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MENOPAUSE AND ANDROPAUSE: A LITERATURE REVIEW

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ABSTRACT: *Menopause and andropause are states in which women and men, respectively, experience cessation (or just gradual reduction, in the case of andropause) of reproductive function, usually around middle age. As everyone who lives long enough will experience either one or the other, all persons must be educated on the symptoms of both conditions and how to manage them effectively. This literature review sought to gather information pertaining to menopause and andropause, their symptoms, and the management of those symptoms, in order to help readers better understand and prepare for their occurrence. A search for articles on the Google Scholar and PubMed Central databases published from inception till 2025, with the keywords "menopause", "perimenopause", and "andropause" yielded 33 papers, which contained the information on which this article is based. It was discovered that both menopause and andropause are typified by several symptoms (such as genitourinary syndrome and vasomotor symptoms in women, and erectile dysfunction and decreased muscle mass in men), and that hormone replacement therapy is the most common treatment for both conditions. There are also non-pharmacological interventions that may ameliorate symptoms. Therefore, with the information available on the management of the symptoms of menopause and andropause, it is possible to enjoy a high quality of life, despite the changes to one's health that come with aging.*

KEYWORDS: Andropause, management, menopause, symptoms.

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INTRODUCTION

Menopause and andropause are conditions characterised by a reduction of reproductive function in women and men, respectively. However, menopause is characterised by complete cessation, while andropause is a gradual reduction in fertility, but rarely complete cessation. In addition, menopause is preceded by a transition period known as perimenopause. Andropause is typified by decreased testosterone levels from about 40 years of age onwards (Kumar & Singh, 2025).

As the global population ages, it must be educated on how to manage the transition from youth to middle age, and finally, to old age. The menopause transition and andropause are associated with health issues such as osteoporosis, cardiovascular disease, type 2 diabetes mellitus, etc.

Menopause is diagnosed after twelve consecutive months of amenorrhea due to cessation of ovarian function (Greendale et al., 1999). Menopausal women typically have high gonadotropin (follicle-stimulating hormone and luteinizing hormone) levels and low circulating oestradiol levels (Roeca et al., 2025).

Menopause may be natural, induced/iatrogenic, or premature/early. Induced menopause occurs as a result of medical intervention, such as a bilateral oophorectomy, or radiation or chemotherapy (e.g., for cancer treatment), resulting in cessation of ovarian function (Mishra et al., 2024; Okeke et al., 2013).

The secretion of female reproductive hormones appears to exert a protective effect on health in premenopausal women. After menopause, women have a similar health/disease profile to men of the same age. For example, at the age range of 45-49 years, the incidence of cardiovascular disease in women is three times lower than that in men. However, by ages 75-79 years, men and women have similar risks of developing heart disease (Iorga et al., 2017).

The diminished testicular function seen in men from approximately age 50 and upwards is gradual and insidious. The decrease in androgen levels in aging men has been termed “andropause”, “male climacteric syndrome”, “late-onset hypogonadism”, “low testosterone syndrome”, “androgen decline in the aging male”, etc. (Saalu & Osinubi, 2022). True andropause exists only in men who have experienced total loss of testicular function, due to diseases or accidents, or in those with advanced prostate cancer who have undergone surgical or medical castration (Singh, 2013).

Unlike in women, the male gonads (testes) continue to produce gametes and secrete hormones throughout life. However, as one ages, testosterone levels decline at a rate of approximately 1% per year. The rate of decline varies between individuals and is influenced by factors such as illness, stress, chronic disease, and medications, but it may be ameliorated by management of lifestyle factors. In addition, the threshold at which symptoms of andropause are seen varies from one man to another, and it is possible to have low testosterone levels while not showing symptoms (Singh, 2013).

Symptoms include low libido, erectile dysfunction, decreased muscle mass and strength, decreased bone mineral density, increased body fat, decreased vitality, and depressed mood. These symptoms are not specific to andropause/late-onset hypogonadism (LOH), but they may point to testosterone deficiency (Singh, 2013).

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Other symptoms include general fatigue, insomnia, urinary problems, stiff shoulders, heavy-headedness, tinnitus, decreased motivation, decreased concentration, and irritability, in addition to loss of facial, axillary, and pubic hair (Ide, 2023).

