quality of life of ageing men and their sexual partners are decrease in energy levels, erectile dysfunction and loss of libido leading to depression. [31, ^{33, 34|} Other symptoms reported in African ageing men includes fatigue, mood and memory changes, sleep disturbance and decrease body hair. [31] The gradual and unspecific nature of the symptoms of andropause, the general lack of knowledge amongst men and low index of suspicion by health care providers contribute to most men not seeking medical help and many cases left $undiagnosed\ or\ misdiagnosed.^{\tiny{[31]}}$

Management of climacteric/menopausal symptoms

Non-Pharmacological

The best approach to the management of menopausal symptoms is to assess each woman's individual

needs, $^{_{[19]}}$ including her risk factors for cardiovascular disease (CVD). $^{_{[20]}}$ Lifestyle modifications such as a healthy diet, exercising regularly, maintaining a healthy body weight, Limiting alcohol consumption and not smoking may be useful in relieving mild menopausal symptoms. There is some evidence that women who are more active tend to suffer less from the symptoms of the menopause, however not all types of activity lead to an improvement in symptoms. The best activity is aerobic, sustained, regular exercise; highimpact infrequent exercise may make symptoms worse. In the African setting especially in the rural areas, women adjust well to mild and moderate symptoms of menopause. [30] Perhaps this may be because of their activities like farming and house hold work. The nonpharmacological management of menopause is offered to the literate few that present to the health care provider.[3

Pharmacological

Hormone replacement therapy

Estrogens have been used for over 50 years as a

hormonal supplement for the treatment of menopausal women and are the most effective treatment for vasomotor symptoms. They are used in combination with progestogens for women with an intact uterus (to avoid the development of endometrial hyperplasia and subsequent carcinoma). The main indication for hormone replacement therapy (HRT) is for the relief of menopausal symptoms. Estrogens reduce the frequency and severity of hot flushes and are given systemically at the lowest dose for the shortest duration.

Topical estrogen therapy is effective for moderate to severe vaginal symptoms and is considered more appropriate than systemic therapy in the absence of vasomotor symptoms. Atrophic vaginitis may respond to a short course (few weeks) of a topical vaginal preparation, repeated if necessary. Estrogen given systemically in the peri-menopausal and postmenopausal period and tibolone given in the postmenopausal period are also effective for the prevention of osteoporosis however other medicinal products should be used as first-line for the

Table 2: Andropausal symptoms

Symptoms associated with male menopause in Africa

Physical

Balding head

Reduced body hair, especially armpits and genital area

Decreased muscle mass, with increased body fat

Reduced strength and stamina

Feeling weak or tired

Decreased testicular size

Enlarged prostate

Mental

Moodiness, irritability, insecurity, indecisiveness

Inner unrest

Lack of concentration

Memory loss

Reduced intellect and critical thinking

Sexual

Loss of libido

Weak erections, Erectile dysfunction

management of osteoporosis. [35] HRT may be used in women with an early natural or surgical menopause (< 45 years) as they are at high risk of osteoporosis, however alternatives to HRT should be considered if osteoporosis is the main concern. [36] The clinician should be wary of adverse effects of HRT as such the lowest dose of hormone for the shortest duration to give symptom relief should be administered. [37]

In Africa treatment for menopause is offered only to a few highly educated and elite women who could manage the cost of HRT. Most patients present to the physician with associated diseases and not because they know the features are related to the menopause as the knowledge of HRT is very poor. Some opined that the management of menopause with HRT is not always justifiable in poor developing countries in Africa, as cost of pre-therapeutic investigation and medication are very high HRT is not common in Nigeria as women in our environment hardly ever visit the hospital for these complaint. It is assumed that cultural background contributes to their adjustment to menopausal changes. Women have identified lack of reliable accessible and current information on the menopause related topics as a problem.

Treatment of andropause

Treatment with testosterone replacement therapy (TRT) is applied for men with symptoms of andropause and low serum testosterone levels in the absence of contraindications, such as men with history of carcinoma of the breast, known or suspected carcinoma of the prostate, severe benign hypertrophy of prostate (BPH)-related bladder outlet obstruction and liver dysfunction. TRT has been found to improve the following andropausal symptoms; libido, body composition and frailty, mood fluctuation and memory disturbances, cardiovascular diseases and osteoporosis. TRT can be administered via ountries of Africa is poor and as such treatments with TRT is just for the literate few.

Challenges of Climacteric and menopause in Africa

There are challenges faced by women at climacteric which are peculiar to developing countries in Africa. The challenge is further reinforced by the culture of silence that shrouds this phase in a woman's life. Women who eventually survive the childbearing phase go on to face yet another phase in life, which is equally challenging. As women age, they experience both physical and cultural challenges that may hinder the attainment of optimal health.^[41]

Just as there is need to focus on women of

reproductive age, there is also need to ensure that the health needs of menopausal women are addressed. In Nigeria, culture of silence shrouds anything that is related to reproduction. [31,41] It spans from puberty, negotiating sex and condom usage, uptake of contraceptive methods and eventually to menopause. Menopause poses a lot of challenges to women in various ways; the transition from reproductive age to menopausal age is not without its problems. As women get older and advance to menopause, they may experience some of the symptoms mentioned earlier. These symptoms may be very disturbing and sometimes unpredictable especially when the affected person does not know that they are related to menopause and what to do. African women especially those in the rural areas has poor knowledge about menopause and menopausal symptoms. [32] Many women seek treatments for malaria and typhoid without knowing that its climacteric and its features. Many perceive menopause as a natural change in life that does not necessitate medical intervention. [31.41] However, the non-use of medical treatment may be connected to the poor or unavailability of basic health care services in rural communities, as such these women are left with no alternatives but to accept their fate and welcome these symptoms as a natural process towards cessation of menstrual periods and growing old. [31] Many African women ride through climacteric without symptoms. It has been hypothesised that diet plays a major role in the type and severity of menopausal symptoms. It was found that diet high in phytoestrogens protect against vasomotor symptoms. Phytoestrogens are present in high quantity in soya products. [42]

African men do not understand what wives go through during climacteric and menopause sometimes they compound issues by divorce or marrying younger wife especially when there are sexual issues. Utilization of health services for climacteric and menopausal symptoms is poor. Knowledge of HRT is poor. [28] Management of menopause with HRT is not always justifiable in a poor developing countries in Africa, as cost of, pre-therapautic investigation and medication are very high. [31] Challenges of andropause are similar to that of menopause in Africa. Men tend to result to herbal remedies especially when they experience sexual problems like lack of libido. [33, 34] Specialist as regards care of andropause is almost non-existent unlike in developed countries where such specialists exist for men.

Conclusion

Men and women faces many challenges of menopause

and andropause in Africa. This is related to poor knowledge and health seeking behaviour of this group of males and females. Menopausal and andropausal problems though numerous are surmountable. Management of menopause is not only by HRT but a holistic approach to health where medical treatment along with social and psychological support, physical exercise and appropriate life style are essential to achieving optimal health for menopausal/andropausal individuals.

Recommendation

It is recommended that all necessary facilities and enabling environments to conduct proper advocacy (awareness creation), counselling, evaluation and treatment of individuals with menopausal and andropausal challenges should be provided. Training and re-training of medical personnel on the management of menopausal challenges would help alleviate these issues. These can be achieved through collaborative efforts of the government and civil society with the resultant effects of improving the quality of life of at risk population. The field of geriatrics should be developed in African countries so that this group of people can receive specialist care.

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