

Bibliometric Analysis

Analisa Bibliometrik

Trends on Study of Women During Menopausal Transition

[Tren Studi Perempuan Selama Transisi Menopause]

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This study is a bibliometric analysis with the aim to explore scientific publications related to the psychological well-being of women in the perimenopause transition phase. The analyzed data was sourced from scientific articles indexed by Scopus from 1985 to October 2023. Scientific article search technique was conducted by tracking scientific publication documents in a database through search queries with search string. Analysis results provided four main findings: (1) psychology is not the only scientific discipline that studies issues related to the menopausal transition phase and not the field of study that produces the highest number of scientific publications; (2) publications related to the menopausal transition phase with the highest level of influence in the discipline of psychology are dominated by mental health topics such as depression and sleep disorders; (3) academic interest in studying the menopausal transition phase in psychology is increasing with each publication period; and (4) a diversity of study topics has emerged as interest in studying the menopausal transition phase has increased; however, in the last twenty years, there has been a trend towards stagnation of studies on the topic of perimenopausal depression and decrease of research interest in various dimensions of psychological well-being. The conclusion of this study is that bibliometric metadata of a scientific publication corpus is dynamic, causing metrics to change with time, and that analysis can be utilized to see trends in scientific publications related to the issue of women's physical and psychological health in the menopausal transition phase.

Keywords: bibliometric analysis, menopausal transition, psychological well-being, sleep disorders

Studi ini berupa analisa bibliometrik, dengan tujuan mengeksplorasi publikasi ilmiah yang berkaitan dengan kesejahteraan psikologis perempuan dalam fase transisi perimenopause. Data yang dianalisis berasal dari artikel ilmiah terindeks *Scopus* dari tahun 1985 sampai dengan Oktober 2023. Teknik pencarian artikel ilmiah dilakukan dengan melacak dokumen publikasi ilmiah pada pangkalan data melalui permintaan pencarian dengan *search string*. Analisa menghasilkan empat poin utama: (1) psikologi bukan satu-satunya disiplin ilmu yang mengkaji persoalan terkait fase transisi menopause dan bukan bidang studi terbanyak yang menghasilkan publikasi ilmiah; (2) publikasi terkait fase transisi menopause dengan tingkat pengaruh tertinggi dalam disiplin psikologi didominasi oleh topik kesehatan mental seperti depresi dan gangguan tidur; (3) ketertarikan akademisi untuk mengkaji fase transisi menopause dalam disiplin psikologi semakin meningkat di tiap periode waktu publikasi; dan (4) keberagaman topik kajian muncul seiring peningkatan minat untuk mengkaji fase transisi menopause, namun dalam dua puluh tahun terakhir terdapat kecenderungan stagnasi kajian pada topik depresi perimenopause dan semakin rendahnya minat pada beragam dimensi kesejahteraan psikologi. Kesimpulan studi ini adalah metadata bibliografi dari suatu korpus publikasi ilmiah bersifat dinamis, sehingga berbagai metrik dapat berubah seiring waktu, dan bahwa analisis dapat dimanfaatkan untuk melihat tren dalam publikasi ilmiah, terkait isu kesehatan fisik dan psikologis perempuan dalam tahapan transisi menopause.

Kata kunci: analisa bibliometrik, transisi menopause, kesejahteraan psikologis, gangguan tidur

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The need for this bibliometric analysis emerged due to the authors and other researchers experiencing difficulties in finding literature on the psychological well-being of women during the menopausal transition phase. The menopausal transition phase represents the second critical phase in the lives of women after the age of 40 to 55 years. In this phase, women undergo biopsychosocial changes due to the decrease in estrogen and progesterone. These transition phases are delineated by Professor Van Hall (1997), a gynecology expert, as the onset of menstruation around the age of 12 years, and the phase of “the cessation of menstruation” around the age of 52 years (Van Hall, 1997, p. 59).

The cessation of menstruation or perimenopause marks the transition from the fertile phase to a phase of “hormonal rest” that is relatively stable (Van Hall, 1997). Every transition in life, including perimenopause, is an adaptation to a new situation where the adaptation process can sometimes be turbulent before achieving a new balance. Various medical discourses have positioned the menopausal transition phase as a phase of sexual atrophy accompanied by the loss of femininity (Ussher et al., 2015), and even as a critical phase that allows for the development of depression symptoms (Willi & Ehlert, 2019).

The menopausal transition has become one of the research topics that has received scientific attention from various disciplines, including gynecology, endocrinology, cardiology, orthopedics, rheumatology, urology, dermatology, psychiatry, psychology, epidemiology, sociology, and anthropology (Van Hall, 1997). Unfortunately, the field of psychology has significantly lagged in this area of study. Therefore, the authors are eager to explore more deeply the psychological studies of women during the menopausal transition. Furthermore, the authors aim to identify topics regarding the psychosocial changes experienced by women.

Phenomena that have been extensively studied and researched, such as issues during the menopausal transition phase, can be explored through bibliometric analysis methods and Systematic Literature Reviews (SLRs). Bibliometric analysis is conducted by examining bibliographic data to understand patterns of knowledge production and accumulation (Hallinger & Kovačević, 2023). Within the discipline of psychology, bibliometric analysis has been applied to explore global trends related to various research topics such as the psychological aspects of social media (Zyoud et al., 2018), morality aspects in social psychology research (Ellemers et al.,

Kebutuhan akan analisis bibliometrik ini muncul karena para penulis dan peneliti lain mengalami kesulitan dalam pencarian literatur mengenai kesejahteraan psikologis perempuan selama fase transisi menopause. Fase transisi menopause merupakan fase kritis kedua dalam kehidupan perempuan setelah usia 40 hingga 55 tahun. Pada fase ini, perempuan mengalami perubahan biopsikososial akibat penurunan estrogen dan progesteron. Fase transisi ini digambarkan oleh Profesor Van Hall (1997), seorang ahli ginekologi, sebagai permulaan menstruasi pada usia 12 tahun, dan fase “berhentinya menstruasi” pada usia 52 tahun (Van Hall, 1997, p. 59).

Berhentinya menstruasi atau perimenopause menandai peralihan dari fase subur ke fase “istirahat hormonal” yang relatif stabil (Van Hall, 1997). Tiap transisi dalam kehidupan, termasuk perimenopause, merupakan adaptasi terhadap situasi baru ketika proses adaptasi terkadang bisa bergejolak sebelum mencapai keseimbangan baru. Berbagai wacana kedokteran memposisikan fase transisi menopause sebagai fase atrofi seksual yang disertai hilangnya femininitas (Ussher et al., 2015), dan bahkan sebagai fase kritis yang memungkinkan berkembangnya gejala depresi (Willi & Ehlert, 2019).