Factors which may cause decreased testosterone levels, and must therefore be ruled out before a diagnosis of LOH can be made, include: depression, hypothyroidism, chronic alcoholism, use of certain medications (corticosteroids, cimetidine, digoxin, opioid analgesics, spironolactone, antidepressants, and antifungal agents), and acute illness (Singh, 2013). The aim of this literature review is to study the effects of menopause and andropause on health, and highlight the different means by which their symptoms may be ameliorated, to improve quality of life.

METHODOLOGY

A review approach was adopted, in order to describe menopause and andropause, their symptoms, and the various means by which their symptoms may be alleviated or ameliorated. Therefore, the terms "menopause" and "andropause" were searched for in the Google Scholar and PubMed Central databases, and results from peer-reviewed papers published from inception till 2025 were incorporated into the current paper.

MENOPAUSE

Early menopause

Menopause occurring at 40-45 years is termed "early menopause", and if it occurs before 40 years, it is said to be "premature". Premature and early menopause may be idiopathic, or may be caused by chromosomal abnormalities, autoimmune diseases, or lifestyle factors (Vogt et al., 2022). Cigarette smoking is a risk factor for early and premature menopause (Mishra et al., 2024).

A 2024 study in India discovered that consumption of tobacco, alcohol, and fried food was associated with early menopause, as were menarche at the age of 15 years or more, birth of first child at less than 18 years old, use of hormonal contraceptives, termination of pregnancy, overweight, and diabetes (Kundu & Acharya, 2024).

In a 2025 Korean study, premature menopause was found to be associated with living in rural areas, smoking, little exercise, obesity, hypertension, chronic kidney disease, depression, and anxiety disorder (Ko et al., 2025).

Premature ovarian insufficiency

Premature ovarian insufficiency is a partial or total loss of reproductive and hormonal function of the ovaries before the age of 40, or two standard deviations in years before the mean age of the study population, due to follicular dysfunction or early loss of eggs. Aetiology is unknown in the majority of cases. Other cases may be due to genetic causes, autoimmune disease, enzyme deficiency, infection, environmental factors, radiation, or surgery. If left untreated, it can increase the risk of osteoporosis, cardiovascular disease, cognitive decline, dementia, and Parkinson's disease (Vogt et al., 2022).

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It is worthy of note that ovulation may occur intermittently after a diagnosis of premature ovarian insufficiency has been made; there may be residual ovarian function in patients with idiopathic premature ovarian insufficiency. However, it rarely leads to pregnancy (Chon et al., 2021).

A pooled analysis of 51,450 women in nine studies found that "nulliparous women were twice as likely to have premature ovarian insufficiency and 30% more likely to have early menopause than women with two or more children. Nulliparous women who also had early menarche (before age 12 years) had a five-fold increased risk of premature ovarian insufficiency and double the risk of early menopause, compared with women who had menarche at 12 years or older with two or more children" (Mishra et al., 2024).

Perimenopause

Perimenopause, or the menopausal transition, is the interval that begins when the menstrual cycle begins to change, or when vasomotor symptoms (night sweats and hot flushes) appear, and ends a year after the final menstrual period (Roberts & Hickey, 2016). It generally occurs between the ages of 45 and 55 years. Perimenopause lasts 4 years on average, and has two phases: an early phase and a late phase. (During the early phase, the menstrual cycle begins to get irregular [longer, shorter, or with spotting]. The late phase is characterised by "skipped" periods and gaps of up to 60 days or more between periods. Perimenopause is longer in women with earlier onset, and may last for up to 10 years in some cases (Roeca et al., 2025).

Late perimenopause is associated with increased risk of depressive symptoms. Studies have confirmed that during late perimenopause, women are particularly susceptible to new-onset depression and decreased quality of sleep (O'Reilly et al., 2024).

Symptoms observed during perimenopause include:

- Vasomotor symptoms: hot flushes and night sweats (85% of women)
- GSM: genitourinary syndrome of menopause (includes vulvovaginal atrophy, bladder symptoms, increased UTI risk)
- Changes in the menstrual cycle, culminating in cessation
- Insomnia, fatigue, irritability, brain fog, short-term memory loss, heightened anxiety, low libido
- Brain fogging
- Thinning of nails, dryness of skin/eyes, changes to hair and skin
- Muscle and joint discomfort

(Talaulikar, 2022)

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Vasomotor symptoms

Vasomotor symptoms (hot flushes and night sweats) are the primary symptoms of perimenopause for which women seek medical attention (Todorova et al., 2023).

