BMJ Open

Uterine fibroids and Black people of African descent globally: a scoping review protocol

Keisha Jefferies ,[1] Lisa Bland ,[1] Bukola Oladimeji,[1] Melissa Rothfus,[2] Josephine Etowa,[3] Angela Alleyne,[4] Bukola Salami,[5] Shane Austin,[4] Megan Aston,[1] Emma Stirling-Cameron[6]

To cite: Jefferies K, Bland L, Oladimeji B, *et al*. Uterine fibroids and Black people of African descent globally: a scoping review protocol. *BMJ Open* 2024;**14**:e085622. doi:10.1136/bmjopen-2024-085622

► Prepublication history for this paper is available online. To view these files, please visit the journal online (https://doi.org/10.1136/bmjopen-2024-085622).

Received 21 February 2024
Accepted 30 July 2024

For numbered affiliations see end of article.

Correspondence to
Dr Keisha Jefferies;
Keisha.Jefferies@dal.ca

ABSTRACT

Introduction Evidence suggests that when adjusted for age and other factors such as Body Mass Index, age of first pregnancy, years since last pregnancy and alcohol consumption, Black women are three times more likely to suffer from fibroids compared with the general population. When compared with the general population, Black women experience larger uterine fibroids with an earlier onset and more frequent and severe symptoms debilitating symptoms. Reported symptoms include pelvic pain, bladder issues, and heavy and/or abnormal menstrual bleeding. For Black women in perimenopause or menopause, uterine fibroids are more likely to continue growing rather than slow or cease. To design empirical research that addresses the issue of uterine fibroids among Black people of African descent, it is important to understand the current state of literature on this issue. The objectives of this scoping review are to understand and describe the extent and type of literature available regarding Black people of African descent with uterine fibroids globally, to identify the gaps within existing literature, and to provide recommendations for future research.

Methods and analysis This scoping review will be conducted in accordance with JBI scoping review methodology and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews Checklist. Eligibility criteria for this review include sources that involve Black people of African descent who have uterine fibroids. This review is global in context and does not include jurisdictional, geographical, regional or study setting restrictions. A comprehensive search strategy developed in collaboration with a health sciences librarian will be used to identify and retrieve relevant peer-reviewed and grey literature. Databases including CINAHL (EBSCO), MEDLINE (Ovid), Embase (Elsevier), Gender Studies Database (EBSCO), Scopus (Elsevier) and LILACS (VHL) will be searched from inception to January 2024. Unpublished studies and grey literature searches will include The Society for Women's Health Research, Black Women's Health Imperative, ProQuest Dissertations and Theses Global (ProQuest), Open Access Theses and Dissertations (OATD.org) and Google search. All relevant sources will be uploaded to Covidence and undergo title and abstract screening by two independent team members. Selected sources will then undergo full-text review by two independent team members. Sources meeting the eligibility criteria will undergo extraction by two independent team members. Thematic analysis will be used to classify the extracted data points into categories according to the purpose or objective of the source, the methods used, the geographical region or jurisdiction of the source, key findings and recommendations. The synthesis of results will align with the review objective and question using charts or tables where necessary.

Ethics and dissemination This scoping review does not require ethical approval. Dissemination of the review results includes the publication of a full report in a peer-reviewed journal as well as presenting the review results at local, national and international conferences. The results of the scoping review will also be disseminated through community events and social media using infographics and brochures.

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ A comprehensive search strategy, developed in collaboration with a librarian scientist, with a robust search of published, peer-reviewed and grey literature, ensuring a thorough review of the existing literature.
- ⇒ Two independent team members who will serve as reviewers at each stage of the scoping review including the title and abstract screening, full-text review and data extraction.
- ⇒ A transparent process for the resolution of conflict between reviewers, which includes the use of a third reviewer/screener or through team consensus.
- ⇒ Language limitations may exist as the team is comprised of English speakers therefore, non-English sources may be excluded.