Transisi menopause telah menjadi salah satu topik penelitian yang mendapat perhatian ilmiah dari berbagai disiplin ilmu, antara lain ginekologi, endokrinologi, kardiologi, ortopedi, reumatologi, urologi, dermatologi, psikiatri, psikologi, epidemiologi, sosiologi, dan antropologi (Van Hall, 1997). Sayangnya, bidang psikologi tertinggal secara signifikan dalam bidang studi ini. Maka dari itu, para penulis ingin menggali lebih dalam mengenai kajian dan studi psikologi perempuan pada masa transisi menopause. Lebih lanjut, para penulis bertujuan untuk mengidentifikasi topik mengenai perubahan psikososial yang dialami perempuan.

Fenomena yang telah banyak dipelajari dan diteliti, seperti permasalahan atau isu pada fase transisi menopause, dapat dieksplorasi melalui metode analisis bibliometrik dan *Systematic Literature Review (SLR; kajian literatur sistematis)*. Analisis bibliometrik dilakukan dengan memeriksa data bibliografis untuk memahami pola produksi dan akumulasi pengetahuan (Hallinger & Kovačević, 2023). Dalam disiplin psikologi, analisis bibliometrik telah diterapkan untuk mengeksplorasi tren global terkait berbagai topik penelitian seperti aspek psikologis media sosial (Zyoud et al., 2018), aspek moralitas dalam penelitian psikologi sosial (Ellemers et

2019), and even historical analyses of the entire corpus of psychological scholarly journals over decades (Tur-Porcar et al., 2018).

Different from bibliometric analysis, the method of Systematic Literature Review (SLR) aims to gather knowledge and identify relevant issues based on critical analysis and synthesis of each research finding (Linnenluecke et al., 2020). Bibliometric analysis and Systematic Literature Review (SLR) aimed at examining research related to the menopausal transition phase are not new. As of October 28, 2023, there are at least 230 Scopus-indexed scientific publications that have applied bibliometric analysis and Systematic Literature Review (SLR) methods to study perimenopause and menopausal transition, of which nine publications are studies in the field of psychology.

In general, studies employing bibliometric analysis and Systematic Literature Review (SLR) methods are focused on examining the implications of the menopausal transition phase on specific issues. In the exploration that the authors conducted, there has not yet been a study that reviews all publications related to the menopausal transition phase comprehensively within a single discipline. Five of the nine published studies utilized bibliometric analysis and Systematic Literature Review (SLR) to examine issues of depression during the menopausal transition phase (de Kruif et al., 2016; Judd et al., 2012; Rubinow et al., 2015; Willi & Ehlert, 2019; Yadav et al., 2021). Meanwhile, the other four studies applied Systematic Literature Review (SLR) to various topics of concern such as anxiety during the menopausal transition phase (Bryant et al., 2012), body image during the menopausal transition phase (Pearce et al., 2014), clinical studies related to the effectiveness of treatment in addressing the psychological impacts of hot flashes during the menopausal transition phase (Azizi et al., 2022), and implications of the menopausal transition phase on singers (Fiuza et al., 2023).

This study employs bibliometric analysis using Scopus database to map and examine all scientific publications related to the menopausal transition phase within the field of psychology. Unlike existing studies based on bibliometric and Systematic Literature Review (SLR) analyses, the bibliometric analysis offered in this study covers several important aspects. Firstly, the mapping of various disciplines and comparison of publication numbers, especially comparisons between the discipline of psychology and other disciplines that produce more

al., 2019), dan bahkan analisis historis terhadap seluruh korpus jurnal ilmiah psikologi selama beberapa dekade (Tur-Porcar et al., 2018).

Berbeda dengan analisis bibliometrik, metode *Systematic Literature Review (SLR)* bertujuan untuk mengumpulkan pengetahuan dan mengidentifikasi permasalahan atau isu yang relevan berdasarkan analisis kritis dan sintesis dari tiap temuan penelitian (Linnenluecke et al., 2020). Analisis bibliometrik dan *Systematic Literature Review (SLR)* yang bertujuan untuk mengkaji penelitian terkait fase transisi menopause bukanlah hal baru. Hingga 28 Oktober 2023, setidaknya terdapat 230 publikasi ilmiah terindeks *Scopus* yang telah menerapkan metode analisis bibliometrik dan *Systematic Literature Review (SLR)* untuk mempelajari perimenopause dan transisi menopause, sembilan publikasi di antaranya merupakan kajian di bidang psikologi.

Secara umum, studi yang menggunakan metode analisis bibliometrik dan *Systematic Literature Review (SLR)* difokuskan untuk mengkaji implikasi fase transisi menopause terhadap isu tertentu. Dalam eksplorasi dan pendalaman yang para penulis lakukan, belum ada studi yang mengkaji seluruh publikasi terkait fase transisi menopause secara komprehensif dalam satu disiplin ilmu. Lima dari sembilan studi yang dipublikasikan menggunakan analisis bibliometrik dan *Systematic Literature Review (SLR)* untuk mengkaji masalah atau isu depresi selama fase transisi menopause (de Kruif et al., 2016; Judd et al., 2012; Rubinow et al., 2015; Willi & Ehlert, 2019; Yadav et al., 2021). Sementara itu, empat studi lainnya menerapkan *Systematic Literature Review (SLR)* pada berbagai topik yang menjadi perhatian seperti kecemasan pada fase transisi menopause (Bryant et al., 2012), citra tubuh pada fase transisi menopause (Pearce et al., 2014), studi klinis terkait efektivitas pengobatan dalam mengatasi dampak psikologis *hot flashes* pada fase transisi menopause (Azizi et al., 2022), dan implikasi fase transisi menopause pada penyanyi (Fiuza et al., 2023).