VMS can begin during the perimenopausal stage and last for years after the final menstrual period. Oestrogen withdrawal during the menopause transition (MT) is linked to changes in the thermoregulatory neutral zone of the hypothalamus. These changes result in more frequent bodily reactions to internal and external triggers that prevent heat loss. Feelings of flushing, warmth, skin reddening, and perspiration may occur, with resultant vasodilation or vasoconstriction in the skin. In some women, hot flushes are followed by chills (Khan et al., 2023).

The prevalence of hot flushes in premenopausal women is about 6-13%. During early perimenopause, it is approximately 4-46%, and during late perimenopause, 33-63%. In women who have experienced menopause, it is up to 79% (Woods & Mitchell, 2005).

The most effective treatment for vasomotor symptoms of menopause is hormone therapy (Khan et al., 2023; Todorova et al., 2023). Hormone therapy is generally well-tolerated (Khan et al., 2023). However, middle-aged women tend to be affected by chronic diseases which influence decision-making pertaining to the use of hormone therapy. Therefore, management of menopause should be individualised for each patient.

Formulations of oestrogen (for hormone replacement therapy) include oral tablets, topical gels/lotions, transdermal patches, vaginal rings, and subcutaneous implants (Khan et al., 2023). Other pharmacological therapeutic options include selective serotonin reuptake inhibitors (SSRIs), selective norepinephrine reuptake inhibitors (SNRIs) (e.g., paroxetine, venlafaxine), gabapentin, pregabalin, oxybutynin, and clonidine. Non-pharmacological options include lifestyle modifications and cognitive behaviour therapy (Khan et al., 2023; Todorova et al., 2023).

Genitourinary syndrome of menopause (GSM)

Genitourinary syndrome of menopause is a collection of signs and symptoms associated with decreased levels of sex steroids, causing changes in the female genitals and lower urinary tract. It is chronic and progressive, affects up to 50% of menopausal women, and generally does not improve without treatment. It may include genital burning, dryness, and irritation, lack of lubrication, discomfort, pain, dyspareunia, and urinary symptoms (urgency, dysuria, incontinence, and urinary tract infections) (Kagan et al., 2019).

GSM can lead to genital or urologic complications and decreased acidity, encouraging the growth of bacteria that cause vaginitis and urinary tract infections. Possible secondary complications include labial atrophy, pelvic organ prolapse, introital stenosis, urethral prolapse or atrophy, and urethral caruncle (Kagan et al., 2019).

Genital symptoms include thinning and inflammation of the vaginal epithelium (often with erosion and bleeding), loss of elasticity, petechiae, discharge fibrosis, vaginal obliteration, decreased vulvar tissue thickness (loss of fat), and loss of pubic hair (Sarmento et al., 2021).

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The vaginal microbiota is crucial to preventing colonization by pathogens and contributes to maintaining reproductive health. Women with lower amounts of *Lactobacillus spp.* in their vaginas are more likely to present with GSM. Oestrogen improves vaginal symptoms and allows for re-colonization of the post-menopausal vagina with *Lactobacillus* (Kagan et al., 2019).

Systemic oestrogen therapy is used to treat vasomotor symptoms, but may improve GSM. Vaginal oestrogen therapy is recommended for women with only vaginal symptoms, because it involves lower doses of oestrogen than those used in systemic oestrogen therapy. Low-dose vaginal oestrogen therapy is available as a cream, a sustained-release ring, vaginal tablets and an oestradiol insert (Kagan et al., 2019).

Prasterone is a synthetic equivalent to endogenous dihydroepiandrosterone approved for the treatment of moderate-to-severe dyspareunia. Ospemifene is a selective oestrogen receptor modulator (SERM) which is orally administered, and used to treat dyspareunia and vaginal dryness, both of which are symptoms of vulvovaginal atrophy, usually seen in menopause.

Menopause and cognitive ability

Menopause appears to be linked to decreased cognitive ability. In addition, it has been noted that women with dementia and Alzheimer's disease have lower serum oestradiol levels than women without dementia (Gholizadeh et al., 2018; Xu et al., 2024).

In a French population cohort study (n=4868), however, no association was found between early menopause and a decline in cognitive function in later life. Spontaneous and surgical premature ovarian insufficiency were linked with a decline in verbal fluency and visual memory (Ryan et al., 2014).

Menopause and diabetes mellitus

Menopause causes an increased risk of accumulation of adipose tissue in the upper body and increases the incidence of insulin resistance, thus predisposing to type 2 diabetes mellitus. In addition, diabetes mellitus may contribute to the ageing of the ovaries; women with type 1 and early-onset type 2 diabetes mellitus may reach menopause earlier than women without diabetes. Moreover, an association has been found between early onset of menopause and a higher risk of type 2 diabetes mellitus later in life (Lambrinoudaki et al., 2022).