INTRODUCTION

Background

Uterine fibroids are benign non-cancerous growths in the uterus.[1–3] Previously considered a condition with minimal impacts, emerging data indicates an alarming increase in the incidence and severity of uterine fibroids with higher frequency of debilitating symptoms among Black people of African descent.[1 4–9]

In North America, race-disaggregated statistics and quantitative research on uterine fibroids is limited. However, the limited available evidence suggests that uterine fibroids disproportionately impact Black people of African descent. Canadian literature[8–10] shows that Black women have larger uterine fibroids with an earlier onset, are more likely to be anaemic and experience a longer duration of symptoms such as intense pain and excessive menstrual bleeding.[8–10]

Furthermore, the lack of race-disaggregated data hampers understanding of the contexts of Black women's experiences and access to culturally appropriate healthcare for uterine fibroids. Often researchers addressing uterine fibroid management in Canada must rely on data from the USA, UK or the Caribbean. These regions have different sociopolitical, geographical and healthcare landscapes that cannot be directly transferred in Canada. To address the limited Canadian research, the Canadian Women With Uterine Fibroids Registry (CAPTURE) was developed to describe ethnic differences in relation to fibroid burden, demographics and patient-reported symptoms.[8] This registry represents an important step forward in capturing evidence-based data within a Canadian context; however, it does not capture Black women's experience navigating a complex healthcare system with structural barriers hindering better outcomes.

Evidence from the USA indicates uterine fibroids as more prevalent in African American women, developing at an earlier age, with more frequent and debilitating symptoms, and higher rates of surgical intervention and postoperative complications.[1 5 11] Data from the USA further shows that nearly 80% of Black women will develop fibroids by the age of 50,[5] and when adjusted for factors including age, parity, age of pregnancies, Body Mass Index (BMI) and alcohol use are almost three times more likely than other racial groups to develop fibroids.[1 9 11] Whereas, in South Africa, a pilot study with Black South African women indicated that the increased incidence of genetic markers, age and parity were contributors to long term, spontaneous and uncontrolled growth of myometrial cell tissue present in uterine fibroids.[12]

Reproductive justice

Reproductive Justice affirms the right of individuals to plan their own family and have access to timely and culturally appropriate healthcare.[13 14] Reproductive Justice is a movement that addresses barriers to reproductive health services for marginalised communities, including conditions that impact pregnancy and fertility.[13 14] For example, Black people of African are disproportionately affected by poor obstetrical outcomes, including higher rates of maternal mortality.[13 15 16] People with uterine fibroids have higher rates of miscarriage[17] and have increased risk of uterine fibroid-associated pain, vaginal bleeding and pelvic pressure in the first and second trimesters.[17–19] To this end, examining the extent and type of available literature regarding Black people of African descent with uterine fibroids globally will identify knowledge and evidence gaps. This will inform recommendations for future research in timely and culturally appropriate healthcare.

Operational terms

This scoping review includes three operational terms. The first is Black people of African descent, which includes people identified as being Black and of African descent. Within the context of this scoping review, the term Black encompasses both the genetic presence of African origin as well as the sociocultural alignment with Black identity, including a distinct mindset and worldview.[20] Black identity may also include self-assigned ethnicity of African descent.[20 21] A non-exhaustive list of examples of Black people of African descent includes those who identify as Black African, Black Caribbean, Black of African descent, Black, Afro-Brazilian, African Canadian or African Nova Scotian.

This review uses the term people as opposed to the traditional term women (or female), in relation to uterine fibroids research. The use of this term acknowledges and includes the progressive understanding of sex and gender-based considerations in health research. This expansive parameter allows us to include and consider biological (sex) and sociocultural (gender) aspects of personhood.[22] To achieve a more comprehensive understanding of this issue, this scoping review will include literature with participants who identify as female or women as well as those who do not identify with either of these categories but who also experience uterine fibroids. Thus, this scoping review is gender non-specific and will include participants who may identify as cis, trans, non-binary or gender expansive.

Finally, the term uterine fibroids, also known as uterine leiomyomas, is restricted to non-cancerous fibroid growths in the uterus or uterine tissues.[2 3] This operational definition of uterine fibroids does not include other gynaecological or reproductive health issues such as malignant uterine growths (carcinomas), endometriosis, adenomyosis, uterine polyps, polycystic ovarian syndrome, ectopic pregnancies or unexplained abnormal uterine bleeding.

