International Journal of Clinical Obstetrics and Gynaecology

ISSN (P): 2522-6614
ISSN (E): 2522-6622
Impact Factor (RJIF): 6.71

www.gynaecologyjournal.com
2025;9(4): 102-107
Received: 23-06-2025
Accepted: 27-07-2025

Dr. Hassan Fadhil Karali
Newcastle University Medicine Malaysia (NUMed), Iskandar Puteri, Malaysia

Noor Fadzillah Binti Ahmad Farid
Newcastle University Medicine Malaysia (NUMed), Iskandar Puteri, Malaysia

Lan Yuen Qi
Newcastle University Medicine Malaysia (NUMed), Iskandar Puteri, Malaysia

Gordon Lim
Newcastle University Medicine Malaysia (NUMed), Iskandar Puteri, Malaysia

Loshini Chandrasehkaran
Newcastle University Medicine Malaysia (NUMed), Iskandar Puteri, Malaysia

Emily Stephen Sekai
Newcastle University Medicine Malaysia (NUMed), Iskandar Puteri, Malaysia

Corresponding Author:
Dr. Hassan Fadhil Karali
Newcastle University Medicine Malaysia (NUMed), Iskandar Puteri, Malaysia

Exercise regimens for enhancing sexual libido in menopausal women: A comprehensive systematic literature review study on type and duration

Hassan Fadhil Karali, Noor Fadzillah Binti Ahmad Farid, Lan Yuen Qi, Gordon Lim, Loshini Chandrasehkaran and Emily Stephen Sekai

DOI: https://doi.org/10.33545/gynae.2025.v9.i4b.1668

Abstract
In recent decades, life expectancy has increased, resulting in more women living into their menopausal years and it presents numerous physiological and psychological changes, including a decline in libido.
The aim of the study is exploring literature to identify type and duration of exercise that can improve sexual libido in menopausal women.
We conducted a systematic literature review, the articles selected was published between 2014 and 2024 using PRISMA checklist, database search was executed using search engines of notable digital libraries such as PubMed, Embase, World of Science, Cochrane Library, Scopus, and Google Scholar. The keyword search identified 684 articles, inclusion criteria and article abstract 15 relevant articles taken for our study.
Types of exercises reviewed are categorised in themes:

1. Mind-body exercise: Yoga for 45 minutes daily or75 minutes twice a week for 12 weeks had improved desire and enhanced intimacy.
2. General Exercise: Only walking had similar sexual function scores to non-exercisers, no impact on desire, arousal, lubrication, orgasm, or satisfaction. Intense, increase exercise and resistance exercise decreases sexual activity and reduces sexual desire.
3. Daily activities: Physically active women making activity ≥5 days/week for ≥30 minutes/session have better desire, arousal, lubrication, orgasm, satisfaction, and less discomfort in contrast with sedentary women.
4. Pelvic floor muscle training: Showed controversy, some studies showed notable improvements with 2-4 times a week for 30-55 minutes each session of 30 contractions while others notify no significant improvement.
5. Dancing: Significant and long-lasting improvement, 60 minutes twice a week for 16 weeks will do.

Non-physical activity-related: Sex education, lubricant gel and self-centralised health education led to a significant enhancement in sexual function.
General education of menopausal women about the importance of intermit life after menopause and exploration of sexual dysfunction in health care for menopausal women in a transparent, clear way. Advice menopausal women with loss or reduced libido for yoga, dancing, and pelvic floor exercise; educate her about diet, sexual life, use of lubricants and practising active lifestyle to boost their sexual libido and function, which can help to provide stable intimate relationship, self-confidence, and mutual care without the need for medications that may be associated with vast side effects.

Keywords: Menopause, sexual libido, exercise intervention, yoga

Introduction
Advancements in healthcare and increased health awareness have significantly improved the quality of life for women globally, allowing women to live longer and healthier lives [1]. However, modernisation has brought about societal changes whereby women tend to achieve higher levels of education, experience more psychological stressors and encounter the expectation of having to maintain their pre-menopausal state despite being menopause, whether that be from a physical or emotional aspect [2]. With that, there is a need to improve women's quality of life as they experience the various changes of menopause, which includes focusing efforts on increasing libido.