Menopause and Associated Musculoskeletal Symptoms

"The musculoskeletal syndrome of menopause includes, but is not limited to, musculoskeletal pain, arthralgia, loss of lean muscle mass, loss of bone density with increased risk of resultant fracture, increased tendon and ligament injury, adhesive capsulitis, and cartilage matrix fragility with the progression of osteoarthritis."(Wright et al., 2024)

Osteoporosis is a disease characterised by deterioration of bone microarchitecture, resulting in increased fracture risk. Reduced secretion of oestrogens during menopause is the primary factor leading to increased bone resorption and decreased bone formation (Lindsay, 1996). Osteoporosis may be treated using bisphosphonates and selective oestrogen receptor modulators (SERMs), among other treatment options (Abdelhafez et al., 2025).

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Increased intake of protein, calcium, and vitamin D, in addition to strength and resistance training, helps maintain bone density, muscle mass, and strength.

The menopausal transition and sleep impairment

Perimenopausal and postmenopausal women are more likely to report sleep difficulties than premenopausal women in the late reproductive stage. In addition, women in perimenopause, post menopause, and surgically-induced menopause have higher odds of experiencing sleep disturbance, relative to women in premenopause (Baker et al., 2018). "The incidence of sleep disorders ranges from16% to 47% at peri-menopause and 35% to 60% at postmenopause."(Tandon et al., 2022).

Management of symptoms of the menopausal transition

Hormonal preparations, non-hormonal medications, and non-pharmacological interventions are all useful tools for the management of the symptoms of the menopausal transition (Santoro et al., 2021).

Hormonal therapy with oestrogen is the most effective treatment for genitourinary syndrome and vasomotor symptoms. Hormonal therapy may also benefit women with disturbed sleep or mood during the menopausal transition (Santoro et al., 2021). However, hormone therapy should not be used for the prevention of cardiovascular disease. Moreover, hormone therapy increases breast cancer risk (Santoro, 2021).

ANDROPAUSE

Diagnosis

Testosterone levels decline by about 1% yearly from the age of 30. Testosterone levels are used as a biomarker for the diagnosis of andropause by comparing them to those in a healthy 30-year-old male. Elevated luteinizing hormone (LH) and follicle-stimulating hormone (FSH) levels, in addition to low testosterone levels, confirm an andropause diagnosis (Folorunsho et al., 2024).

Predisposing Factors

In a 2025 study of 1489 Japanese men aged 20-69, severe andropause symptoms were associated with former smoking, current smoking, strength training (>1.0 hour daily), possible insomnia, and moderate to severe psychological distress. After excluding 289 participants with cardiovascular disease, cerebrovascular disease, cancer, or depression, severe andropause symptoms were associated with age, absence of a spouse, and suspected insomnia in addition to the aforementioned factors (Tanji et al., 2025).

Risk factors for LOH may also include chronic illnesses such as diabetes mellitus, metabolic syndrome, obesity, chronic obstructive pulmonary disease, renal disease, human immunodeficiency virus (HIV)-related disease, and haemochromatosis (Singh, 2013).

Conditions Associated with Decreased Testosterone Levels

Testosterone deficiency leads to a 10-20% decrease in haemoglobin concentration. In addition, decreased testosterone concentration may be associated with a decline in verbal and visual

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memory and visuospatial performance (Singh, 2013). Decreased testosterone levels are correlated with decreased lean muscle mass and changes in fat storage pattern (from subcutaneous to visceral), especially in obese individuals.

Management of Andropause Symptoms

Testosterone replacement therapy is the best-known method for managing late-onset hypogonadism (Saalu, n.d.; Sulistyono Putra & Winarso, 2025); benefits include improved libido, muscle mass, cognition, and quality of life (Luther et al., 2024). However, side effects include an increased risk of polycythaemia, benign prostate hypertrophy (BPH), prostate cancer, gynaecomastia, testicular atrophy, and infertility.

Other treatment options include herbal remedies such as saw palmetto and ashwagandha, and lifestyle modification (Folorunsho et al., 2024).

