

UNIVERSIDADE FEDERAL DE CIÊNCIAS DA SAÚDE DE PORTO ALEGRE
CURSO DE FISIOTERAPIA

Gabriella Moraes Jungblut e Thais Petrocelli Gonçalves

**Sexual Health, Masturbation, and
Menopausal Symptoms in Midlife**

Women: A Cross-Sectional Study

UFCSPA

Universidade Federal de Ciências da Saúde
de Porto Alegre

Porto Alegre

2025

Gabriella Moraes Jungblut e Thais Petrocelli Gonçalves

**Sexual Health, Masturbation, and Menopausal Symptoms in Midlife
Women: A Cross-Sectional Study**

Trabalho de Conclusão de Curso de
Fisioterapia, da Universidade Federal de
Ciências da Saúde de Porto Alegre, como
requisito parcial para obtenção do título de
Bacharel em Fisioterapia.

Orientadora: Dra. Patricia Viana da Rosa
Coorientadora: Dra. Gabriela Tomedi Leites

Porto Alegre

2025

Catálogo na Publicação

Gabriella Moraes Jungblut, Thais Petrocelli Gonçalves
Sexual Health, Masturbation, and Menopausal Symptoms
in Midlife Women: A Cross-Sectional Study / Thais
Petrocelli Gonçalves Gabriella Moraes Jungblut. -- 2025.
40 p. : 30 cm.

Monografia (trabalho de conclusão de curso) --
Universidade Federal de Ciências da Saúde de Porto
Alegre, Curso de Fisioterapia, 2025.

Orientador(a): Patricia Viana da Rosa ;
coorientador(a): Gabriela Tomedi Leites.

1. Menopausa. 2. Masturbação. 3. Sexualidade. 4.
Satisfação sexual. I. Título.

Gabriella Moraes Jungblut e Thais Petrocelli Gonçalves

**Sexual Health, Masturbation, and Menopausal Symptoms in Midlife
Women: A Cross-Sectional Study**

Trabalho final, apresentado à Universidade Federal de Ciências da Saúde de Porto Alegre, como parte das exigências para a obtenção do título de Bacharel em Fisioterapia.

Porto Alegre, 24 de novembro de 2025.

BANCA EXAMINADORA

Prof.^a Patricia Viana da Rosa

Prof.^a Adriana Torres de Lemos

Prof.^a Magda Patrícia Furlanetto

AGRADECIMENTOS

Agradeço à Universidade Federal de Ciências da Saúde de Porto Alegre por ter sido casa e palco para o desenvolvimento de conhecimento e deste trabalho.

Agradeço a todos professores desta instituição, que contribuíram não somente para o conhecimento científico, mas também para um fazer profissional mais humano.

Agradeço às orientadoras Patricia e Gabriela por não somente orientarem o trabalho com maestria, mas serem impulsionadoras da pesquisa científica e da Fisioterapia Pélvica.

Agradeço à Tatiane por colaborar com o trabalho e com a minha formação profissional.

Agradeço também à Michele por fazer parte deste artigo.

Agradeço imensamente ao meu namorado, Eduardo, por ter sido meu porto seguro, meu ouvinte e por sempre acreditar em mim e por isso fazer com que eu também acreditasse. O teu apoio incondicional foi essencial para a conclusão deste trabalho e para a minha formação.

Agradeço à minha família, Janete, Luiz, Roberta e Rafael por sempre me apoiarem, acolherem e vibrarem com as minhas conquistas, além de terem ajudado na divulgação do trabalho. Vocês fazem parte fundamental desta conquista.

Agradeço à minha parceira de curso e amiga Thais por ter desenvolvido este artigo comigo e dividido todo trabalho, angústia e vitórias. A faculdade foi um período muito mais especial porque te tive ao meu lado.

Gabriella Moraes Jungblut

Gostaria de agradecer a todos aqueles que participaram desta jornada de maneira direta e indireta. Quando passamos por etapas modificadoras e importantes como o trabalho de conclusão de curso, essencial para a etapa final da graduação, é imprescindível o apoio recebido. Por isso, quero agradecer à minha parceira e amiga que a faculdade me deu, Gabriella, sendo que ela tornou os processos difíceis mais fáceis, além disso, sem ela não teríamos saído do projeto. Muito obrigada à minha orientadora Patricia e a minha coorientadora Gabriela por me guiarem nessa jornada e me inspirarem a sempre persistir. Também sou grata pelo apoio da Tatiane Gomes de Araújo e da Michele Pinto Farias, que auxiliaram nos momentos necessários. Gostaria de agradecer aos membros da banca por aceitarem participar deste momento tão importante na minha trajetória acadêmica. Agradeço, também, à banca examinadora por aceitar o convite e por dedicar seu tempo e experiência a este momento, suas contribuições valiosas certamente enriqueceram este trabalho. Agradeço também ao meu grupo de estágio, que também estão passando por este momento desafiador e mesmo assim conseguiram deixar a vida

de estagiário mais leve e feliz. Agradeço aos meus pais pela paciência e compreensão quando me fiz ausente ao longo desse ano, vocês foram indispensáveis para que eu concluísse essa jornada. Agradeço ao meu irmão, Rafael, e ao Pedro por sempre me incentivarem em todos os momentos que foram necessários. Obrigada ao meu noivo, Charles, pela paciência e compreensão durante um ano desafiador. A todos os professores desta instituição com quem eu tive a oportunidade de conviver e aprender, meus sinceros agradecimento.

Thais Petrocelli Gonçalves

RESUMO

Objetivo: Investigar as associações entre os sintomas da menopausa e a função sexual em mulheres de 45 a 60 anos, considerando fatores sociodemográficos e comportamentais.

Métodos: Estudo transversal com 124 mulheres de 45 a 60 anos, por meio de questionário on-line autoaplicável abordando características sociodemográficas e comportamentais e as ferramentas Índice de Função Sexual Feminina (FSFI) e a Escala de Avaliação da Menopausa (MRS).