As the age of sexual engagement increases, prolonging the period during which women can engage in fulfilling sexual activities well into menopause becomes increasingly important. Sexual libido plays a crucial role in a woman's overall well-being, contributing to self-esteem, emotional health, and intimate relationships [3]. Therefore, maintaining libido not only enhances quality of life but also encourages self-care and fosters a positive self-image where poorer body image can result in a depressed state, creating difficulty in women's abilities to express their emotions and impeding their libido. This, in turn, often leads to greater attention to physical appearance and personal well-being, boosting self-confidence and psychological well-being [4].

The hormonal mechanisms underlying libido are complex and multifaceted. Testosterone, often highlighted as a key hormone influencing sexual desire, is not the sole contributor. Other hormones, such as oestrogen and progesterone, and neurochemical mediators, such as dopamine, acetylcholine, histamine, serotonin, prolactin, and oxytocin, have been shown to impact sexual function significantly [5, 6]. Oestrogen plays a major role in modulating dopamine activity as the hormone has a stimulatory effect on dopamine receptors [7]. The dopamine pathway itself is responsible for regulating motor control, as well as the sense of motivation and reward. With that, it is clear these various hormones and neurotransmitters work together to regulate mood, arousal, and vaginal health, all of which contribute to sexual satisfaction. A decline in oestrogen levels results in changes such as a weakened orgasmic response and reduced vaginal lubrication. Combined with psychological and sociocultural factors, this decline can further complicate the transition through menopause. Psychological factors may include the development of depression or anxiety during menopause and marital challenges. From a sociocultural aspect, a woman's sexual value may either increase or decrease during the postmenopausal period [8].

While hormone replacement therapy (HRT) remains the primary option for managing menopausal symptoms, testosterone can be supplemented in patients to improve libido as the hormone is a mandatory precursor to produce oestrogen [9]. While these interventions can be effective, they are often associated with side effects and risks such as cardiovascular events, breast cancer, and masculinising symptoms in the case of testosterone therapy, and this spurred interest in non-pharmacological approaches to stimulate endogenous hormone production [10, 11]. A growing interest in alternative, non-pharmacological methods to enhance libido in menopausal women. Some examples include making dietary changes, aromatherapy with essential oils, acupuncture, yoga and exercise [12]. Furthermore, these non- pharmacological options may provide valuable alternatives for women who prefer not to use HRT, lack access to it, or face contraindications to its use [13].

Exercise has been demonstrated to positively influence a variety of hormones and neurotransmitters, including cortisol, oestrogen, prolactin, oxytocin, and testosterone. For example, aerobic exercise has been associated with increased levels of testosterone, oestrogen, and serotonin, as well as reduced cortisol [14], while endurance activities promote a rise in oxytocin. Exercise also enhances dopamine release, which improves mood and motivation [15].

As the search for non-pharmacological options is increasing in momentum, exercise regimens are emerging as a promising approach. Exercise has always been a cornerstone of a healthy lifestyle, and its possibility of enhancing hormonal balance and, consequently, libido appears as an optimistic strategy [13].

Different types of physical activities influence hormonal pathways in distinct ways. The standard advice given to menopausal women is walking. Though it is a good practice for fitness and bone density preservation, it has no role in influencing endogenous androgens. On the other hand, several studies [15, 16, 17] have examined the effects of exercise on libido with promising findings. Strength training has been associated with increases in testosterone [18], yoga has shown benefits across various aspects of sexual function [19], and aerobic exercise can reduce stress hormones and improve overall mood [15, 20]. However, many of these studies focus on younger populations or fail to specify the optimal type and duration of exercise for menopausal women.

Despite the evidence supporting exercise to enhance libido, there are still significant gaps. For example, there is limited understanding of which types of exercises are most effective for menopausal women and what the ideal duration required to achieve optimal outcomes. By addressing these questions, this research aims to establish a foundation for developing non-pharmacological interventions that empower menopausal women to enhance their sexual health and overall well-being.