Table 1: Summary of Relevant Literature

Title	Objectives	Methods	Results
Abdelhafez et al. (2025). Menopause and Osteoporosis: An Approach to Gynecologists—A Literature Review. https://doi.org/10.5005/jp-journals-10006-2617	"To provide gynaecologists with an update and evidence-based recommendations in order to counsel as well as manage postmenopausal women with osteoporosis."	"A comprehensive search of databases, including PubMed, Medline, and Web of Science was conducted to gather the most recent and relevant articles addressing the topic."	Various strategies for pharmacological treatment of osteoporosis.
KhaKhan et al. (2023). Vasomotor Symptoms During Menopause: A Practical Guide on Current Treatments and Future Perspectives. In *International Journal of Women's Health* (Vol. 15, pp. 273–287). Dove Medical Press Ltd. https://doi.org/10.2147/IJWH.S365808	To evaluate the physiology of vasomotor symptoms (VMS) and discuss hormonal and nonhormone options for treatment in addition to emerging therapies to guide clinicians caring for midlife women experiencing VMS.		VMS can begin during the perimenopausal stage, and last years past the final menstrual period. Oestrogen withdrawal during the menopause transition (MT) is linked to changes in the thermoregulatory neutral zone of the hypothalamus. These changes result in more frequent

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			bodily reaction to internal and external triggers that prevent heat loss. Feelings of flushing, warmth, skin reddening, and perspiration may occur, with resultant vasodilation or vasoconstriction in the skin. "Nearly 80% of women worldwide suffer from vasomotor symptoms (VMS), which can range in severity and affect quality of life and overall health. VMS persist for a median duration of 7 years and have been associated with significant comorbidities such as cardiovascular disease, bone disease, and cognitive complaints." "Hormone therapy (HT) is the most effective treatment for VMS. It reduces symptom frequency and intensity by nearly 90%, usually within

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			one month of initiation. Formulations of oestrogen include oral tablets, topical gels/lotions, transdermal patches, vaginal rings, and subcutaneous implants. Other pharmacological therapeutic options include selective serotonin reuptake inhibitors (SSRIs), selective norepinephrine reuptake inhibitors (SNRIs), (e.g. paroxetine, venlafaxine), gabapentin, oxybutynin, clonidine, Non-pharmacological options include lifestyle modifications and cognitive behaviour therapy.
Gg Chon et al. (2021). Premature Ovarian Insufficiency: Past, Present, and Future. *Frontiers in Cell and Developmental Biology* (Vol. 9).	To discuss the current understanding and future prospects of heterogeneous POI		

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Frontiers Media S.A. https://doi.org/10.3389/fcell.2021.672890			
Baker et al. (2018). Sleep problems during the menopausal transition: Prevalence, impact, and management challenges. *Nature and Science of Sleep* (Vol. 10, pp. 73–95). Dove Medical Press Ltd. https://doi.org/10.2147/NSS.S125807	"To review evidence for sleep difficulties in the context of the menopausal transition, considering severity of sleep complaints and links between hot flashes (HFs) and depression with poor sleep."		Women in perimenopause and postmenopause are more likely to report sleep difficulties, with prevalence rates of self-reported sleep difficulties of 40-56%, compared to premenopausal women in the late-reproductive stage, who have rates of 31%.
Gholizadeh, et al. (2018). The association between estradiol levels and cognitive function in postmenopausal women. *International Journal of Reproductive BioMedicine* (Vol. 16, Issue 7).	"To determine whether endogenous levels of oestradiol are related to cognitive function in postmenopausal women."	A cross-sectional study was conducted on 209 postmenopausal women referred to Arash Hospital, Tehran, Iran over the course of four months. The participants filled out the Montreal Cognitive Assessment (MoCA) Scale and a questionnaire for personal data. Venous blood samples were drawn from each woman after an overnight fast.	Oestradiol levels were associated with short memory ($p<0.001$) attention ($p<0.001$), and executive domains ($p<0.01$). There was significant association between MoCA points with oestradiol levels ($p<0.01$) and educational status ($p<0.001$)
Kundu & Acharya (2023). Linkage of	To explore the effect of premature and early menopause on	The study was cross- sectional and descriptive, and	Approximately 8% of