Resultados: Entre as participantes sexualmente ativas, quase metade (49,4%) apresentou disfunção sexual de acordo com FSFI. Mulheres que praticavam automasturbação obtiveram maiores escores no domínio de excitação ($p = 0,004$) e menor prevalência de disfunção sexual (36,6%) ($p = 0,042$). A maioria das participantes (42%) apresentaram sintomas severos da menopausa no escore total da MRS. Mulheres com IMC de sobrepeso apresentaram maiores escores nos sintomas psicológicos da MRS ($p = 0,029$). Mulheres com renda de até 3 salários-mínimos, apresentaram maiores escores da MRS nos sintomas somato-vegetativos ($p = 0,026$). Mulheres com apenas ensino fundamental completo obtiveram pior escore total da MRS ($p = 0,036$). Houve uma correlação negativa significativa entre o Escore total do FSFI e o Escore total da MRS, ou seja, quanto maior a pontuação no FSFI, representando melhor função sexual, menos sintomas da menopausa no escore total ($\rho = -0,396$, $p = 0,003$). A maior idade também teve relação com pior função sexual nos domínios de dor, excitação, lubrificação, orgasmo e no escore total do FSFI (dor: $\rho = -0,209$; $p = 0,049$; excitação: $\rho = -0,318$; $p = 0,002$; lubrificação: $\rho = -0,360$; $p = 0,001$; orgasmo: $\rho = -0,268$; $p = 0,011$; escore total: $\rho = -0,301$; $p = 0,004$). **Conclusão:** Existe uma associação entre a gravidade dos sintomas da menopausa, fatores sociodemográficos e comportamentais, e a presença de disfunção sexual. Portanto, estudos adicionais sobre o manejo dos sintomas da menopausa e melhoria da qualidade de vida durante essa fase, podem impactar positivamente na sexualidade dessas mulheres.

Palavras-chave: Menopausa; masturbação; sexualidade, satisfação sexual;

ABSTRACT

Objective: To investigate the associations between menopausal symptoms and sexual function in women aged 45–60 years, considering sociodemographic and behavioral factors. **Methods:** Cross-sectional study with 124 women aged 45–60 years, assessed through a self-administered online questionnaire addressing sociodemographic and behavioral characteristics, the Female Sexual Function Index (FSFI), and the Menopause Rating Scale (MRS). **Results:** Among sexually active participants, almost half (49.4%) had sexual dysfunction according to the FSFI. Women who practiced self-masturbation showed higher scores in the arousal domain and a lower prevalence of sexual dysfunction (36.6%) ($p = 0.004$). Most participants (42%) had severe menopausal symptoms in the total MRS score. Women classified as overweight by BMI had higher scores in the psychological symptoms domain of the MRS ($p = 0.029$). Women with a household income of up to three minimum wages had higher scores in the somato-vegetative symptoms domain of the MRS ($p = 0.026$). Women with only elementary education had poorer total MRS scores ($p = 0.036$). A significant negative correlation was found between the total FSFI and the total MRS score, indicating that better sexual function was associated with fewer menopausal symptoms total ($\rho = -0.396$, $p = 0.003$). Older age was also associated with poorer sexual function in the pain, arousal, lubrication, orgasm domains, and in the total FSFI score (pain: $\rho = -0.209$; $p = 0.049$; arousal: $\rho = -0.318$; $p = 0.002$; lubrication: $\rho = -0.360$; $p = 0.001$; orgasm: $\rho = -0.268$; $p = 0.011$; total score: $\rho = -0.301$; $p = 0.004$). **Conclusion:** There is an association between the severity of menopausal symptoms, sociodemographic and behavioral factors, and the presence of sexual dysfunction. Therefore, further studies on the management of menopausal symptoms and improved quality of life during this phase may positively impact the sexuality of these women.

Keywords: menopause; masturbation; sexuality; sexual satisfaction.

LISTA DE TABELAS

Tabela 1 – Características sociodemográficas e comportamentais, função sexual (FSFI) e sintomas da menopausa (MRS) de mulheres brasileiras de 45 a 60 anos.....	23
Tabela 2 – Resultados do FSFI.....	25
Tabela 3 – Distribuição dos escores da Escala de Avaliação da Menopausa (MRS) de acordo com a presença ou ausência de disfunção sexual avaliada pelo Índice de Função Sexual Feminina (FSFI) em mulheres brasileiras de 45 a 60 anos (n=124).....	26
Tabela 4 – Escores da Escala de Avaliação da Menopausa (MRS) de acordo com o tempo desde a última relação sexual em mulheres brasileiras de 45 a 60 anos (n=124).....	27

LISTA DE ABREVIATURAS E SIGLAS

MRS - Menopause Rating Scale

FSFI - Female Sexual Function Index

IMC - Índice de Massa Corporal

TCLE - Termo de Consentimento Livre e Esclarecido

SUMÁRIO

1. INTRODUÇÃO.....	14
2. MÉTODOS.....	14
2.1. DESENHO DO ESTUDO.....	14
2.2. PROCEDIMENTOS.....	14
2.3. ANÁLISE ESTATÍSTICA.....	15
3. RESULTADOS.....	15
4. DISCUSSÃO.....	17
5. CONCLUSÃO.....	20
6. REFERÊNCIAS.....	21
7. TABELAS.....	23
8. ANEXOS.....	28
8.1 ANEXO A - Regras para submissão Revista Menopause.....	28

O presente trabalho é um artigo científico em processo de submissão na Revista *Menopause*, fator de impacto 3.0 (JIF).

Title:

Sexual Health, Masturbation, and Menopausal Symptoms in Midlife Women: A Cross-Sectional Study

Running Title:

Sexual Health and Menopausal Symptoms

Authors:

Gabriella M. Jungblut¹, PT; Thais P. Gonçalves¹, PT; Tatiane G. de Araujo², PhD; Michele P. Farias¹, PT; Gabriela T. Leites¹, PhD; Patricia V. da Rosa¹, PhD

Institutions

1. Department of Physiotherapy, Universidade Federal de Ciências da Saúde de Porto Alegre, Porto Alegre, Rio Grande do Sul, 90050-170, Brazil

2. Service of Care Integrate the Sexual Health, Hospital Materno Infantil Presidente Vargas, Secretaria Municipal de Saúde, Prefeitura de Porto Alegre, Porto Alegre, Rio Grande do Sul, 900350-076, Brazil

Funding:

The authors declare that the study did not receive any funding.

Conflict of Interest:

The authors declare that they have no conflicts of interest related to this article.

Presentation at Meetings:

This study has not been presented at any national or international meeting, and no abstract has been published from this work.