This systematic literature review aims to address these gaps by exploring the types and durations of exercises that can enhance sexual libido in menopausal women by reviewing the current literature to provide evidence-based recommendations for clinicians and women seeking to improve their sexual desire through exercise and offering conservative and sustainable ways to improve sexual health during menopause.

Methodology

A checklist of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) was used to carry out this systematic literature review and ensure its reliability. The checklist acts as a guide and was used to create a systematic review protocol and to select literature that met the inclusion criteria. The protocol is as follows:

1. Database search
2. Specific keywords related to the topic of the study

Articles published from 2014 to 2024 Titles and abstracts are screened based on the predetermined inclusion and exclusion criteria.

Data relevant to the research questions are identified Finalised data are summarised and reported The database search was executed using search engines of notable digital libraries such as PubMed, Embase, World of Science, Cochrane Library, Scopus, and Google Scholar. Relevant articles were searched based on their title and abstracts, which were further analysed based on their keywords and phrases: *menopause and libido enhancement, exercise to increase libido in menopause, increasing endogenous testosterone in menopausal women, increasing endogenous oestrogen in menopausal women, increasing endogenous oxytocin in menopausal women, increasing endogenous serotonin in menopausal women, increasing endogenous noradrenaline in menopausal women, increasing endogenous dopamine in menopausal women, exercise regimens and increasing libido related serotonin, exercise regimens and increasing libido related noradrenaline, exercise regimens and increasing libido related dopamine.*

Table 1: Keywords and phrases with inquiries for database search

Keywords And Phrases	Inquiries
Menopause And Libido Enhancement	Libido And Menopause And Quality Of Life, Libido Enhancement At Menopause And Quality Of Life
Exercise And Libido And Menopause	Exercise And Menopause And Sexual Function, Exercise Interventions And Libido Enhancement At Menopause, Exercise Regimens And Libido Enhancement At Menopause, Exercise To Improve Libido In Menopause Women
Increasing Endogenous Testosterone In Menopausal Women	Method And Increase And Endogenous Testosterone And Menopause, Exercise And Increase And Endogenous Testosterone
Increasing Endogenous Oestrogen In Menopausal Women	Method And Increase And Endogenous Estrogen And Menopause, Exercise And Increase And Endogenous Oestrogen
Increasing Endogenous Oxytocin In Menopausal Women	Method And Increase And Endogenous Oxytocin And Menopause, Exercise And Increase And Endogenous Oxytocin
Increasing Endogenous Serotonin In Menopausal Women	Method And Increase And Endogenous Serotonin And Menopause
Increasing Endogenous Noradrenaline In Menopausal Women	Method And Increase And Endogenous Noradrenaline And Menopause, Method And Increase And Endogenous Norepinephrine And Menopause
Increasing Endogenous Dopamine In Menopausal Women	Method And Increase And Endogenous Dopamine And Menopause
Exercise Increasing Serotonin / Regimens and libido-related	Exercise Serotonin And Increase And Endogenous
Exercise regimens and increasing libido-related noradrenaline	Exercise And Exercise And Increase And Endogenous Noradrenaline
Exercise Increasing Dopamine / Regimens and Libido-Related	Exercise Dopamine And Increase And Endogenous

The keyword search identified 684 articles. As part of the inclusion process, the articles were
further examined based on the titles and articles that did not focus on types and duration of exercise regimens for enhancing sexual libido in menopausal women are omitted which leaves 442 articles. The second inclusion process used the abstracts to eliminate more articles, leaving the list with 15 articles. The articles selected were published between 2014 and 2024.
The PRISMA flow diagram outlined in Figure 1 shows the process of identifying relevant publications, the screening process and the finalised number of articles selected based on the inclusion criteria.