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premature and early menopause with psychosocial well-being: a moderated multiple mediation approach. *Scientific Reports*, *14*(1). https://doi.org/10.1038/s41598-024-53536-9	cognitive health, and psychosocial well-being.	utilized the Longitudinal Aging Study in India (LASI), 2017–2018, Wave 1 data, as a data source. The subjects of the study were 31,435 women aged 45 and above, who had not undergone hysterectomies. Cognitive health, prevalence of insomnia and presence of depressive symptoms were measured, as were age at menopause, and socioeconomic and demographic characteristics.	the older women re ported having undergone menopause prematurely (< 40 years), while 12.4% reported having experienced early menopause (40 to 44 years). Premature menopause was negatively associated with cognition, but positively associated with insomnia and depression.
Santoro et al. (2021). The Menopause Transition: Signs, Symptoms, and Management Options. *The Journal of Clinical Endocrinology & Metabolism*, *106*(1) , 1-15.	"To discuss the basic pathophysiology of the menopausal transition and the hormonal and nonhormonal management of clinicopathology attributed to it."	"A Medline search of epidemiologic, population-based studies, and studies of reproductive physiology was conducted. A total of 758 publications were screened."	"Symptoms of menopause typically start off mild and then increase in prevalence later… Irregular bleeding patterns, with changes in period frequency and bleeding duration, may be one of the earliest signs of the menopause transition." Other symptoms include: vasomotor symptoms, genitourinary symptoms, mood changes, cognitive decline,

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			decreased libido, sleep deterioration, and reduced bone mineral density. Conjugated equine oestrogen (CEE) with medroxyprogesterone acetate (MPA) are prescribed for hormone therapy (or CEE without MPA in women without uteri). However, the risk of breast cancer must be considered before initiating hormone therapy (HT). "Women with a history of breast cancer or high baseline risk should explore nonhormonal alternatives for bothersome symptoms." Oestrogen formulations exist as oral, transdermal, vaginal, and topical emulsions or sprays. Nonhormonal therapies (e.g. SSRIs) for menopause can also be considered in patients who are wary of initiating HT, or who have

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			a contraindication to HT. The selective-norepinephrine reuptake inhibitors (SNRI) venlafaxine and desvenlafaxine , in addition to clonidine and gabapentin, have been shown to improve vasomotor symptoms. A non-pharmacological intervention which might be useful is cognitive behavioural therapy.
Folorunsho et al., (2024). Andropause: a neglected disease entity. *OBM Geriatrics*, *08*(02), 1–27. https://doi.org/10.21926/obm.geriatr.2402276	"To bring attention to the growing issue of andropause", and review literature on its management.	Multiple studies were canvassed, in order to "understand andropause comprehensively, highlighting various biomarkers and diagnostic criteria, possible therapies, and potential risks and complications associated with the condition."	Testosterone levels decline by about 1% yearly from the age of 30. Testosterone levels are used as a biomarker for the diagnosis of andropause, by comparing them to those in a healthy 30-year-old male. Elevated luteinizing hormone (LH) and follicle-stimulating hormone (FSH) levels, in addition to low testosterone

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			levels, confirm an andropause diagnosis. Treatment options include hormone replacement therapy, lifestyle modification, and herbal remedies such as saw palmetto and ashwagandha.
Sulistyono & Winarso (2025). The benefits of testosterone replacement therapy in men with andropause: a literature review *Intisari Sains Medis*, *16*(3), 1294–1302. https://doi.org/10.15562/ism.v16i3.2537	To examine the Advantages of testosterone replacement therapy in the management of andropause among affected men.	A literature search was conducted using multiple electronic databases, to identify pertinent studies on testosterone replacement therapy in men with andropause.	Testosterone replacement therapy has been found to have beneficial effects on sexual function in men with hypogonadism.
Tanji, F., Nanbu, H., Nishimoto, D., & Kawajiri, M. (2025). Psychosocial Factors and Andropause Symptoms Among Japanese Men: An Internet-Based Cross-Sectional Study. *American Journal of Men's Health*, *19*(1). https://doi.org/10.1177/15579883241312836	"To investigate the association between psychosocial factors and andropause symptoms in Japanese men."	A study project named "Japanese Men's health and Andropause Related Symptoms (J-MARS)" was launched in September 2024 to investigate the factors associated with the incidence and deterioration of andropause symptoms. The study was longitudinal, with follow-up each year from 2024. It began with an anonymous, cross-sectional,	Severe andropause symptoms were associated with former smoking, current smoking, strength training (>1.0 hr/day), probable insomnia, moderate psychological distress, severe psychological distress, age, and absence of a spouse.

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		internet-based baseline survey, which included the participants' demographic data, medical histories, andropause symptoms, and lifestyles, and psychological distress	

CONCLUSION

Menopause and andropause affect the entire population, but their effects on quality of life can be managed via lifestyle modification and pharmaceutical intervention. Old age should not be just the end of life, but can be the fulfilling, final stage of one's journey through it.

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