Charting the literature

Growing attention on the debilitating and disproportional impacts of uterine fibroids reinforces both the timeliness and necessity of a review on the extent and type of literature available regarding Black people of African descent with uterine fibroids globally. To better address this health issue and the impacts on Black people of African descent, it is critical to comprehensively review the available literature related to uterine fibroids among Black people of African descent globally. Additionally, a comprehensive review of the literature advances the scientific field of Black population health by identifying existing evidence gaps as well as opportunities to develop recommendations for future research related to Black people of African descent with uterine fibroids. Importantly, understanding the available literature on this issue will illuminate salient evidence gaps that address intersectional, geographical and historical considerations. Finally, this review contributes to the international call-to-action by the United Nations to improve the human rights, social well-being and overall health of Black people of African descent globally.[21]

Preliminary literature search

A preliminary search of MEDLINE, the Cochrane Database of Systematic Reviews and *JBI Evidence Synthesis* was conducted in December 2023. No systematic reviews or scoping reviews regarding Black people of African descent with uterine fibroids, in a global context, were identified as in progress.

Our preliminary search retrieved two existing reviews. The first is related to Black women/women of African descent in Sub-Saharan Africa and epidemiology of uterine fibroids.[23] This 2022 review retrieved nine studies with case series, case control or cross-sectional study designs, with sample sizes ranging from 20 to 661 participants. The review illuminated a dearth of data on the epidemiology of uterine fibroids, with small-scale studies presenting conflicting findings. The second review included a review on the epidemiology of uterine fibroids.[24] In this 2017 systematic review, Black race was identified as a consistent risk factor for uterine fibroids across the 60 included sources. This review found that factors such as age, premenopausal state, hypertension, family history, time since last birth, and food additive and soybean milk consumption increased uterine fibroid risk.[24] This review also identified factors such as the use of oral or injectable contraceptives (ie, depot medroxyprogesterone acetate), smoking in women with low BMI, and unspecified parity, reduced uterine fibroid risk.[24]

Review objectives

This scoping review will address a gap of prior reviews by expanding the context to a global scope with explicit focus on the risk factor of Black race. Therefore, the objectives of this scoping review are to:

1. Understand the extent and type of literature available regarding Black people of African descent with uterine fibroids globally;
2. Identify the gaps within existing literature; and
3. Provide recommendations for future research involving Black people of African descent with uterine fibroids.

Review question

Our review is guided by the research question, 'what is the available extent and type of literature regarding Black people of African descent with uterine fibroids globally?'

METHODS

The proposed scoping review will be conducted in accordance with the JBI methodology for scoping reviews,[25 26] and follow the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist.[27]

Eligibility criteria

Participants

Sources will be considered for inclusion if they focus on participants identified as Black, Black African, Black Caribbean or of Black African descent. Additionally, there are no gender restrictions imposed in this review, therefore, sources will be considered for inclusion if they focus on participants identified as cis-, non-binary or trans. Sources will be excluded if they do not focus on participants identified as Black people of African descent. Sources that include a subgroup analysis will be considered for inclusion. For example, participants who live in predominantly Black countries (regions or jurisdictions) and do not identify as Black and of African descent will be excluded.

Concept

The concept of interest is uterine fibroids, which are also known as uterine leiomyomas. The operational definition of uterine fibroids is restricted to non-cancerous fibroid growths in the uterus. Sources that focus on other gynaecological or reproductive health issues such as endometriosis, adenomyosis, uterine polyps, polycystic ovarian syndrome, infertility, miscarriage and abnormal uterine bleeding will be excluded if there is no disaggregated analysis related to uterine fibroids.

Context

The context does not include any jurisdictional, geographical or regional restrictions. The context of interest is Black people of African descent globally. Additionally, no restrictions will be imposed related to study setting such as clinical or hospital settings.

Types of sources

This scoping review will consider both experimental and quasi-experimental study designs including randomised controlled trials, non-randomised controlled trials, before and after studies and interrupted time-series studies. In addition, analytical observational studies including prospective and retrospective cohort studies, case-control studies and analytical cross-sectional studies will be considered for inclusion. This review will also consider descriptive observational study designs including case series, individual case reports and descriptive cross-sectional studies for inclusion.

This scoping review will consider mixed methods and qualitative study designs including but not limited to phenomenology, grounded theory, ethnography, qualitative description, action research and feminist research. Systematic reviews and grey literature (eg, dissertations, text and opinion papers, organisational reports, or policy documents) will also be considered for inclusion in this scoping review.