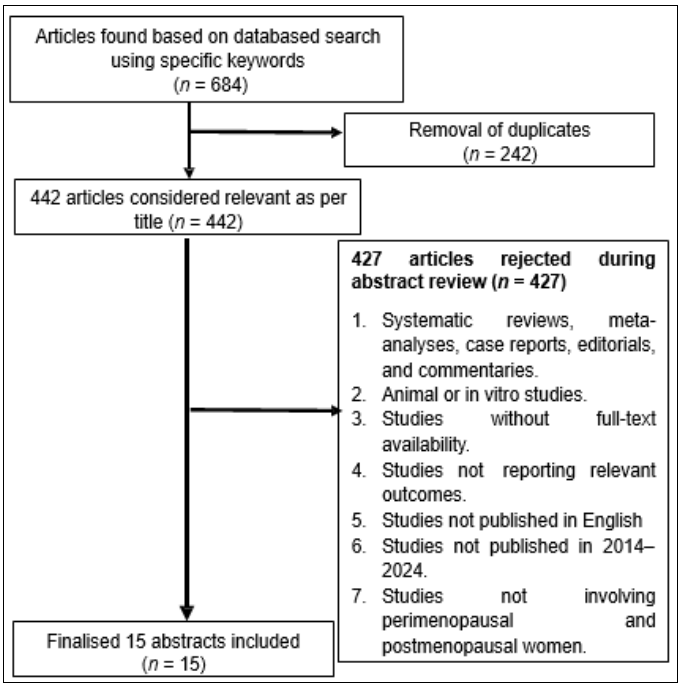

Fig 1: PRISMA flow diagram

Findings

This systematic review included studies evaluating a variety of exercise interventions, including types of exercises reviewed are categorised in themes:

1. Mind-body exercise: Hatha yoga 75 minutes twice a week for 12 weeks [21], Rusie Dutton yoga intervention, 90-minute sessions for 13-week [22], and combining Patanjala yoga and Hatha yoga for 45 minutes per day on 12-week program [23], had improved desire, enhanced intimacy and sexual function.
2. General Exercise: walking (especially), aerobics, strength training, resistance training, loosening and stretching exercises had similar sexual function scores to non-exercisers and non-significant improvement of desire and sexual function. Intense, increased exercise decreases sexual activity and reduces sexual desire [21, 23, 24, 25, 26].
3. Daily activities: Physically active women doing activity (≥5 days/week for ≥30 minutes/session) have better desire, arousal, lubrication, orgasm, satisfaction, and less discomfort in contrast with sedentary women [27, 28, 29, 30].
4. Pelvic floor muscle training: Showed controversy where some studies showed notable improvements with 12 weeks of pelvic floor muscle training [32, 33], while others noted no significant improvement [32, 33].
5. Dancing: Significant and long-lasting improvement; 60 minutes twice a week for 16 weeks will do [35].
6. Non-physical activity-related: Sex education [31], lubricant gel [33], nutrition [26] and personalised dietary guidance [25] led to a significant enhancement in sexual function.

Outcomes were primarily measured using validated instruments such as the Menopause- Specific Quality of Life Questionnaire (MENQOL), the Menopause Rating Scale (MRS), and the Female Sexual Function Index (FSFI).

Discussion

Mind-body exercise

According to Jorge *et al*. (2016), women practising Hatha yoga 75 minutes twice a week for 12 weeks reported significant reductions (p=0.007) in vaginal dryness, loss of libido, sexual dissatisfaction, and bladder issues measured by the MRS [21].

These views are supported by Ngowsiri *et al*. (2014) improvement by practising Rusie Dutton yoga intervention for 90-minute sessions over 13-week as measured by the MENQOL, shows significance of (p = 0.003) [22]; in addition, Nayak *et al*. (2014) showed that combining Patanjala yoga and Hatha yoga for 45 minutes per day on the 12-week program, significantly improved desire (p=0.001), intimacy (p=0.001) and sexual function(p=0.004) based on MENQOL sexual domain scores [23].