Studi ini menggunakan analisis bibliometrik dengan pangkalan data *Scopus* untuk memetakan dan mengkaji seluruh publikasi ilmiah terkait fase transisi menopause di bidang psikologi. Berbeda dengan studi berbasis analisis bibliometrik dan *Systematic Literature Review (SLR)* yang sudah ada, analisis bibliometrik yang ditawarkan dalam studi ini mencakup beberapa aspek penting. Pertama, pemetaan berbagai disiplin ilmu dan perbandingan jumlah publikasi, terutama perbandingan antara disiplin ilmu psikologi dengan disiplin ilmu lain

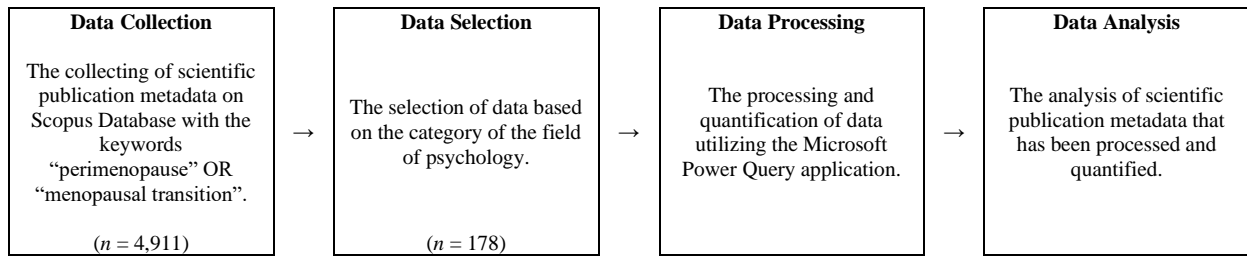


Figure 1. Method and stages of study.

publications. Secondly, the mapping of trends and various sub-themes in psychological studies based on parameters such as publication numbers, citation counts, author keywords, and keywords indexed by Scopus. Thirdly, a historical analysis to understand the evolution of trends in sub-themes periodically, where publications related to the menopausal transition phase are divided into four time periods.

Furthermore, the authors expect that the results of this bibliometric analysis can address the following research questions: (1) What is the current status of research focusing on menopausal transition? (2) What are the main thematic areas in menopausal transition research in the last 39 years? (3) How is the intellectual structure of the menopausal transition represented in the field of academic literature? and (4) What are the main findings of menopausal transition research?

yang menghasilkan publikasi lebih banyak. Kedua, pemetaan tren dan berbagai sub-tema dalam kajian psikologi berdasarkan parameter seperti jumlah publikasi, jumlah sitasi, kata kunci penulis, dan kata kunci yang terindeks *Scopus*. Ketiga, analisis historis untuk memahami evolusi tren sub-tema secara periodik, ketika publikasi terkait fase transisi menopause dibagi dalam empat periode waktu.

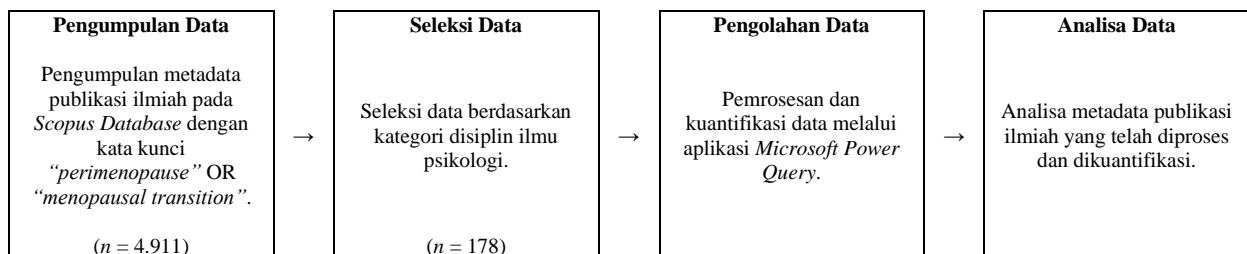
Lebih lanjut, para penulis berharap hasil analisis bibliometrik ini dapat menjawab pertanyaan penelitian sebagai berikut: (1) Bagaimana status penelitian yang berfokus pada transisi menopause saat ini? (2) Apa saja bidang tematik utama dalam penelitian transisi menopause dalam 39 tahun terakhir? (3) Bagaimana struktur intelektual transisi menopause direpresentasikan dalam bidang literatur akademik? dan (4) Apa temuan utama dari penelitian transisi menopause?

Method

The bibliometric analysis of the menopausal transition phase is conducted in four stages: (1) data collection; (2) data selection; (3) data processing; and (4) data analysis (Ellegaard & Wallin, 2015). The general framework of this study is available in Figure 1.

Metode

Analisis bibliometrik fase transisi menopause dilakukan dalam empat tahap: (1) pengumpulan data; (2) pemilihan data; (3) pengolahan data; dan (4) analisis data (Ellegaard & Wallin, 2015). Kerangka umum studi ini tersedia pada Gambar 1.



Gambar 1. Metode dan tahapan studi.

Data Collection

The first stage, being the data collection stage, was procedurally executed on October 28, 2023, utilizing the Scopus scientific publication database accessed via the webpage of Scopus. The authors tracked scientific publication documents in the database through a search query with the following syntax:

(TITLE-ABS-KEY (perimenopause) OR TITLE-ABS-KEY (“menopausal transition”))

This search string signifies the request for scientific publication documents containing the words “perimenopause” or “menopausal transition” in the title, abstract, or keywords of each publication document. Document types include all scientific writings with an emphasis on the aforementioned keywords. Only articles published in English were selected. The search request then yielded findings of 4,911 scientific publication documents with a composition of 3,407 articles, 957 reviews, 203 book chapters, 115 conference papers, 67 editorials, 62 notes, 44 letters, 35 brief surveys, 12 errata of published texts, eight books, and one retracted publication. These findings underscore the low interest in studies of women in the menopausal transition phase. The publication documents were categorized into various fields of study as listed in Table 1 and Figure 2.

Data Selection

The second stage, being the data selection stage, consisted of the authors selecting data based on the subject area or field of psychology study. This selection resulted in 178 documents for the subject field of psychology, consisting of 133 research articles, 24 reviews, 11 book chapters, three corrections to published texts (erratum), two books, and one short survey. Technically, the selection based on the field of study was performed using the filters by subject area feature available on the Scopus database webpage. After data selection, the authors exported the data in comma-separated value (.csv) format for further processing and analysis.

Data Processing

The third stage, being the data processing stage, consisted of the authors utilizing Microsoft Power Query for data processing, such as data cleaning, creating bibliographic column data in the American Psychological Association (APA) format, and extracting string data, i.e., data consisting of a series of text characters, found

Pengumpulan Data

Tahap pertama, yaitu tahap pengumpulan data, dilaksanakan secara prosedural pada tanggal 28 Oktober 2023 dengan memanfaatkan pangkalan data publikasi ilmiah *Scopus* yang diakses melalui laman *web Scopus*. Para penulis melacak dokumen publikasi ilmiah di pangkalan data melalui *query* pencarian dengan sintaks berikut:

String pencarian ini menandakan permintaan dokumen publikasi ilmiah yang mengandung kata “perimenopause” atau “transisi menopause” pada judul, abstrak, atau kata kunci setiap dokumen publikasi. Jenis dokumen mencakup semua tulisan ilmiah dengan penekanan pada kata kunci di atas. Hanya artikel yang diterbitkan dalam Bahasa Inggris yang dipilih. Permintaan pencarian tersebut kemudian menghasilkan temuan 4.911 dokumen publikasi ilmiah dengan komposisi 3.407 artikel, 957 reviu, 203 bab buku, 115 makalah konferensi, 67 editorial, 62 catatan, 44 surat, 35 survei singkat, 12 ralat teks terbitan, delapan buku, dan satu publikasi yang ditarik kembali. Temuan ini menekankan rendahnya minat akan studi terhadap perempuan dalam fase transisi menopause. Dokumen publikasi dikategorikan dalam berbagai bidang studi sebagaimana tercantum pada Tabel 1 dan Gambar 2.