Corresponding Author:

Gabriela Tomedi Leites, PhD

Federal University of Health Sciences of Porto Alegre

Sarmiento Leite Street, 245, Centro Histórico

Porto Alegre – RS, 90050-170, Brazil

Email: gabriela.tomedi@ufcspa.edu.br

References

1. World Health Organizations: Defining Sexual Health. 2010. Sexual and Reproductive Health and Research. Available at: <https://www.who.int/teams/sexual-and-reproductive-health-and-research/key-areas-of-work/sexual-health/defining-sexual-health>. Accessed April 26, 2023.
2. Dabrowska-Galas M, Dabrowska J, Michalski B. Sexual Dysfunction in Menopausal Women. *Sexual Medicine. Sex Med.* 2019;7(4):472-9. doi:10.1016/j.esxm.2019.11.003
3. Armeni A, Armeni E, Augoulea A, et al. Climacteric symptoms, age, and sense of coherence are associated with sexual function scores in women after menopause. *J Sex Med.* 2023;20(3):313-323. Available at: doi:10.1093/jsxmed/6991245
4. Heinemann LA, Potthoff P, Schneider HP. International versions of the Menopause Rating Scale (MRS). *Health Qual Life Outcomes.* 2003;1:28. doi:10.1186/1477-7525-1-28
5. Avis NE, Brockwell S, Randolph JF, et al. Longitudinal changes in sexual functioning as women transition through menopause: results from the Study of Women's Health Across the Nation. *Menopause.* 2009;16(3):442-52. doi:10.1097/gme.0b013e31818b1f90
6. Von Hippel C, Adhia A, Rosenberg A, Austin SB, Partridge A, Tamimi R. Sexual Function among Women in Midlife: Findings from the Nurses' Health Study II. *Womens Health Issues.* 2019 Jul-Aug;29(4):291–8. doi:10.1016/j.whi.2019.04.006.
7. Aizenberg D, Siboni G, Apter A, Sela T. Association Between Religiosity and Female Sexual Pain: The Moderating Role of Psychological Distress. *J Relig Health.* 2024;63(2):1219–1232. doi:10.1007/s10943-024-02130-4.
8. Urrunaga-Pastor D, Mezones-Holguín E, Blümel JE, et al. Female orgasmic dysfunction and severe climacteric symptomatology in women aged 40 to 59 years: an independent association from an analysis of a multicenter Latin American study. *Menopause.* 2022;29(6):654–663. doi:10.1097/GME.0000000000001973.
9. Costa JG, Rodrigues RM, Puga GM, Cheik NC. Does Obesity Aggravate Climacteric Symptoms in Postmenopausal Women? *Rev Bras Ginecol Obstet.* 2022;44(6):586-92. doi:10.1055/s-0042-1759725
10. Lavanya N, Sathyaprabha B. Physical activity, anthropometric measurements, quality of life and menopausal symptoms among South-Indian women. *Prz Menopauzalny.* 2023;22(4):191-5. doi:10.5114/pm.2023.133867
11. Sreenivas SB, Kashyap PB. Effects of Obesity on Severity of Menopausal Symptoms in Urban and Rural Women. *J Midlife Health.* 2022;13(4):304-9. doi:10.4103/jmh.jmh_150_21
12. Mankar S, Johnson AR, Chawla PS, Basannar D. Needs assessment study for management of menopause in the community. *J Family Med Prim Care.* 2024;13(4):1371-8. doi:10.4103/jfmpe.jfmpe_2463_22

13. Abdel-Salam DM, Mohamed RA, Alruwaili RR, Alhablani FS, Aldaghmi RM, ALghassab RE. Postmenopausal Symptoms and Their Correlates among Saudi Women Attending Different Primary Health Centers. *Int J Environ Res Public Health*. 2021;18(13). doi:10.3390/ijerph18136911
14. Cagnacci A, Venier M, Xholli A, Paglietti C, Caruso S; ANGEL Study group. Female sexuality and vaginal health across the menopausal age. *Menopause*. 2020 Jan;27(1):14–19. doi:10.1097/GME.0000000000001427. doi:10.1097/GME.0000000000001427
15. Yağmur Y, Orhan İ. Examining sexual functions of women before and after menopause in Turkey. *Afr Health Sci*. 2019;19(2):1881-7. doi:10.4314/ahs.v19i2.45
16. Peeyanjarassri K, Liabsuetrakul T, Soonthornpun K, Choobun T, Manopsilp P. Sexual functioning in postmenopausal women not taking hormone therapy in the Gynecological and Menopause Clinic, Songklanagarind Hospital measured by Female Sexual Function Index questionnaire. *J Med Assoc Thai*. 2008;91(5):625-632. PMID:18672623 (no DOI disponível)
17. Pérez-Herrezuelo I, Aibar-Almazán A, Martínez-Amat A, et al. Female Sexual Function and Its Association with the Severity of Menopause-Related Symptoms. *Int J Environ Res Public Health*. 2020 Oct 3;17(19):7235. doi:10.3390/ijerph17197235. doi:10.3390/ijerph17197235
18. Cea García J, Márquez Maraver F, Rubio Rodríguez MC. Cross-sectional study on the impact of age, menopause and quality of life on female sexual function. *J Obstet Gynaecol*. 2022;42(5):1225-32. doi:10.1080/01443615.2021.1907841
19. Cagnacci A, Venier M, Xholli A, Paglietti C, Caruso S, Study A. Female sexuality and vaginal health across the menopausal age. *Menopause*. 2020;27(1):14-9. doi:10.1097/GME.0000000000001427
20. Kong F, Wang J, Zhang C, Feng X, Zhang L, Zang H. Assessment of sexual activity and menopausal symptoms in middle-aged Chinese women using the Menopause Rating Scale. *Climacteric*. 2019;22(4):370-6. doi:10.1080/13697137.2019.1602192

ANEXOS

ANEXO A - Regras para submissão da Revista Menopause

29/10/2025, 18:05

Editorial Manager - Menopause

Menopause

Online Submission and Review System

Author Resources

[Instructions for Authors \(this page\)](#)

[Reprint Ordering](#)

[Permissions Requests](#)

Scope

Menopause is the official journal of The North American Menopause Society (NAMS). A peer-reviewed scientific journal, *Menopause* provides a forum for new research, applied basic science, and clinical guidelines on all aspects of menopause. The scope of the Journal extends beyond gynecology, encompassing multidisciplinary areas that include internal medicine, family practice, medical subspecialties such as cardiology and geriatrics, epidemiology, pathology, physiology, sociology, psychology, anthropology, and pharmacology.

Manuscript Submission

A submitted manuscript must be an original contribution not previously published (except as an abstract or preliminary report), must not be under consideration for publication elsewhere, and, if accepted, must not be published elsewhere in similar form, in any language, without the consent of Wolters Kluwer Health, Inc. Each person listed as an author is expected to have participated in the study to a significant extent. Although the editors and referees make every effort to ensure the validity of published manuscripts, the final responsibility rests with the authors, not with the Journal, its editors, or the publisher.