Exercise

Walking (especially), aerobics, strength training, resistance training, loosening and stretching exercises. Nazarpour *et al*. (2016) showed that there were no significant differences were found between exercisers (walking [especially], aerobics, and strength training) and non- exercisers for desire (p=0.035), arousal, lubrication (p=0.014), orgasm (p=0.045), or satisfaction, though they reduce pain during and after intercourse (p=0.013) as measured by the FSFI score. Longer exercise and high-intensity exercise sessions were linked to decreased satisfaction, increased pain (p=0.008), and decreased sexual desire and activity after menopause (p=0.049), among the women who exercised, those engaging in activities other than walking—such as aerobics and strength training—reported poorer outcomes in desire, arousal, orgasm, satisfaction, and particularly in lubrication and pain, as well as in total FSFI scores ($p < 0.05$), compared to those who walked exclusively [24].

According to Hao *et al*. (2022), participants received a combination of health education, personalised dietary guidance, and intensive resistance exercises twice a week for 30 to 40 minutes paired with aerobic exercises done for at least three days a week, experienced greater improvements in sexual desire (p<0.05) and a greater reduction in sexual disorders (p<0.05) compared to those who did exercise alone and no much of difference from those who did education and diet without exercise [25].

A study by Asghari *et al*. (2017) found that an aerobic exercise being conducted three times a week, with each session lasting between 30 to 45 minutes for a 12-week program combined with nutrition education significantly improved (p<0.001) the MENQOL sexual domain compared to the nutrition-only group, the exercise-only group, and the control group [26]. While Nayak *et al*. (2014) mentioned that Loosening and stretching exercises showed slight improvements in sexual desire and function after 12 weeks, but these changes were not statistically significant (p=0.93) compared to the yoga group, which demonstrated greater improvements in the MENQOL sexual domain [23], And Jorge *et al*. (2016) stated that stretching exercise demonstrated slight improvements in sexual desire and function after 12 weeks. Changes were less pronounced than those observed in the yoga group and did not reach statistical significance [21].

Daily activities

Tan *et al*. (2014) mentioned that women who engaged in moderate and high levels of physical activity, based on the International Physical Activity Questionnaire (IPAQ), showed significant improvements in sexual desire (p=0.043) and function (p=0.016) measured by the MRS score [27], Cabral *et al*. (2014) also supported that very active women (≥5 days/week for ≥30 minutes/session), based on IPAQ criteria, demonstrated significant improvements (though less than normal) in desire (p=0.047), sexual function (p=0.002) as measured by the FSFI, compared to sedentary and moderately active women [28], agreed by Nguyen *et al*. (2022) when stated that woman spending more hours exercising daily, experienced notable improvements in libido and sexual function as reflected in their MENQOL compared to less active women [29].

On the other hand, Kim *et al*. (2014) study found no significant association (p=0.249) between physical activity levels, whether low, moderate, or high, and sexual symptoms, as measured by MENQOL scores [30].

Pelvic floor muscle training (PFMT)

Nazarpour *et al*. (2017) reported that although the group that practised Kegel exercise daily for 12 weeks experienced significant improvements in orgasm and satisfaction (p=0.003), but non-significant improvements in desire and sexual functions as measured by the FSFI (31). While Franco *et al*. (2021) found that after 12 weeks of PFMT, the intervention group showed slight improvements, though non-significant, in desire and sexual function as measured by the FSFI Franco *et al*. (2021) and Khosravi *et al*. (2022) stated that the Kegel exercise group experienced significant improvements in desire (p<0.005), with even greater improvements as measured by the FSFI observed in orgasm, satisfaction, and sexual function, compared to the lubricant gel group (p<0.001 for each) [32, 33]. Elgayar (2024) also supported that 12 week of pelvic floor muscle training (PFMT) led to significant improvements in desired sexual function (p=0.002) as measured by the FSFI [34].

Dancing

According to Martins *et al*. (2024), jazz dancing twice a week, each lasting 60 minutes for 16 weeks, experienced a significant improvement (p=0.013) in libido and sexual function as measured by the MRS. These benefits continued to improve and were maintained at the 6- month follow-up [35].