Pemilihan Data

Tahap kedua, yaitu tahap pemilihan data, terdiri dari para penulis memilih data berdasarkan bidang studi atau bidang kajian psikologi. Seleksi ini menghasilkan 178 dokumen untuk bidang studi psikologi, terdiri dari 133 artikel penelitian, 24 reviu, 11 bab buku, tiga koreksi teks terbitan (*erratum*), dua buku, dan satu survei singkat. Secara teknis, seleksi berdasarkan bidang studi dilakukan dengan menggunakan fitur *filter by subject area* yang tersedia pada laman *web* pangkalan data *Scopus*. Setelah pemilihan data, para penulis mengeksplor data dalam format *comma-separated value (.csv)* untuk diproses dan dianalisis lebih lanjut.

Pengolahan Data

Tahap ketiga, yaitu tahap pengolahan data, terdiri dari para penulis memanfaatkan *Microsoft Power Query* untuk pengolahan data, seperti pembersihan data, pembuatan data kolom bibliografis dalam format *American Psychological Association (APA)*, dan ekstraksi data *string*, yaitu data yang terdiri dari rangkaian karakter teks,

Table 1
Number of Publications on Perimenopause and Menopausal Transition by Field of Study

Subject Area	Total Publication
Medicine	4.271
Biochemistry, Genetics, and Molecular Biology	919
Nursing	273
Neuroscience	227
Psychology	178
Pharmacology, Toxicology, and Pharmaceutics	142
Social Sciences	126
Health Professions	83
Agricultural and Biological Sciences	66
Environmental Science	44
Arts and Humanities	43
Multidisciplinary	43
Immunology and Microbiology	40
Chemistry	22
Dentistry	21
Engineering	20
Computer Science	16
Mathematics	15
Chemical Engineering	13
Veterinary	9
Physics and Astronomy	8
Business, Management, and Accounting	3
Decision Sciences	3
Earth and Planetary Sciences	2
Economics, Econometrics, and Finance	2
Energy	2
Materials Science	2

Notes. Source: Scopus Scientific Publication Database.

Tabel 1
Jumlah Publikasi Dengan Topik Perimenopause dan Transisi Menopause Berdasarkan Bidang Studi

Bidang Studi	Total Publikasi
Kedokteran	4,271
Biokimia, Genetika, dan Biologi Molekuler	919
Keperawatan	273
Ilmu Saraf	227
Psikologi	178
Farmakologi, Toksikologi, dan Farmasi	142
Ilmu Sosial	126
Profesi Kesehatan	83
Agrikultur dan Ilmu Biologi	66
Ilmu Lingkungan	44
Seni dan Humaniora	43
Multidisiplin	43
Imunologi dan Mikrobiologi	40
Kimia	22
Kedokteran Gigi	21
Teknik	20
Ilmu Komputer	16
Matematika	15
Teknik Kimia	13
Kedokteran Hewan	9
Fisika dan Astronomi	8
Bisnis, Manajemen, dan Akuntansi	3
Ilmu Kuantitatif (Keputusan)	3
Ilmu Bumi dan Planet	2
Ekonomi, Ekonometri, dan Keuangan	2
Energi	2
Ilmu Materi	2

Catatan. Sumber: Pangkalan Data Publikasi Ilmiah *Scopus*.

in the columns for author keywords, indexed keywords by Scopus, title, and abstract. Technically, the extraction of string data was performed using a delimiter to separate characters. Data processing also aimed at quantification to identify trends in research topics within the field of psychology related to the menopausal transition phase based on the frequency of keyword appearances. Data processing also included the exclusion of stop words, which are specific words that do not contribute meaningful articulation for data quantification and further analysis processes. In this context, the excluded stop words were categorized into three groups: (1) determiners, which are markers that specify nouns such as the, a, an, another, and similar words; (2) coordinating conjunctions that connect words, phrases, and clauses such as for, and, nor, but, or, yet, so, and similar words; and (3) prepositions that express temporal or spatial relationships such as in, under, towards, before, and similar words.

terdapat pada kolom kata kunci penulis, kata kunci terindeks *Scopus*, judul, dan abstrak. Secara teknis, ekstraksi data *string* dilakukan menggunakan *delimiter* (pembatas) untuk memisahkan karakter. Pengolahan data juga bertujuan kuantifikasi untuk mengidentifikasi tren topik penelitian di bidang psikologi terkait fase transisi menopause berdasarkan frekuensi kemunculan kata kunci. Pengolahan data juga mencakup pengecualian *stop words*, yaitu kata spesifik yang tidak memberikan artikulasi bermakna untuk kuantifikasi data dan proses analisis lebih lanjut. Dalam konteks ini, *stop words* yang dikecualikan dikategorikan menjadi tiga kelompok: (1) *determiner*, yaitu penanda yang menentukan kata benda seperti kata *the, a, an, another*, dan sejenisnya; (2) *coordinating conjunction* (konjungsi koordinatif) yang menghubungkan kata, frasa, dan klausa seperti *for, and, nor, but, or, yet, so*, dan sejenisnya; dan (3) *preposition* (kata depan) yang menyatakan hubungan temporal atau spasial seperti *in, under, towards, before*, dan sejenisnya.

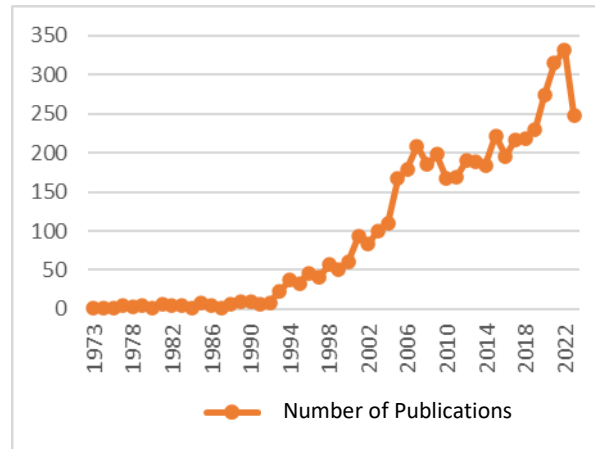


Figure 2. Publications of menopausal transition phase by year of publication.