All manuscripts must be submitted on-line through the Menopause Editorial Web Site (<http://meno.edmgr.com>). **First-time Users:** Click the Register Button from the main menu and enter the requested information. Upon successful registration, you will receive an e-mail with your user name and password. Print a copy of this information for future reference. Once you have received a user name and password, never register again, even if your status changes (as author, reviewer, or editor). **Authors:** Click the Login Button from the menu at the top of the page and enter the system as an Author. **Upload text, figures and tables as separate files. Do not upload your text as a PDF and do not import figures or tables into the text document.** Submit your manuscript according to the author instructions. This Web site also provides an opportunity to track the progress of your manuscript through the peer review process. If you have any questions, please contact:

Editorial Office, *Menopause*

E-mail: menopausejournal@menopause.org

Preparation of Manuscripts

All manuscripts submitted to *Menopause* should adhere to the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals." Manuscripts must be written in English. Authors whose native language is not English should have their manuscripts checked for correct English grammar prior to submission. Upon submission, if the grammar is considered to be unsuitable by the Editor-in-Chief, the paper will be returned to the corresponding author for necessary revisions prior to being sent out for peer review. All text is subject to editorial revision and review. The author should retain a copy of the complete submission for reference.

Authorship

Please review the authorship guidelines set forth by the International Committee of Medical Journal Editors (ICMJE) to ensure that all individuals listed as authors meet the following criteria:

- The individual must have made substantial contributions to the conception or design of the study; or contributed to the acquisition, analysis or interpretation of the data
- Drafted or revised the paper for important intellectual content
- Given final approval of the version to be published
- Agree to be accountable for all aspects of the work by ensuring that questions related to the accuracy/integrity of any part of the study will be appropriately resolved

Individuals who do not meet the above criteria to be considered for authorship, but who were involved in the manuscript in some way, may be included in an Acknowledgements section at the end of the manuscript before the References section.

Use of Artificial Intelligence (AI)

Authors who use AI tools in the writing of a manuscript, production of images or graphical elements of the paper, or in the collection and analysis of data, must be transparent in disclosing in the Materials and Methods section of the paper how the AI tool was used and which tool was used. Authors are fully responsible for the content of their manuscript, even those parts produced by an AI tool, and are thus liable for any breach of publication ethics.

Details of Style

Please follow the current guidelines set by the *American Medical Association Manual of Style*. The manuscript must include (in the following order): the title page, abstract, text, acknowledgments, references, and if applicable, tables, figure legends, and figures.

The article will be typeset and should not contain any extraneous formatting instructions. For example:

- Use hard carriage returns only at the end of paragraphs and display lines (eg, titles, subheadings)
- Do not use an extra hard return between paragraphs
- Do not use tabs or extra space at the start of a paragraph or for list entries
- Do not indent run over lines in references
- Turn off line spacing
- Turn off hyphenation and justification
- Do not specify page breaks, page numbers, or headers
- Do not specify typeface
- Care should be taken to correctly enter "one" (1) and lower case "el" (l), as well as "zero" (0) and capital "oh" (O).

Please observe the following conventions:

- Use a single hyphen with space before it for a minus sign, use a double hyphen (with space before and after) to indicate a "long dash" in text, use a single hyphen (with no extra space) to indicate a range of numbers (eg, "23-45").
- Illustrations and tables will be handled conventionally. However, figure and table legends should be included at the end of the electronic file.
- Nonstandard characters (Greek letters, mathematical symbols, etc.) should be coded consistently throughout the text. Please make a list of such characters and provide a listing of the codes used.

Title Page: The title page must contain, in order, the following:

- The paper's full title
- A running title of no longer than 45 characters and spaces combined
- Author line with the first name, middle initial, last name, credentials (eg, MD, PhD)
- Author affiliations listed in the same order as the author line
- Any source(s) of financial support for the manuscript being considered, if none, please state so
- Conflict of interest/financial disclosure, if none please state so; Please note any relevant COI/financial disclosures reported on the title page should also be disclosed when each author completes the online form as part of the author declaration process.
- Disclaimers, if any
- Whether the manuscript was presented in any format at a national meeting or whether an abstract was published from this study.
- The title page must also include disclosure of funding received for this work from any of the following organizations: National Institutes of Health (NIH); Wellcome Trust; Howard Hughes Medical Institute (HHMI); and other(s).
- Name, address, phone and fax number, and e-mail address of the author to whom reprint requests should be addressed (if reprints will not be available, please state so). Indicate which author should receive correspondence and provide that person's preferred mailing

address, telephone and fax numbers, and e-mail address if different from that indicated by the authors for reprint requests.

Structured Abstract: On the next page, for Original Research articles, Basic Science articles, Case Reports, and Brief Reports provide an abstract of 250 words or less, organized under the following headings: Objective, Methods, Results, and Conclusions. Also provide with the abstract no more than six key words for database searching. For review articles please follow the specific instructions for narrative and systematic reviews with respect to the format of the abstract. Personal Perspectives require an abstract, but we do not require that it be structured.

Text: Begin the body of the manuscript on the next page following the abstract. Although not appropriate for some articles, most regular manuscripts should adhere to the following sequence: Introduction, Methods, Results, Discussion, Conclusions, References, and Figure Legends. See instructions above for Narrative and Systematic reviews for specific sequence for these article types.

Drug Names: Use only generic names when referring to drugs. If a trade name is necessary for clarity, place it in parentheses after the generic name. Do not use registration marks or trademarks.

Terminology: When describing postmenopausal hormone therapy, use the words "estrogen plus progestogen therapy" (abbreviated EPT), to describe this combination hormone therapy or "estrogen therapy" (abbreviated ET), to describe treatment with this hormone alone. "Hormone therapy" (abbreviated HT), should be used as an umbrella term to describe both ET and EPT. Use the word "progestogen" as the umbrella term for progestin and progesterone. Use "progestin" and "progesterone" only for those specific agents. When referring to therapy that does not include hormones, the term "nonhormone therapy" should be used to describe this type of treatment.

Abbreviations: Keep abbreviations to a minimum and define each at its first use. Do not use abbreviations in the abstract. Abbreviate units of measure only when used with numbers and refer to the AMA Manual of Style for standard scientific abbreviations.

Conflicts of Interest: Authors must state all possible conflicts of interest on the title page of the manuscript, including financial, consultant, institutional and other relationships that might lead to bias or a conflict of interest. If there is no conflict of interest, this should also be explicitly stated as "none declared". All sources of funding should be acknowledged in the manuscript. All relevant conflicts of interest and sources of funding should be included on the title page of the manuscript with the heading "Financial Disclosures/Conflicts of Interest:". For example: Financial Disclosures/Conflicts of Interest: A has received honoraria from Company Z. B is currently receiving a grant (#12345) from Organization Y, and is on the speaker's bureau for Organization X – the CME organizers for Company A. For the remaining authors none were declared.

The copyright transfer agreement/conflicts of interest form is made available to the submitting author within the Editorial Manager submission process. Co-authors will automatically receive an email with instructions on completing the form upon submission of the paper by the corresponding author.