Non-physical related activities

Nazarpour *et al*. (2017) mentioned that 12-week sex education sessions demonstrated significant improvements in sexual desire (p=0.01) and sexual function but did not reach statistical significance [31]. Moreover, Khosravi *et al*. (2022) found out that lubricant gel application helped in a significant improvement in desire and sexual function (p<0.001 for each), as measured by the FSFI. However, these effects were less pronounced than those observed in the Kegel group. Unlike the Kegel exercises, which demonstrated continued improvement over time, the benefits of the lubricant gel plateaued after three months [33].

By 12 weeks, Asghari *et al*. (2017) reported that the nutrition group demonstrated mild improvements in libido and sexual function, though not significant [26].

Finally, Hao *et al*. (2022) mentioned that participants who received health education alone and those who received health education combined with personalised dietary guidance both experienced significant reductions in sexual disorders, with the combined intervention producing the greatest improvement (p<0.05 and p<0.01 respectively) [25].

Conclusion

General education of menopausal women about the importance of intermit life after menopause and exploration of sexual dysfunction in health care for menopausal women in a transparent, clear way. Advice menopausal women with loss or reduced libido for yoga, dancing, and pelvic floor exercise; educate her about diet, sexual life, use of lubricants and practising active lifestyle to boost their sexual libido and function, which can help to provide stable intimate relationship, self-confidence, and mutual care without the need for medications that may be associated with vast side effects.

Recommendation

Further studies are needed to have objective evidence on exercise improvement of libido and sexual function, which can be achieved by measuring serum testosterone, oestrogen, and dopamine, as exercise can increase hormones and neurotransmitters affecting libido and mood intrinsically.

Explore long-term impact of exercise on libido and mood without external hormone supplements.

Support intrinsic hormonal balance through lifestyle.

Limitations

The studies included in this paper vary in terms of methodology, population, sample sizes, interventions and outcomes measured. Apart from heterogeneity causing difficulty in standardising results, the studies analysed were of variable quality, which, to a certain extent, introduces potential biases and inability to perform meta-analysis. Also, we only included articles written in the English language.