Table 1 Preliminary search of MEDLINE (*Ovid*): search conducted in December 2023

#	Query	Records retrieved
1	exp Leiomyoma/	23 120
2	(Leiomyoma* or Fibromyoma* or Fibroid* or Uter* Fibro* or myoma*).ab,ti,kf.	29 628
3	1 or 2	34 600
4	exp african people/ or exp black people/ or exp caribbean people/	98 071
5	(Africa* or Afro* or Black* or Caribbean or West Indi* or 'BME' or 'BAME' or 'POC' or 'BIPOC' or 'PAD').ab,ti,kf.	544 994
6	((person* or people of wom?n or patient* or population or resident* or individual*) adj4 colo?r).ab,ti,kf.	5583
7	(racial* adj2 (disparit* or inequit* or equit* or minorit* or person* or people* or wom?n or resident* or individual*)).ab,ti,kf.	20 290
8	visible minorit*.ti,ab,kf.	316
9	4 or 5 or 6 or 7 or 8	581 394
10	3 and 9	686

Search strategy

The comprehensive search strategy, developed in collaboration with a health sciences librarian, will locate both published and unpublished studies. An initial limited search of MEDLINE, the Cochrane Database of Systematic Reviews and JBI Evidence Synthesis was conducted in December 2023. No systematic reviews or scoping reviews were global in context or in progress on the topic were identified. The text words contained in the titles and abstracts of relevant articles, and the index terms used to describe the articles were used to develop a full search strategy for MEDLINE, outlined in table 1. The search strategy, including all identified keywords and index terms, will be adapted for each included database and/or information source. Importantly, ancestry searching (scanning the reference list of included sources) and forward citation tracking will be conducted to screen for additional studies.

No language filter will be applied in the search. Sources that do not include an English translation will be translated using DeepL (DeepL SE, Cologne, Germany). Lastly, no restrictions will be imposed for date-of-publication and databases will be searched from time of inception.

The databases to be searched include CINAHL (EBSCO), MEDLINE (Ovid), Embase (Elsevier), Gender Studies Database (EBSCO), Scopus (Elsevier) and LILACS (VHL). Sources of unpublished studies/grey literature to be searched include The Society for Women's Health Research, Black Women's Health Imperative, ProQuest Dissertations and Theses Global (ProQuest), Open Access Theses and Dissertations (OATD.org) and Google search. The keywords for the search include terms such as Black, African, visible minorities, racialized people, fibroids and leiomyoma.

Selection of sources of evidence

Following the search, all identified citations will be collated and uploaded into Covidence (Veritas Health Innovation, Melbourne, Australia) and duplicates removed. All titles and abstracts will then be screened by two independent reviewers against the a priori inclusion criteria for the review. Potentially relevant sources will be retrieved in full, and their citation details imported into Covidence. The full text of included citations will be assessed in detail against the a priori inclusion criteria by two independent reviewers. Reasons for exclusion of sources of evidence at full text that do not meet the inclusion criteria will be recorded and reported in the scoping review. Any disagreements that arise between the reviewers at each stage of the selection process will be resolved by a third reviewer or through team discussion and consensus. The results of the search and the study inclusion process will be reported in full in the final scoping review report and presented in a PRISMA-ScR flow diagram.[27]

Data extraction

Data will be extracted from included sources by two independent reviewers using a data extraction tool developed by JBI and modified by the reviewers to accommodate the

Table 2 Data extraction tool

Date:	
Reviewer:	
Extraction components	Response
Source title:	
Year of publication:	
Source author(s):	
Source citation:	
Source type (eg, research, policy, commentary):	
Source aim/purpose:	
Research questions/objectives (if applicable):	
Theoretical framework (if presented/applicable):	
Design (if applicable):	
Methods (data collection and analysis if applicable):	
Study population and sample size (if presented/applicable):	
Context (including setting and location for example, region, country, province, city, district):	
Concept:	
Results/key findings:	
Source recommendations/implications:	
Gaps identified by source:	
Additional notes:	

objective of this scoping review. The data to be extracted will include details such as purpose, population, concept, context, study methods and key findings relevant to the review question. The tool will be tested with two reviewers completing extractions independently, followed by comparisons before continuing with the extraction process. The extraction tool is shown in table 2. The draft data extraction tool will be modified and revised during data extraction, if necessary. All modifications will be detailed within the final scoping review report. Similar to the full-text review phase, any disagreements that arise between reviewers will be resolved through discussion or with a third reviewer. Finally, critical appraisal will not be conducted on these sources.