Summary sentences for Table of Contents: A brief summary of the study - no more than two sentences - is required for all submissions **except** Editorials and Letters to the Editor. This summary will be utilized in the Table of Contents for each issue.

References: The number of references should not exceed 75 whenever possible (see specific reference guidelines for narrative and systematic reviews below). Accuracy of reference data is the responsibility of the author. Number references in the order of their use in the text; do **not** alphabetize. Identify references in the text with Arabic superscript numerals.

A complete reference included the following:

- List all authors when six or fewer; when seven or more, list only the first three and "et al."
- Provide article titles and subtitle, if any..

- Abbreviated name of the journal. Refer to the *List of Journals Indexed in Index Medicus* for abbreviations of journal names.
- Year, volume and page range and DOI. The DOI should be the last item listed in the reference and should not be followed by a period.
- If a DOI is not available for an online journal article a URL and accessed date may be used. However, do not include a URL and accessed date if a DOI is available.
- If including a URL in a reference, please use the URL that will take the reader directly to the article. Do not include a long string search.

The following are examples of correct format. Refer to the current *AMA Manual of Style* for other examples.

Journal Article

1. Shifren JL, Gass ML; NAMS Recommendations for Clinical Care of Midlife Women Working Group. The North American Menopause Society recommendations for clinical care of midlife women. *Menopause* 2014;21:1038-1062. doi: 10.1097/GME.0000000000000319

Chapter in a Book

2. Byrne JLB. The role of oral contraceptives. In: Wilansky S., Willerson JT, editors. *Heart Disease in Women*. New York, NY: Churchill Livingstone, 2002:122-127.

Book

3. McPherson K, Gon G, Scott M, ed. *International Variations in a Selected Number of Surgical Procedures*. Paris: OECD Publishing; 2013.

Web Site

4. Prasterone (dehydroepiandrosterone) in treating postmenopausal cancer survivors with vaginal symptoms. Available at: <https://clinicaltrials.gov/ct2/show/NCT01376349>. Accessed December 14, 2021.

5. The North American Menopause Society. Five solutions for menopause symptoms.. Available at: <http://www.menopause.org/for-women/menopauseflashes>. Accessed November 21, 2021.

Tables and Figures

Tables: Tables should be in a separate file from the body of the paper. Tables should be in .doc files only. Tables should not be in excel files. Place explanatory information in footnote. For footnotes, use the following designations: a, b, c, d, e, f. Do not use numbers or symbols to designate footnotes.

Digital Figures:

Creating Digital Artwork

1. Learn about the publication requirements for Digital Artwork: <http://links.lww.com/ES/A42>
2. Create, Scan and Save your artwork and compare your final figure to the Digital Artwork Guideline Checklist (below).
3. Upload each figure to Editorial Manager in conjunction with your manuscript text and tables.

Digital Artwork Guideline Checklist

Here are the basics to have in place before submitting your digital art to *Menopause*:

- Artwork should be saved as TIFF, EPS, or JPEG. MS Office (DOC, DOCX, PPT, XLS) and PDF files are NOT acceptable.
- Crop out any white or black space surrounding the image.
- Diagrams, drawings, graphs, and other line art must be vector or saved at a resolution of at least 1200 dpi. If created in an MS Office program, send the native (DOC, PPT, XLS) file.
- Photographs, radiographs and other halftone images must be saved at a resolution of at least 300 dpi.
- Photographs and radiographs with text must be saved as postscript or at a resolution of at least 600 dpi.

- Each figure must be saved and submitted as a separate file. Figures should not be embedded in the manuscript text file.

Remember:

- Cite figures consecutively in your manuscript.
- Number figures in the figure legend in the order in which they are discussed.
- Upload figures consecutively to the Editorial Manager web site and enter figure numbers consecutively in the Description field when uploading the files.

Article Types:

Brief Reports/Case Reports: Reports should present focused, new clinical or investigational observations in a format of 9–12 double spaced pages of text (including references) and a maximum of two illustrations or tables. Please note: Case Reports require you to upload a copy of the de-identified consent form for any patients discussed in the paper.

Original Articles/Basic Science Articles: Articles covering both basic science and clinical topics are welcome. In most cases, each article receives at least two editorial peer reviews and one statistical review. Basic science research papers must include a paragraph at the end of the Discussion section under the sub header *Potential Clinical Value* which clearly discusses the possible clinical implications of your research.

Review Articles: Effective January 1, 2020 all Narrative Review papers and Systematic Review papers must conform to the following instructions upon submission or the paper will be sent back for revision before being sent out for peer review.

Narrative Review:

Narrative Reviews provide an up-to-date review on a topic of general common interest from the perspective of internationally recognized experts in menopause. The focus is an update on current understanding of the physiology of diseases or conditions, diagnostic considerations, mechanisms and/or therapies. The review should address a specific question relevant to clinical practice. Narrative Reviews do not require (but can include) a systematic review of the literature. Best evidence available must support recommendations and should rely on recent systematic reviews and/or guidelines if available. They can emphasize cause, diagnosis, prognosis, therapy, prevention, mechanisms and/or data from qualitative studies.

Typical length is 2000-3500 words (maximum) with no more than 5 tables and/or figures, and no more than 50-75 references. For an example of a published Narrative Review, see Sriprasert I et al Menopause 2016 Mar 23(3):343-351. Please follow the general Details of Style for manuscripts submitted to our journal, except for the following specific Narrative Review guidelines below:

Specific Components of a Narrative Review

Abstract (300 words) consisting of the following sub headers:

Importance and Objective: An overview of the topic and discussion of the main objective or reason for this review.

Methods: The data sources used to arrive at principal observations and findings of the review.

Discussion and Conclusion: The information must support the conclusions, along with clinical applications. How are the findings clinically relevant?

Key Words: Please provide no more than six key words for database searching.

Introduction (150-250 words)

The first 2 to 3 sentences should draw in readers, so they want to continue reading the article. It should establish the importance of the review. Reviews should include the clinical question or issue and its importance for general, specialty, or public health practice of issues related to menopause. The first paragraph should provide a general summary of the clinical problem (e.g., hot flashes). The next paragraph should focus on the specific aspect of the clinical

problem the article will explore (e.g., treatments for hot flashes). Briefly summarize the epidemiology. This information should include prevalence, incidence, and perhaps discussion of the presence and frequency of any relevant subpopulations and any geographic or seasonal variations of the disease. The third paragraph should discuss exactly what material is to be covered in the review (e.g., hot flash treatments).

Methods (150-250 words)

A Methods section should be included to summarize the methods of the literature search. Briefly describe the characteristics of the literature searched and included in the review, including the bibliographic databases and other sources searched, search terms used, dates included in the search, and any process used to evaluate the literature.