Conflict of Interest

Not available

Financial Support

Not available

References

1. World Health Organization. Life expectancy and Healthy life expectancy. https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/ghe-life-expectancy-and-healthy-life-expectancy.
2. Hammond J, Marczak M. Women's experiences of premature ovarian insufficiency: a thematic synthesis. Psychol Health. 2025;40(2):192-216. https://www.tandfonline.com/doi/abs/10.1080/08870446.2023.2192738.
3. Heidari M, Ghodusi M, Rafiei H. Sexual Self-concept and Its Relationship to Depression, Stress and Anxiety in Postmenopausal Women. J Menopausal Med. 2017;23(1):42. https://pmc.ncbi.nlm.nih.gov/articles/PMC5432465/.
4. Ling J, Wang YH. Association between depressive mood and body image and menopausal symptoms and sexual function in perimenopausal women. World J Clin Cases. 2023 Nov 16;11(32):7761. https://pmc.ncbi.nlm.nih.gov/articles/PMC10698428/.
5. Bancroft J. The endocrinology of sexual arousal. Journal of Endocrinology. 2005 Sep 1;186(3):411-27. https://joe.bioscientifica.com/view/journals/joe/186/3/1860411.xml.
6. Hilz MJ. Physiology and Pathophysiology of Female Sexual Function. Primer on the Autonomic Nervous System. 2012 Jan 1;235-8.
7. Kim D, Park YM. Effects of Menopause on Physical Activity and Dopamine Signaling in Women. Iran J Public Health. 2022;51(10):2372. https://pmc.ncbi.nlm.nih.gov/articles/PMC9647612/.
8. Management of Libido Problems in Menopause - PMC. https://pmc.ncbi.nlm.nih.gov/articles/PMC6220606/.
9. Davis SR. Use of Testosterone in Postmenopausal Women. Endocrinol Metab Clin North Am. 2021 Mar 1;50(1):113-24.
10. NHS. Side effects of hormone replacement therapy (HRT). https://www.nhs.uk/medicines/hormone-replacement-therapy-hrt/side-effects-of-hormone-replacement-therapy-hrt/.
11. Al-Imari L, Wolfman WL. The Safety of Testosterone Therapy in Women. Journal of Obstetrics and Gynaecology Canada. 2012;34:859-65.
12. Aarshageetha P, Rani Janci PR, Devi Tharani N. Role of Alternate Therapies to Improve the Quality of Life in Menopausal Women: A Systematic Review. J Midlife Health. 2023 Dec 30;14(3):153. https://pmc.ncbi.nlm.nih.gov/articles/PMC10836436/.
13. Ennour-Idrissi K, Maunsell E, Diorio C. Effect of physical activity on sex hormones in women: a systematic review and meta-analysis of randomised controlled trials. Breast Cancer Res. 2015 Nov 5;17(1):139. https://pmc.ncbi.nlm.nih.gov/articles/PMC4635995/.
14. Tops M, Gomes-Osman J, Israel B, Raichlen D, Colzato LS, Heijnen S, *et al*. Neuromodulation of Aerobic Exercise—A Review. Front Psychol. 2016 [cited 2025 Mar 3];6(JAN):1890. https://pmc.ncbi.nlm.nih.gov/articles/PMC4703784/.
15. Stanton AM, Handy AB, Meston CM. The Effects of Exercise on Sexual Function in Women. Sexual Medicine Review. 2018. https://doi.org/10.1016/j.sxmr.2018.02.004.
16. Herbenick D, Fortenberry JD. Exercise-induced orgasm and pleasure among women. Sexual and Relationship Therapy. 2011 Nov;26(4):373-88. https://www.tandfonline.com/doi/abs/10.1080/14681994.2011.647902.
17. Tabatabaie NS, Rasti Borujeni F, Tavakol Z, Raeisi Shahraki H. The Effect of Yoga and Pelvic Floor Muscle Exercise on Sexual Function and Sexual Self-esteem of Reproductive-age Women: A Randomised Clinical Trial. Int J Community Based Nurs Midwifery. 2024 Jul 1 [cited 2025 Mar 3];12(3):188. https://pmc.ncbi.nlm.nih.gov/articles/PMC11330551/.
18. Vingren JL, Kraemer WJ, Ratamess NA, Anderson JM, Volek JS, Maresh CM. Testosterone physiology in resistance exercise and training: The upstream regulatory elements. Sports Medicine. 2010 Sep 23;40(12):1037-53. https://link.springer.com/article/10.2165/11536910-000000000-00000.
19. Dhikav V, Karmarkar G, Gupta R, Verma M, Gupta R, Gupta S, *et al*. Yoga in Female Sexual Functions. J Sex Med. 2010 Feb 1 [cited 2024 Dec 23];7(2_Part_2):964-70. https://dx.doi.org/10.1111/j.1743-6109.2009.01580.x.
20. Ida M, Ida I, Wada N, Sohmiya M, Tazawa M, Shirakura K. A clinical study of the efficacy of a single session of individual exercise for depressive patients, assessed by the change in saliva-free cortisol level. Biopsychosoc Med. 2013 Dec 6;7(1):1-11. https://link.springer.com/articles/10.1186/1751-0759-7-18.
21. Jorge MP, Santaella DF, Pontes IMO, Shiramizu VKM, Nascimento EB, Cabral A, *et al*. Hatha Yoga practice decreases menopause symptoms and improves quality of life: A randomised controlled trial. Complement Ther Med. 2016 Jun 1;26:128-35. https://pubmed.ncbi.nlm.nih.gov/27261993/.
22. Ngowsiri K, Tanmahasamut P, Sukonthasab S. Rusie Dutton traditional Thai exercise promotes health-related physical fitness and quality of life in menopausal women. Complement Ther Clin Pract. 2014;20(3):164-71.
23. Nayak G, Kamath A, Kumar PN, Rao A. Effect of yoga therapy on physical and psychological quality of life of perimenopausal women in selected coastal areas of