Synthesis of results

Extracted data will be reviewed and then classified into conceptual categories. This will facilitate creating a comprehensive illustration of the type and extent of available literature. Data analysis will complement the conceptual categorisation of data with thematic analysis. The analysis will examine sources to identify the methods used, location of studies, study results including statistical information or thematic findings, and recommendations. The findings from the review will be presented in a manner that addresses our review objective and question. Importantly, the findings will be presented narratively through conceptual categories and themes. The findings will also be illustrated using charts or tables where necessary to allow for the characterisation and summarisation of evidence related to Black people of African descent with uterine fibroids globally.

Patient and public involvement

Patients or the public were not involved in the design, conduct or reporting for this scoping review. The public will be involved in the dissemination plans of this scoping review as recipients of the results. The plan for results dissemination is detailed in the following section.

Dissemination of results

The results from this scoping review will be disseminated to the scientific community through a peer-reviewed publication in an appropriate journal and through scholarly presentations at local, national and international scientific meetings and conferences. The review results will also be shared with the general public through in-person and virtual community-oriented events and through infographics.

Author affiliations
[1]School of Nursing, Faculty of Health, Dalhousie University, Halifax, Nova Scotia, Canada
[2]W.K. Kellogg Health Sciences Library, Dalhousie University, Halifax, Nova Scotia, Canada
[3]School of Nursing, Faculty of Health Sciences, University of Ottawa, Ottawa, Ontario, Canada
[4]Department of Biological and Chemical Sciences, Faculty of Science and Technology, The University of the West Indies Cave Hill Campus, Bridgetown, Saint Michael, Barbados
[5]Department of Community Health Sciences, Cumming School of Medicine, University of Calgary, Calgary, Alberta, Canada
[6]School of Population and Public Health, The University of British Columbia, Vancouver, British Columbia, Canada

Acknowledgements Jackie Phinney, Instruction/Liaison Librarian, Dalhousie Medicine New Brunswick.

Contributors KJ is the guarantor and the project lead for this review and has provided content development, editorial support and mentorship of research associates in the development of the protocol. LB is the research coordinator [associate] for KJ uterine fibroids projects. She has provided content development and editorial support in the development of the protocol under the mentorship of KJ. BO is an associate involved in this review. She has provided content development of the protocol under the mentorship of KJ. MR is the Health Sciences Librarian supporting the project. She conducted a preliminary search of the literature and worked with KJ to develop a comprehensive search. She will also conduct the database search and has authored the methods section of the protocol. JE provided reviewed and provided feedback development of the protocol and authored portions of the background section regarding available data in Canada. AA, BS, MA, SA and ES-C reviewed and provided feedback in the development of the protocol. Each author has contributed to the development of the ideas, writing and review of the submitted manuscript, and have adhered to the JBI methods and ethical standards.

Funding Acknowledged funding of $5000 through the Faculty of Health, Research Development Grant at Dalhousie University. An additional $5000 was awarded through an Operating Grant, through the School of Nursing at Dalhousie University. Together, these awards will support the hiring and training of trainees on this scoping review.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

ORCID iDs
Keisha Jefferies http://orcid.org/0000-0002-4860-073X
Lisa Bland http://orcid.org/0009-0006-5317-8517

REFERENCES

1 Baird DD, Dunson DB, Hill MC, *et al*. High cumulative incidence of uterine leiomyoma in black and white women: ultrasound evidence. *Am J Obstet Gynecol* 2003;188:100–7.
2 Myers ER. *Duke university evidence-based practice center, United States agency for healthcare research and quality. Management of uterine fibroids. (Evidence report/technology assessment, No.34*). Rockville, MD: Agency for Healthcare Research and Quality, U.S. Dept. of Health and Human Services, 2001.
3 Stewart EA, Laughlin-Tommaso SK, Catherino WH, *et al*. Uterine fibroids (Primer). *Nat Rev Dis Primer* 2016;2.
4 Berman JM, Bradley L, Hawkins SM, *et al*. Uterine Fibroids in Black Women: A Race-Stratified Subgroup Analysis of Treatment Outcomes After Laparoscopic Radiofrequency Ablation. *J Womens Health (Larchmt)* 2022;31:593–9.
5 Eltoukhi HM, Modi MN, Weston M, *et al*. The health disparities of uterine fibroid tumors for African American women: a public health issue. *Am J Obstet Gynecol* 2014;210:194–9.
6 Jacoby VL, Fujimoto VY, Giudice LC, *et al*. Racial and ethnic disparities in benign gynecologic conditions and associated surgeries. *Am J Obstet Gynecol* 2010;202:514–21.
7 Mostafavi B. Michigan Medicine. Understanding racial disparities for women with uterine fibroids, 2020. Available: https://www.michiganmedicine.org/health-lab/understanding-racial-disparities-women-uterine-fibroids