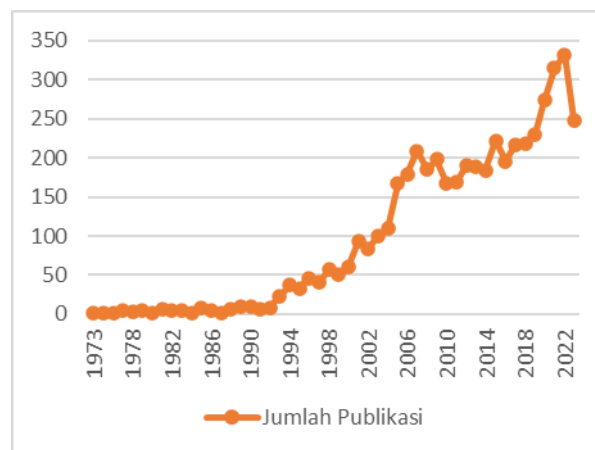
Notes. Source: Scopus Scientific Publication Database.

Data Analysis

The fourth and final stage, being the data analysis stage, comprises four parts: (1) mapping of academic disciplines; (2) descriptive statistical analysis; (3) trend analysis; and (4) historical analysis. Firstly, mapping of academic disciplines and comparing the number of publications between psychology and other disciplines with more publications. Secondly, descriptive statistical analysis includes the impact factor based on the Total Citation per Year (TC/Year) index, calculated as the average citation per year from the year of publication to the year the data was collected (Tur-Porcar et al., 2018). Thirdly, trend analysis of research topics globally based on the frequency of appearance of author keywords through the VOSviewer application. Fourthly, historical

Analisis Data

Tahap keempat dan terakhir, yaitu tahap analisis data, terdiri dari empat bagian: (1) pemetaan disiplin ilmu; (2) analisis statistik deskriptif; (3) analisis tren; dan (4) analisis historis. Pertama, memetakan disiplin ilmu akademik dan membandingkan jumlah publikasi antara disiplin psikologi dengan disiplin ilmu lain yang publikasinya lebih banyak. Kedua, analisis statistik deskriptif mencakup *impact factor* berdasarkan indeks *Total Citation per Year (TC/Year, Total Sitasi per Tahun)*, yang dihitung sebagai rerata sitasi per tahun sejak tahun publikasi hingga tahun pengumpulan data (Tur-Porcar et al., 2018). Ketiga, analisis tren topik penelitian secara global berdasarkan frekuensi kemunculan kata kunci penulis melalui aplikasi *VOSviewer*. Keempat, analisis historis



Gambar 2. Publikasi bertopik fase transisi menopause berdasarkan tahun publikasi.

Catatan. Sumber: Pangkalan Data Publikasi Ilmiah Scopus.

analysis to understand the evolution of studies related to the menopausal transition phase over four time periods. These four parts of the analysis are based on the quantification of metadata from scientific publications in the Scopus database processed in the data processing stage.

Results and Discussions

The Menopausal Transition Phase Across Various Academic Disciplines

Based on 4,911 tracked scientific publication documents containing the terms “perimenopause” or “menopausal transition” in the title, abstract, or keywords in the Scopus Database, psychology is not the only academic discipline examining issues related to the menopausal transition phase. In this regard, a single Scopus-indexed publication document may fall under more than one academic discipline. When ranked by the highest number of publications, the discipline of psychology ranks fifth after the fields of medicine and healthcare (4,271 publications); biochemistry, genetics, and molecular biology (919 publications); nursing (273 publications), and neuroscience (227 publications). More detailed results are available in Table 1.

The field of medicine and healthcare holds the record for the highest number of publications. Notably, the earliest scientific publication related to the menopausal transition phase identified in the Scopus database is a research article in the field of medicine and healthcare by Heinrich Wittlinger, published in 1973. This article appeared in the journal *Sandorama*, titled “Differentialdiagnose von Blutungen in der Perimenopause, Postmenopause und im Senium”, which translates to “Differential Diagnosis of Bleeding in Perimenopause, Postmenopause, and Senium” (Wittlinger, 1973).

Since 1973, Scopus-indexed scientific publications related to the menopausal transition phase have seen several significant increases. The first notable rise occurred between 1993 and 1994, with 23 publications in 1993 and 37 publications in 1994. The second significant increase happened from 2001 to 2004, during which period the number of publications exceeded 100 annually. The third notable increase occurred in 2006-2007, with the number of publications reaching 200 annually. The most recent significant surge occurred during the COVID-19 pandemic, from 2020 to 2022, when the number of publications exceeded 300 annually.

untuk memahami evolusi studi terkait fase transisi menopause dalam empat periode waktu. Keempat bagian analisis tersebut didasarkan pada kuantifikasi *metadata* publikasi ilmiah dalam pangkalan data *Scopus* yang diolah pada tahap pengolahan data.

Hasil dan Diskusi

Fase Transisi Menopause Pada Berbagai Disiplin Akademik

Berdasarkan 4.911 dokumen publikasi ilmiah teracak yang memuat istilah “perimenopause” atau “transisi menopause” pada judul, abstrak, atau kata kunci dalam *Scopus Database*, psikologi bukanlah satu-satunya disiplin ilmu yang mengkaji permasalahan atau isu terkait fase transisi menopause. Dalam hal ini, satu dokumen publikasi yang terindeks *Scopus* dapat termasuk dalam lebih dari satu disiplin ilmu. Apabila diurutkan berdasarkan jumlah publikasi terbanyak, disiplin ilmu psikologi menempati urutan kelima setelah bidang kedokteran dan kesehatan (4.271 publikasi); biokimia, genetika, dan biologi molekuler (919 publikasi); keperawatan (273 publikasi), dan ilmu saraf (227 publikasi). Hasil lebih rinci tersedia pada Tabel 1.

Bidang kedokteran dan kesehatan memegang rekor jumlah publikasi terbanyak. Khususnya, publikasi ilmiah paling awal terkait fase transisi menopause yang diidentifikasi dalam pangkalan data *Scopus* adalah artikel penelitian di bidang kedokteran dan kesehatan oleh Heinrich Wittlinger, yang diterbitkan pada tahun 1973. Artikel ini muncul di jurnal *Sandorama* dengan judul “*Differentialdiagnose von Blutungen in der Perimenopause, Postmenopause und im Senium*”, yang diterjemahkan menjadi “Diagnosis Banding Perdarahan pada Perimenopause, Postmenopause, dan Senium” (Wittlinger, 1973).