Discussion/Observations (1000-1250 words)

The principal observations of the Narrative Review generally may include the subsections listed below, although each section may not be necessary for some topics. The word counts following each subsection are suggested to assist with keeping the overall Discussion/Observations section limited to 1000-1250 words.

Pathophysiology (150-250 words). Provide a brief overview of the pathophysiology of the disease/disorder/health issue. The intent is to provide readers with sufficient background information about the underpinnings of a disease or condition to provide context for the rest of the article.

Clinical Presentation (150-250 words). Briefly describe the clinical characteristics that result in a patient seeking medical care for the condition or what features of the disease should lead to evaluation and /or treatment.

Assessment and Diagnosis (250-300 words). If appropriate, describe the clinical examination for evaluation of the disease and explain the most salient physical examination findings. If laboratory or imaging studies are necessary, provide the sensitivity, specificity, and diagnostic accuracy of these tests and consider providing positive and negative likelihood ratios. Sequences of diagnostic tests can be presented as algorithms or in tables. For narrative reviews of studies that do not examine diseases or health problems, e.g. reviews of women's lived experience of menopause, behavioral interventions to manage symptoms, describe relevant clinical context in which these may be useful.

Treatment (250-500 words). Treatments should be based on the most recently available and highest level of evidence. Treatment options should be summarized in the text and presented in detail in tables along with an indication of the strength of evidence supporting the individual treatments. In general, treatment recommendations should be supported by a systematic review or a high-quality guideline. If possible, the costs for various treatments should be discussed.

Prognosis (100-150 words). A section outlining the overall prognosis for the condition, once treated, should be included.

Conclusions

Include a 2- to 3-sentence summary of the major conclusions of the review.

Tables

For most Narrative Reviews, tables should be included that summarize the epidemiology, diagnostic tools, and/or therapies available for the disease/condition/health issue. In some cases, these topics may not all be relevant to the review topic and tables may be appropriately modified to fit the review. Include a fourth table that compares the findings of the review and current clinical practice recommendations or diagnostic and therapeutic uncertainty or controversies.

Table 1: Major epidemiologic and burden of disease facts

Table 2: Major diagnostic tools available

Table 3: Major therapies available

Table 4: Current clinical practice recommendations and/or diagnostic and therapeutic uncertainty, and controversies

Tables summarizing treatments should have information organized by category of treatment and then by individual treatments. Columns may include the treatment, strength of evidence supporting the treatment, the effect of the treatment (preferably shown as the treatment's effect as compared to control on the measured outcome together with 95% confidence intervals), adverse effects, and very brief explanatory comments, if necessary. Lengthy text-based tables are to be avoided.

Figures

Figures that illustrate pathophysiology or clinical presentation may be included. A figure title and legend should be included.

Systematic Review (with and without meta-analysis):

Systematic reviews are critical assessments of the literature and data sources pertaining to clinical topics. They often, yet not exclusively, emphasize factors such as cause, diagnosis, prognosis, therapy, prevention or mechanism of a disease or condition. Systematic Reviews are published as Systematic Reviews without meta-analysis; those with meta-analysis are published as Systematic review with meta-analysis. Systematic Reviews should address a specific question or issue that is relevant for clinical practice and provide an evidence-based, balanced, patient-oriented review on a focused topic. Follow [EQUATOR Reporting Guidelines \(https://www.equator-network.org\)](https://www.equator-network.org).

Please follow the Details of Style, except for the following specific guidelines below:

The basic structure in reporting Systematic Reviews should include: Key Points (75-100 words); Abstract (structured abstract of no more than 350 words); Introduction and Objective (150-250 words); Methods (150-250 words); Results (1000-1250 words) with the following subsections, if appropriate, depending on the specific question or issue addressed: Pathophysiology, Clinical Presentation, Assessment and Diagnosis, Treatment, and Prognosis; Discussion (1000 words); and Conclusions (2-3 sentences).

Maximum length: 3500 words of text (not including abstract, tables, figures, acknowledgments, references, and online-only material), with no more than a total of 5 tables and/or figures and no more than 50-75 references. For an example of a published Systematic Review, see Menopause 2017 Dec 24(12):1404-13 and below for the general structure examples of a Systematic Review article.

Specific Components of a Systematic Review:

Key Points: (75-100 words)

Provide a quick structured synopsis and include three key points: Question, Findings, and Meaning. Limit to no more than 100 words. This is different from the Abstract.

Key Points Example:

Question/Objective: What is the effect of programmed exercise for at least 12 weeks, in postmenopausal women on insulin sensitivity?

Findings: Seven RCTS (n = 580) evaluating the effects of programmed exercise were included. Exercising for 3 to 4 months significantly lowered insulin levels and HOMA-IR values, BMI waist circumference, and percentage body fat mass. Exercising for 6 to 12 months lowered waist circumference in postmenopausal women. Heterogeneity of effects among studies was moderate to low.

Meaning: Based on the results of meta-analysis, exercise improves insulin resistance. Longer duration of exercise may be necessary to optimize body fat distribution.

Abstract: (350 words)

A structured abstract is required; Systematic Review articles should include a structured abstract of no more than 350 words using the headings listed below:

Importance: Include 1 or 2 sentences describing the clinical question or issue and its importance in clinical practice or public health.

Objective: State the precise primary objective of the review. Indicate whether the review emphasizes factors such as cause, diagnosis, prognosis, therapy, prevention or mechanism. Include information about the specific population, intervention, exposure, tests and outcomes, where pertinent.

Evidence Review: Describe the information sources used, including the search strategies, years searched, and other sources of material, such as subsequent reference searches of retrieved articles. Methods used for inclusion of identified articles and quality assessment need to be displayed and explained.

Findings: Include a brief summary of the number of articles included, numbers of various types of studies (e.g., clinical trials, cohort studies), and numbers of patients/participants represented by these studies. Summarize the major findings of the review of the clinical issue or topic in an evidence-based, objective, and balanced fashion, with the highest quality evidence available receiving the greatest emphasis. Provide quantitative data or qualitative data depending upon focus of the review.

Conclusions and Relevance: The conclusions should clearly answer the questions posed if applicable, based on best available evidence, and emphasize how clinicians should apply current knowledge. Conclusions are based on results described in the Abstract Findings subsection.