8 Murji A, Bedaiwy M, Singh SS, *et al*. Influence of ethnicity on clinical presentation and quality of life in women with uterine fibroids: results from a prospective observational registry. *J Obstet Gynaecol Can* 2020;42:726–33.
9 Wise LA, Laughlin-Tommaso SK. Epidemiology of Uterine Fibroids: From Menarche to Menopause. *Clin Obstet Gynecol* 2016;59:2–24.
10 Murji A, Crosier R, Chow T, *et al*. Role of ethnicity in treating uterine fibroids with ulipristal acetate. *Fertil Steril* 2016;106:1165–9.
11 Marsh EE, Ekpo GE, Cardozo ER, *et al*. Racial differences in fibroid prevalence and ultrasound findings in asymptomatic young women (18-30years old): a pilot study. *Fertil Steril* 2013;99:1951–7.
12 Amant F, Dorfling CM, de Brabanter J, *et al*. A possible role of the cytochrome P450c17alpha gene (CYP17) polymorphism in the pathobiology of uterine leiomyomas from black South African women: A pilot study. *Acta Obstet Gynecol Scand* 2004;83:234–9.
13 Ross L, Solinger R. Reproductive justice: an introduction. In: *Reproductive justice*. University of California Press, 2017. Available: https://www.degruyter.com/document/doi/10.1525/9780520963207/html
14 Sister Song. Reproductive justice, 2023. Available: https://www.sistersong.net/reproductive-justice
15 Coen-Sanchez K, Idriss-Wheeler D, Bancroft X, *et al*. Reproductive justice in patient care: tackling systemic racism and health inequities in sexual and reproductive health and rights in Canada. *Reprod Health* 2022;19:44.
16 HuffPost Parents. Why black women fear for their lives in the delivery room, 2020. Available: https://www.huffpost.com/archive/ca/entry/black-maternal-health-canada_ca_5ed90ae3c5b685164f2eab93
17 Hartmann KE, Velez Edwards DR, Savitz DA, *et al*. Prospective cohort study of uterine fibroids and miscarriage risk. *Am J Epidemiol* 2017;186:1140–8.
18 Hasan R, Baird DD, Herring AH, *et al*. Patterns and predictors of vaginal bleeding in the first trimester of pregnancy. *Ann Epidemiol* 2010;20:524–31.
19 Michels KA, Hartmann KE, Archer KR, *et al*. The relationship between total fibroid burden and first trimester bleeding and pain. *Paediatr Perinat Epidemiol* 2016;30:115–23.
20 Carruthers CA. *Unapologetic: A black, queer, and feminist mandate for radical movements*. Boston, Massachusetts: Beacon Press, 2018.
21 United Nations. International decade for people of African descent 2015-2024, Available: https://www.un.org/en/observances/decade-people-african-descent
22 van Trotsenburg M, Meriggiola MC, Luikenaar. *Context, principles and practice of trans gynecology: Managing transgender patients in ObGyn practice*. Cambridge: Cambridge University Press, 2022. Available: https://www.cambridge.org/core/books/context-principles-and-practice-of-transgynecology/F3F081D24764579C54488C80E3CD3FD9
23 Morhason-Bello IO, Adebamowo CA. Epidemiology of uterine fibroid in black African women: a systematic scoping review. *BMJ Open* 2022;12:e052053.
24 Stewart E, Cookson C, Gandolfo R, *et al*. Epidemiology of uterine fibroids: a systematic review. *BJOG* 2017;124:1501–12.
25 Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005;8:19–32.
26 Tricco AC, Lillie E, Zarin W, *et al*. A scoping review on the conduct and reporting of scoping reviews. *BMC Med Res Methodol* 2016;16:15.
27 Tricco AC, Lillie E, Zarin W, *et al*. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med* 2018;169:467–73.