Sejak tahun 1973, publikasi ilmiah yang terindeks *Scopus* terkait fase transisi menopause mengalami sejumlah peningkatan yang signifikan. Peningkatan penting pertama terjadi antara tahun 1993 dan 1994, dengan 23 publikasi pada tahun 1993 dan 37 publikasi pada tahun 1994. Peningkatan signifikan kedua terjadi dari tahun 2001 hingga 2004, ketika pada periode tersebut jumlah publikasi melebihi 100 setiap tahunnya. Peningkatan penting ketiga terjadi pada tahun 2006-2007, dengan jumlah publikasi mencapai 200 publikasi setiap tahunnya. Lonjakan signifikan terbaru terjadi selama pandemi COVID-19, dari tahun 2020 hingga 2022, ketika jumlah publikasi melebihi 300 setiap tahunnya.

Table 2
Number of Publications by Author Affiliation Institutions

Institution	Number of Publications
University of Pittsburgh	35
University of Melbourne	9
Rush University	8

Notes. Source: Scopus Scientific Publication Database.

Tabel 2
Jumlah Publikasi Berdasarkan Institusi Afiliasi Penulis

Institusi	Jumlah Publikasi
<i>University of Pittsburgh</i>	35
<i>University of Melbourne</i>	9
<i>Rush University</i>	8

Catatan. Sumber: Pangkalan Data Publikasi Ilmiah *Scopus*.

The Menopausal Transition Phase in the Discipline of Psychology

Journals and Institutions

The selection process of scientific publications based on the field of psychology resulted in 178 publications issued between the years 1985 to 2023. During this period, the majority of publications originated from institutions located in the United States of America, totaling 77 publications, followed by Australia and the United Kingdom with 18 publications each. The institutions most frequently affiliated with the authors were the University of Pittsburgh (35 publications), the University of Melbourne (nine publications), and Rush University (eight publications). More detailed results are available in Table 2.

Regarding the most active journal publishers, there are five journal publishers that have published more than five (>5) publications related to the menopausal transition phase within the field of psychology. Firstly, the *Journal of Affective Disorders* with 17 publications. Secondly, the *Journal of Psychosomatic Obstetrics and Gynecology* with nine publications. Thirdly, *Psychological Medicine* with eight publications. Fourthly, the *Journal of Depression and Anxiety* with six publications. Fifthly, the *Journal of Psychosomatic Medicine* with six publications. More detailed results are available in Table 3.

Global Research Topic Trends

This study employs citation as a parameter to measure the impact generated by each scientific publication. The metadata of scientific publications available in the Scopus database provides the number of citations for each publication. However, calculating the impact or impact factor cannot solely rely on the number of citations without considering the age of the publication. Therefore, this study utilizes the Total Citation per Year (TC/Year) index as utilized by Tur-Porcar et al. (2018),

Fase Transisi Menopause Dalam Disiplin Ilmu Psikologi

Jurnal dan Institusi

Proses seleksi publikasi ilmiah berdasarkan bidang psikologi menghasilkan 178 publikasi yang diterbitkan antara tahun 1985 hingga 2023. Pada periode tersebut, mayoritas publikasi berasal dari lembaga yang berlokasi di Amerika Serikat sebanyak 77 publikasi, disusul Australia dan Inggris dengan masing-masing 18 publikasi. Institusi yang paling sering berafiliasi dengan penulis adalah *University of Pittsburgh* (35 publikasi), *University of Melbourne* (sembilan publikasi), dan *Rush University* (delapan publikasi). Hasil lebih rinci tersedia pada Tabel 2.

Terkait penerbit jurnal teraktif, terdapat lima penerbit jurnal yang telah menerbitkan lebih dari lima (>5) publikasi terkait fase transisi menopause dalam bidang psikologi. Pertama, *Journal of Affective Disorders* dengan 17 publikasi. Kedua, *Journal of Psychosomatic Obstetrics and Gynecology* dengan sembilan publikasi. Ketiga, *Psychological Medicine* dengan delapan publikasi. Keempat, *Journal of Depression and Anxiety* dengan enam publikasi. Kelima, *Journal of Psychosomatic Medicine* dengan enam publikasi. Hasil lebih rinci tersedia pada Tabel 3.

Tren Topik Penelitian Global

Studi ini menggunakan sitasi sebagai parameter untuk mengukur dampak yang dihasilkan dari tiap publikasi ilmiah. Metadata publikasi ilmiah yang tersedia di pangkalan data *Scopus* mencantumkan jumlah sitasi untuk tiap publikasi. Namun, penghitungan dampak atau *impact factor* tidak bisa hanya mengandalkan jumlah sitasi tanpa mempertimbangkan usia publikasi. Maka dari itu, studi ini menggunakan indeks *Total Citation per Year (TC/Year)* seperti yang digunakan oleh Tur-Porcar et al.

Table 3
Journals with the Most Publications Related to the Menopausal Transition Phase (Top 5, >5)

Journal Name	Number of Publications
Journal of Affective Disorders	17
Journal of Psychosomatic Obstetrics and Gynecology	14
Psychological Medicine	8
Depression and Anxiety	6
Psychosomatic Medicine	6

Notes. Source: Scopus Scientific Publication Database.

calculating the average citation per year over the period from the year of publication to the year the data was collected. The top 10 publications with the highest impact based on Total Citation per Year (TC/Year) can be reviewed in Table 4.

In general, publications with the highest impact (Total Citation per Year [TC/Year]) as indicated in Table 4 are predominantly focused on studies related to depression during the menopausal transition phase. This dominance is evidenced through various thematic studies such as depression during the perimenopausal phase analyzed through national survey data on women's health (Bromberger et al., 2007, 2011), meta-analysis on perimenopausal depression phenomena (de Kruif et al., 2016), risk factors triggering depression (Bromberger et al., 2015), and depression predictors (Goldbacher et al., 2009) during the menopausal transition phase.

In addition to depression issues, there are other themes related to the menopausal transition phase that have a high impact. For example, research themes on sleep disturbances experienced by women during perimenopause (Baker, de Zambotti, Colrain, & Bei, 2018; Baker, Lampio, Saaresranta, & Polo-Kantola, 2018), sexual function and activity during the menopausal transition phase (Cain et al., 2003; Dennerstein, Alexander, & Kotz, 2003), and physical activity that can affect mental health during the menopausal transition phase (Elavsky & McAuley, 2007).

Aside from being reviewed based on the highest impact levels based on Total Citation per Year (TC/Year), trends

(2018), menghitung rerata sitasi per tahun selama periode tahun publikasi hingga tahun pengumpulan data. Sepuluh publikasi teratas dengan dampak tertinggi berdasarkan *Total Citation per Year (TC/Year)* dapat dilihat pada Tabel 4.