Introduction: (150-250 words)

The first 2 to 3 sentences of the Introduction should draw in readers such that they want to continue reading the article and should establish the importance of the Review. Reviews should include the clinical question or issue and its importance for general, specialty, or public health practice of menopause and related issues. For systematic reviews of pharmacotherapy, devices, or other biomedical agents, the first paragraph should provide a general summary of the clinical problem (e.g., dyspareunia). The next paragraph should focus on the specific aspect of the clinical problem the article will explore (e.g., treatments for dyspareunia). The epidemiology of the disease or condition should be briefly summarized and generally should include disease prevalence and incidence. The third paragraph should discuss exactly what material would be covered in the Review (e.g., dyspareunia treatments reported in trials and/or longitudinal studies with a minimum follow-up of 12 weeks including 80% of the original cohort).

Methods/Literature Search: (150-250 words)

The literature search should be as current as possible, ideally with end dates within a month or two before manuscript submission. A search of the primary literature should be conducted, including multiple bibliographic databases (e.g., PubMed/MEDLINE, Embase, CINAHL, and PsycINFO). This can be facilitated by collaborating with a medical librarian to help with the search.

Briefly describe characteristics of the literature searched and included in the review, following the [PRISMA reporting guidelines](http://www.equator-network.org/reporting-guidelines/prisma/) (<http://www.equator-network.org/reporting-guidelines/prisma/>), including the bibliographic databases and other sources searched, search terms used, dates included in the search, date the literature search was conducted, screening process, language limitations, and inclusion and exclusion criteria. The rating system used to evaluate the quality of the evidence need to be specified and the methods used to evaluate quality should be described, including number of quality raters, how agreement on quality ratings was assessed, and how disagreements on quality ratings were resolved.

The highest-quality evidence (e.g., randomized clinical trials, meta-analyses, systematic reviews, and high-quality prospective cohort studies) should receive the greatest emphasis. Clinical practice guidelines should not be used as a primary component of the evidence base for the systematic review, although relevant guidelines should be addressed in the Discussion section of the article.

The search methods must be described in enough detail so the search can be reproduced based on the information provided in the manuscript. A summary of the methods of the literature search including this information should be included. A PRISMA-style [flow diagram](#) showing this information should also be included. In addition, a completed [PRISMA checklist](#) should be submitted for the items completed that apply to systematic reviews (the checklist items that apply to meta-analyses do not need to be completed for systematic reviews without meta-analysis). The checklist will be used during review but will not be published.

Results: (1000-1250 words)

Briefly report the results of the literature search, including the number of articles reviewed and included, numbers of various types of studies (e.g., clinical trials, longitudinal studies) included, and the aggregate numbers of patients included in the reviewed studies. Also, provide a brief summary of the quality of the evidence. Details of this information can be included in a PRISMA-style flow diagram and table.

Next, the subsections listed below should generally appear in the Results sections of most reviews although not all these subsections may be necessary for some topics, depending on the specific question or issue addressed. The word counts following each subsection are suggested to assist with keeping the overall Results section limited to 1000-1250 words.

Pathophysiology: (150-250 words). Provide a brief overview of the pathophysiology of the disease/condition. The intent is to provide readers with enough background information about the underpinnings of a disease or condition to provide context for the rest of the article. For mechanistic reviews, how does this work?

Clinical Presentation: (150-250 words). Briefly describe the clinical characteristics that result in a patient seeking medical care for the condition or what features of the disease/condition should lead a clinician to evaluate or treat it.

Assessment and Diagnosis: (250-300 words). As appropriate for the focus of the review, describe the clinical examination for evaluation of the disease/condition and explain the most salient findings. If laboratory or imaging studies are necessary, provide the sensitivity, specificity, and diagnostic accuracy of these tests and consider providing positive and negative likelihood ratios. Sequences of diagnostic tests are best presented as algorithms or in tables.

Treatment: (250-500 words). Treatments should be based on the most recently available and highest level of evidence. Treatment options should be summarized in the text and presented in detail in tables along with an indication of the strength of evidence supporting the individual treatments. In general, treatment recommendations should be supported by a systematic review of the literature, either performed by the author of the Review or published in the form of a high-quality review or guideline. If possible, the costs for various treatments should be discussed.

Prognosis: (100-150 words). A section outlining the overall prognosis for the condition, once treated, should be included.

Discussion (Approximately 1000 words): Key findings should be summarized in the first paragraph of the Discussion section. All statements made should be supported by evidence. Do not simply list findings from the studies reviewed. This information is best presented in tables. The Discussion should provide a critical synthesis of data and information based on the results of the review, an assessment of the quality of studies summarized, and a description of how studies can be interpreted and used to guide clinical practice. The limitations of the evidence and of the review should be discussed as well as gaps in evidence. Often it is useful to have the results of high-quality studies discussed in contrast to those rated less highly. A discussion of controversial or unresolved issues and topics in need of future research also should be included.

Clinical Practice Guidelines: In the Discussion section, describe current clinical practice guidelines or approaches relevant to the topic of the review, and whether the conclusions of the review agree or disagree with the current thinking. If there is more than one guideline, a table should be prepared comparing the major features that differ between the guidelines. Guideline quality should be discussed using the standards outlined in **Equator-Network.org** (<https://www.equator-network.org>).

Conclusions:

Include a 2- to 3-sentence summary of the major conclusions of the review.

Tables:

Construct tables that summarize the search results. Tables summarizing treatments should have information organized by category of treatment and then by individual treatments. Columns should include the name of the treatment, strength of evidence supporting the treatment, the treatment's effect (preferably shown as the treatment's effect as compared to control on the measured outcome together with 95% confidence intervals), adverse effects, and very brief comments, if necessary.

Ratings of the quality of the evidence. Tables summarizing the treatments and outcomes and their assessment (measures) should be included for clinical trials, samples studied, etc. Tables summarizing evidence should include ratings of the quality of the evidence. Use the rating scheme listed below with ratings of 1-5 for Reviews that include individual studies (modified from the [Oxford Centre for Evidence-based Medicine](#)) for ratings of individual studies.

Quality Rating Scheme for Studies and Other Evidence

1. Properly powered and conducted randomized clinical trial; systematic review with meta-analysis
2. Well-designed controlled trial without randomization; prospective comparative cohort trial
3. Case-control studies; retrospective cohort study
4. Case series with or without intervention; cross-sectional study
5. Opinion of respected authorities; case reports

There are several other preferred systems for rating the quality of evidence in Review articles. For Reviews that synthesize findings from numerous studies into a single summary recommendation, use the rating scale shown above or the [Oxford Centre for Evidence-based Medicine's Levels of Evidence and Grades of Recommendation](#). For reviews that include diagnostic studies, use: [The Rational Clinical Examination Levels of Evidence table](#).

Figures:

A PRISMA-style flow diagram detailing the results of the literature search and/or detailing the quality of the evidence should be included. Additional figures that illustrate critical components may be considered.