Karnataka, India. J Midlife Health. 2014 Oct;5(4):180-5. http://www.ncbi.nlm.nih.gov/pubmed/25540568.
24. Nazarpour S, Simbar M, Tehrani FR, Majd HA. Sexual Function and Exercise in Postmenopausal Women Residing in Chalous and Nowshahr, Northern Iran. Iran Red Crescent Med J. 2016 May 1;18(5). https://pubmed.ncbi.nlm.nih.gov/27437131/.
25. Hao S, Tan S, Li J, Li W, Li J, Liu Y, *et al*. The effect of diet and exercise on climacteric symptomatology. Asia Pac J Clin Nutr. 2022 Sep 1;31(3):362-70. https://pubmed.ncbi.nlm.nih.gov/36173208/.
26. Asghari M, Mirghafourvand M, Mohammad-Alizadeh-Charandabi S, Malakouti J, Nedjat S. Effect of aerobic exercise and nutrition education on quality of life and early menopause symptoms: A randomised controlled trial. Women Health. 2017 Feb 7;57(2):173-88. https://pubmed.ncbi.nlm.nih.gov/26909662/.
27. Tan MN, Kartal M, Guldal D. The effect of physical activity and body mass index on menopausal symptoms in Turkish women: a cross-sectional study in primary care. BMC Womens Health. 2014 Mar 6;14(1). https://pubmed.ncbi.nlm.nih.gov/24602392/.
28. Cabral PUL, Canário ACG, Spyrides MHC, Uchôa SADC, Júnior JE, Giraldo PC, *et al*. Physical activity and sexual function in middle-aged women. Rev Assoc Med Bras (1992). 2014;60(1):47-52. https://pubmed.ncbi.nlm.nih.gov/24918852/.
29. Nguyen TTP, Phan HT, Vu TMT, Tran PQ, Do HT, Vu LG, *et al*. Physical activity and social support are associated with quality of life in middle-aged women. PLoS One. 2022 May 1;17(5). https://pubmed.ncbi.nlm.nih.gov/35522681.
30. Kim MJ, Cho J, Ahn Y, Yim G, Park HY. Association between physical activity and menopausal symptoms in perimenopausal women. BMC Womens Health. 2014 Oct 3;14(1).
31. Nazarpour S, Simbar M, Ramezani Tehrani F, Alavi Majd H. Effects of Sex Education and Kegel Exercises on the Sexual Function of Postmenopausal Women: A Randomised Clinical Trial. Journal of Sexual Medicine. 2017 Jul 1;14(7):959-67.
32. Franco MM, Pena CC, de Freitas LM, Antônio FI, Lara LAS, Ferreira CHJ. Pelvic Floor Muscle Training Effect in Sexual Function in Postmenopausal Women: A Randomized Controlled Trial. Journal of Sexual Medicine. 2021 Jul 1;18(7):1236-44.
33. Khosravi A, Riazi H, Simbar M, Montazeri A. Effectiveness of Kegel exercise and lubricant gel for improving sexual function in menopausal women: A randomised trial. European Journal of Obstetrics and Gynecology and Reproductive Biology. 2022 Jul 1;274:106-12.
34. Elgayar SL. Combined effects of high-intensity focused electromagnetic therapy and pelvic floor exercises on pelvic floor muscles and sexual function in postmenopausal women. Obstet Gynecol Sci. 2024 Nov;67(6):574-85. http://www.ncbi.nlm.nih.gov/pubmed/39500313.
35. Martins JBB, Fausto DY, Sperandio Flores F, Sonza A, Matias TS, Coutinho de Azevedo Guimarães A. Jazz Dance on Menopausal Symptoms and Psychological Aspects: A Randomized Clinical Trial Pilot Study With Follow-Up. Res Q Exerc Sport. 2024. https://pubmed.ncbi.nlm.nih.gov/39321416/.

How to Cite This Article
Karali HF, Farid NFBA, Qi LY, Lim G, Chandrasehkaran L, Sekai ES. Exercise regimens for enhancing sexual libido in menopausal women: A comprehensive systematic literature review study on type and duration. International Journal of Clinical Obstetrics and Gynaecology 2025;9(4):102-107.