Secara umum, publikasi dengan dampak tertinggi (*Total Citation per Year [TC/Year]*) seperti ditunjukkan pada Tabel 4 sebagian besar berfokus pada studi terkait depresi pada fase transisi menopause. Dominasi tersebut dibuktikan melalui berbagai studi tematik seperti depresi pada fase perimenopause yang dianalisis melalui data survei nasional kesehatan perempuan (Bromberger et al., 2007, 2011), meta-analisis fenomena depresi perimenopause (de Kruif et al., 2016), faktor risiko pemicu depresi (Bromberger et al., 2015), dan prediktor depresi (Goldbacher et al., 2009) selama fase transisi menopause.

Selain isu depresi, ada tema lain terkait fase transisi menopause yang berdampak tinggi. Sebagai contoh adalah tema penelitian tentang gangguan tidur yang dialami wanita pada masa perimenopause (Baker, de Zambotti, Colrain, & Bei, 2018; Baker, Lampio, Saaresranta, & Polo-Kantola, 2018), fungsi dan aktivitas seksual pada fase transisi menopause (Cain et al., 2003; Dennerstein, Alexander, & Kotz, 2003), dan aktivitas fisik yang dapat mempengaruhi kesehatan mental selama fase transisi menopause (Elavsky & McAuley, 2007).

Selain ditinjau berdasarkan tingkat dampak tertinggi berdasarkan *Total Citation per Year (TC/Year)*, tren topik

Tabel 3
Jurnal Dengan Publikasi Terbanyak Terkait Fase Transisi Menopause (5 Teratas, >5)

Nama Jurnal	Jumlah Publikasi
Journal of Affective Disorders	17
Journal of Psychosomatic Obstetrics and Gynecology	14
Psychological Medicine	8
Depression and Anxiety	6
Psychosomatic Medicine	6

Catatan. Sumber: Pangkalan Data Publikasi Ilmiah Scopus.

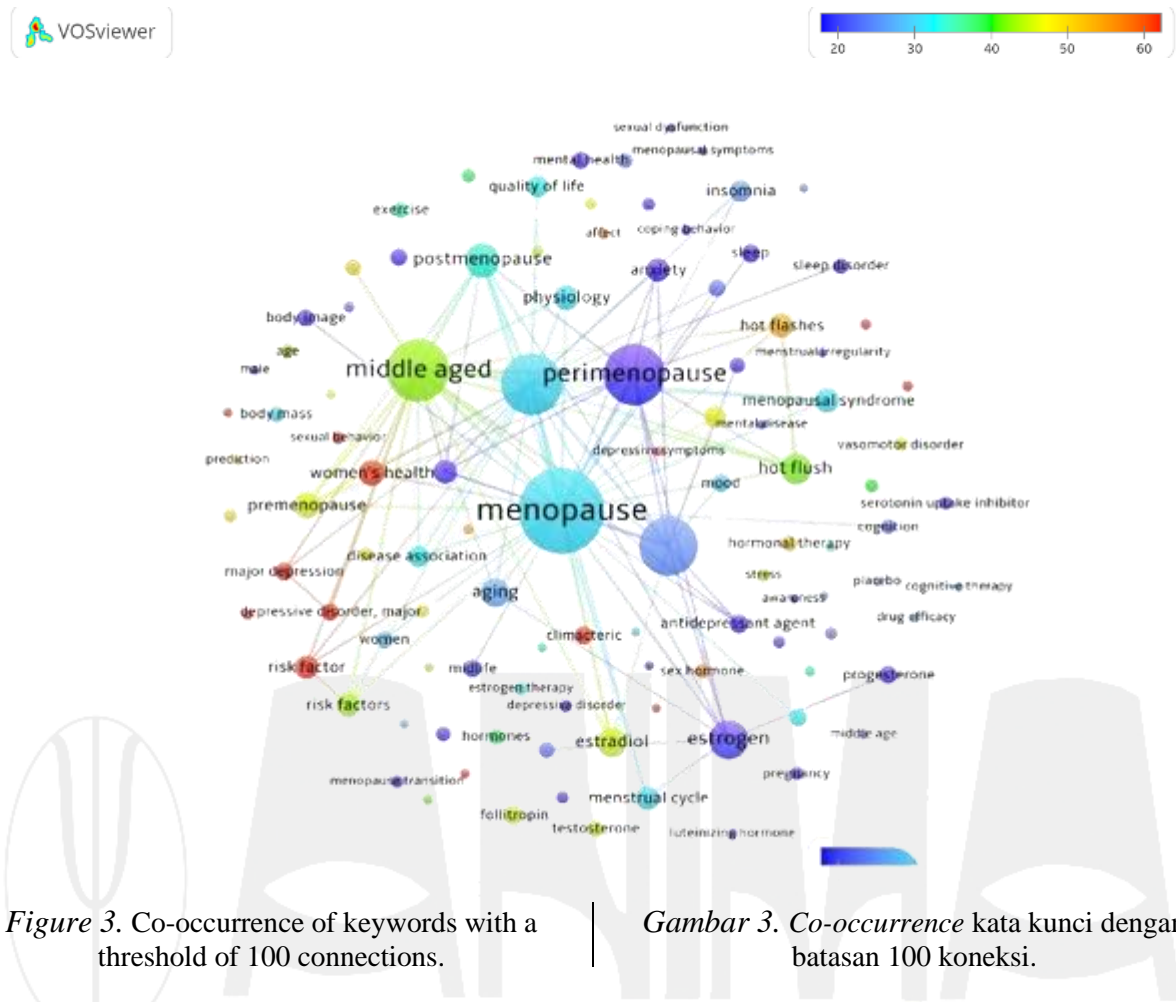


Figure 3. Co-occurrence of keywords with a threshold of 100 connections.

Gambar 3. Co-occurrence kata kunci dengan batasan 100 koneksi.

in research topics on the menopausal transition phase can also be examined through keyword co-occurrence analysis in each publication document. This study utilizes the VOSviewer software (van Eck & Waltman, 2010) to determine the level of association among keywords based on their co-occurrence frequency (Laengle et al., 2017). The keywords used are author-defined keywords. Visualization of the keyword co-occurrence analysis can be reviewed in Figure 3.