Letters to Editor: Letters to the Editor are encouraged and should be submitted in response to work that has recently been published in *Menopause*. All letters must be submitted online through the Menopause Editorial web site and addressed to the Editor-in-Chief. (see instructions for Manuscript Submission). Letters should not exceed 400 words when possible (excluding references, names/addresses). When possible, references should not exceed five, with the related article being one of the five citations. Complete references must be supplied in the proper format (see references section under Details of Style). If the letter is accepted for publication the authors of the article that prompted the letter will be given an opportunity to reply. Only one letter may be submitted by any single author or group of authors on any one published paper.

Supplemental Digital Content (SDC): Authors may submit SDC via Editorial Manager to LWW journals that enhance their article's text to be considered for online posting. SDC may include standard media such as text documents, graphs, audio, video, etc. On the Attach Files

page of the submission process, please select Supplemental Audio, Video, or Data for your uploaded file as the Submission Item. If an article with SDC is accepted, our production staff will create a URL with the SDC file. The URL will be placed in the call-out within the article. SDC files are **not** copy-edited by LWW staff, they will be presented digitally as submitted. For a list of all available file types and detailed instructions, please visit <http://links.lww.com/A142>.

SDC Call-outs

Supplemental Digital Content must be cited consecutively in the text of the submitted manuscript. Citations should include the type of material submitted (Audio, Figure, Table, etc.), be clearly labeled as "Supplemental Digital Content," include the sequential list number, and provide a description of the supplemental content. All descriptive text should be included in the call-out as it will not appear elsewhere in the article.

Example:

We performed many tests on the degrees of flexibility in the elbow (see Video, Supplemental Digital Content 1, which demonstrates elbow flexibility) and found our results inconclusive.

List of Supplemental Digital Content

A listing of Supplemental Digital Content must be submitted at the end of the manuscript file. Include the SDC number and file type of the Supplemental Digital Content. This text will be removed by our production staff and not be published.

Example:

Supplemental Digital Content 1.wmv

SDC File Requirements

All acceptable file types are permissible up to 10 MBs. For audio or video files greater than 10 MBs, authors should first query the journal office for approval. For a list of all available file types and detailed instructions, please visit <http://links.lww.com/A142>.

Page Charges. There is currently no submission fee for the journal *Menopause*.

Permissions. To reprint material that has appeared in or has been adapted from previously published works, the author(s) must obtain written permission from the copyright holder and/or author. Include full credit to the original source in the title or legend of the borrowed material. Photos depicting a recognizable individual must be accompanied by a signed release from that person, explicitly granting permission to publish the illustration. Permission documentation must be submitted with the manuscript or soon thereafter.

After Acceptance

Electronic page proofs and corrections

Corresponding authors will receive a link to the electronic page proofs to check the copyedited and typeset article before publication. Support documents (eg, reprint order form) will be sent to the corresponding author via e-mail. Complete instructions will be provided with the e-mail for downloading and marking the electronic page proofs. Corresponding author must provide an email address. The proof/correction process is done electronically.

It is the author's responsibility to ensure that there are no errors in the proofs. Authors who are not native English speakers are strongly encouraged to have their manuscript carefully edited by a native English-speaking colleague. Changes that have been made to conform to journal style will stand if they do not alter the authors' meaning. Only the most critical changes to the accuracy of the content will be made. Changes that are stylistic or are a reworking of previously accepted material will be disallowed. The publisher reserves the right to deny any changes that do not affect the accuracy of the content. Authors may be charged for alterations to the proofs beyond those required to correct errors or to answer queries. Electronic proofs must be checked carefully, and corrections returned within 24 to 48 hours of receipt.

Copyright: Copyright on all accepted manuscripts will be held by The North American Menopause Society (NAMS). Current U.S. copyright law makes it necessary to obtain a signed statement from the primary author(s), expressly transferring copyright if the manuscript is published in *Menopause*. Manuscripts published in *Menopause* become the property of the

journal and may not be published elsewhere without written permission from both NAMS and Wolters Kluwer Health, Inc.

Open access

Authors of accepted peer-reviewed articles have the choice to pay a fee to allow perpetual unrestricted online access to their published article to readers globally, immediately upon publication. Authors may take advantage of the open access option at the point of submission. Please note that this choice has no influence on the peer review and acceptance process. These articles are subject to the journal's standard peer-review process and will be accepted or rejected based on their own merit.

The article processing charge (APC) is charged on acceptance of the article and should be paid within 30 days by the author, funding agency or institution. Payment must be processed for the article to be published open access. For a list of journals and pricing please visit our [Wolters Kluwer Hybrid Open Access Journals page](#).

Authors retain copyright

Authors retain their copyright for all articles they opt to publish open access. Authors grant Wolters Kluwer an exclusive license to publish the article and the article is made available under the terms of a Creative Commons user license. Please visit our [Open Access Publication Process page](#) for more information.

Creative Commons license

Open access articles are freely available to read, download and share from the time of publication under the terms of the [Creative Commons License Attribution-Non Commercial No Derivative \(CC BY-NC-ND\) license](#). This license does not permit reuse for any commercial purposes, nor does it cover the reuse or modification of individual elements of the work (such as figures, tables, etc.) in the creation of derivative works without specific permission.

Read and Publish Agreements

Wolters Kluwer currently has read-and-publish agreements with institutional consortia listed [here](#).

Corresponding authors who are affiliated with the participating institution and who qualify as eligible authors* can publish their eligible articles open access in the eligible LWW journals at no direct cost to them. Please see your institution's individual policy for guidance on eligible article types and license choice. To qualify for the APC waiver, the corresponding author must provide their participating institution's name and institutional email address in the journal's submission system. On acceptance, the corresponding author will be asked to place an open access order in the publisher's payment portal where they will be able to request the APC be funded in accordance with this agreement. A \$0.00 APC will then be applied.

**Eligible authors: Corresponding authors who are teaching and research staff employed by or otherwise accredited to one of the participating institutions as well as students enrolled or accredited to one of the institutions and who want to publish open access articles.*

National Institutes of Health (US) Public Access Policy

The Journal is compliant with the NIH Public Access Policy. Please refer to the [Publisher's page](#) for more details.

FAQ for open access

<https://www.wolterskluwer.com/en/solutions/ljppincott-journals/ljppincott-open-access/faq>

Reprints. Authors will receive an email notification with a link to the order form soon after their article publishes in the journal (<https://shop.lww.com/author-reprint>). Reprints are normally shipped 6 to 8 weeks after publication of the issue in which the item appears. Contact the Reprint Department, Fax: 410.558.6234; E-mail: authorreprints@wolterskluwer.com with any questions.



Copyright © 2025 Wolters Kluwer Health, Inc. All rights reserved

[Copyright/Disclaimer Notice](#) • [Privacy Policy](#)