In Figure 3, the bubble size of a keyword is determined by its frequency of appearance in 178 publication documents. Meanwhile, the thickness of connecting lines is determined by the frequency of occurrence of keywords that are interconnected within the same publication document. The color difference marked with a range of values from 20 to 60 indicates the average number of citations from documents containing the keyword. For example, the occurrence rate of the keyword “hot flashes” is smaller than the keyword “estrogen”, yet its average citation is higher, i.e., >50 citations per publication.

penelitian pada fase transisi menopause juga dapat dikaji melalui analisis *keyword co-occurrence* (kata kunci yang muncul bersamaan) di tiap dokumen publikasi. Studi ini menggunakan perangkat lunak *VOSviewer* (van Eck & Waltman, 2010) untuk menentukan tingkat keterkaitan antar kata kunci berdasarkan frekuensi *co-occurrence* (kemunculan bersama)-nya (Laengle et al., 2017). Kata kunci yang digunakan adalah kata kunci yang ditentukan penulis. Visualisasi analisis *keyword co-occurrence* dapat dilihat pada Gambar 3.

Pada Gambar 3, ukuran gelembung suatu kata kunci ditentukan oleh frekuensi kemunculannya di 178 dokumen publikasi. Sedangkan ketebalan garis penghubung ditentukan oleh frekuensi kemunculan kata kunci yang saling berhubungan dalam satu dokumen publikasi yang sama. Perbedaan warna yang ditandai dengan rentang nilai 20 hingga 60 menunjukkan rerata jumlah sitasi dari dokumen yang mengandung kata kunci tersebut. Sebagai contoh, tingkat kemunculan kata kunci “hot flashes” lebih kecil dibandingkan kata kunci “estrogen”, namun rerata sitasinya lebih tinggi, yaitu >50 sitasi per publikasi.

Table 4
Publications With the Highest Citation Rates Globally (Top 10)

R	Title	Year	Authors	TC	TC/Year
1	Sleep Problems During the Menopausal Transition: Prevalence, Impact, and Management Challenges	2018	Baker, F. C.; De Zambotti, M.; Colrain, I. M.; Bei, B.	137	22.83
2	Depressive Symptoms During the Menopausal Transition: The Study of Women's Health Across the Nation (SWAN)	2007	Bromberger, J. T.; Matthews, K. A.; Schott, L. L.; Brockwell, S.; Avis, N. E.; Kravitz, H. M.; Everson-Rose, S. A.; Gold, E. B.; Sowers, M.; Randolph Jr. J. F.	355	20.88
3	Major Depression During and After the Menopausal Transition: Study of Women's Health Across the Nation (SWAN)	2011	Bromberger, J. T.; Kravitz, H. M.; Chang, Y. -F.; Cyranowski, J. M.; Brown, C.; Matthews, K. A.	259	19.92
4	Sleep and Sleep Disorders in the Menopausal Transition	2018	Baker, F. C.; Lampio, L.; Saaresranta, T.; Polo-Kantola, P.	80	13.33
5	Depression During the Perimenopause: A Meta-analysis	2016	de Kruif, M.; Spijker, A. T.; Molendijk, M. L.	92	11.50
6	Sexual Functioning and Practices in a Multi-ethnic Study of Midlife Women: Baseline Results From SWAN	2003	Cain, V. S.; Johannes, C. B.; Avis, N. E.; Mohr, B.; Schocken, M.; Skurnick, J.; Ory, M.	220	10.48
7	Physical Activity and Mental Health Outcomes During Menopause: A Randomized Controlled Trial	2007	Elavsky, S.; McAuley, E.	157	9.24
8	The Menopause and Sexual Functioning: A Review of the Population-based Studies	2003	Dennerstein, L.; Alexander, J. L.; Kotz, K.	189	9.00
9	Lifetime History of Major Depression Predicts the Development of the Metabolic Syndrome in Middle-aged Women	2009	Goldbacher, E. M.; Bromberger, J.; Matthews, K. A.	127	8.47
10	Risk Factors for Major Depression During Midlife Among a Community Sample of Women With and Without Prior Major Depression: Are They the Same or Different?	2015	Bromberger, J. T.; Schott, L.; Kravitz, H. M.; Joffe, H.	73	8.11

Notes. R = Rank; TC = Total Citations; TC/Year = Total Citation Per Year; Source: Scopus Scientific Publication Database.

Period of Studies on the Menopausal Transition Phase in the Discipline of Psychology

Periodization of Studies

The oldest publication related to the menopausal transition phase in the field of psychology found in the Scopus database is a research article by Norma McCoy, Winnifred Cutler, and Julian M. Davidson (1985) published

Periode Studi Fase Transisi Menopause Dalam Disiplin Psikologi

Periodisasi Studi

Publikasi tertua terkait fase transisi menopause dalam bidang psikologi yang terdapat dalam pangkalan data *Scopus* adalah artikel penelitian Norma McCoy, Winnifred Cutler, dan Julian M. Davidson (1985) yang dimuat dalam

Tabel 4

Publikasi Dengan Tingkat Sitasi Tertinggi Secara Global (10 Tertinggi)

R	Judul	Tahun	Penulis	TC	TC/Year
1	Sleep Problems During the Menopausal Transition: Prevalence, Impact, and Management Challenges	2018	Baker, F. C.; De Zambotti, M.; Colrain, I. M.; Bei, B.	137	22.83
2	Depressive Symptoms During the Menopausal Transition: The Study of Women's Health Across the Nation (SWAN)	2007	Bromberger, J. T.; Matthews, K. A.; Schott, L. L.; Brockwell, S.; Avis, N. E.; Kravitz, H. M.; Everson-Rose, S. A.; Gold, E. B.; Sowers, M.; Randolph Jr. J. F.	355	20.88
3	Major Depression During and After the Menopausal Transition: Study of Women's Health Across the Nation (SWAN)	2011	Bromberger, J. T.; Kravitz, H. M.; Chang, Y. -F.; Cyranowski, J. M.; Brown, C.; Matthews, K. A.	259	19.92
4	Sleep and Sleep Disorders in the Menopausal Transition	2018	Baker, F. C.; Lampio, L.; Saaresranta, T.; Polo-Kantola, P.	80	13.33
5	Depression During the Perimenopause: A Meta-analysis	2016	de Kruif, M.; Spijker, A. T.; Molendijk, M. L.	92	11.50
6	Sexual Functioning and Practices in a Multi-ethnic Study of Midlife Women: Baseline Results From SWAN	2003	Cain, V. S.; Johannes, C. B.; Avis, N. E.; Mohr, B.; Schocken, M.; Skurnick, J.; Ory, M.	220	10.48
7	Physical Activity and Mental Health Outcomes During Menopause: A Randomized Controlled Trial	2007	Elavsky, S.; McAuley, E.	157	9.24
8	The Menopause and Sexual Functioning: A Review of the Population-based Studies	2003	Dennerstein, L.; Alexander, J. L.; Kotz, K.	189	9.00
9	Lifetime History of Major Depression Predicts the Development of the Metabolic Syndrome in Middle-aged Women	2009	Goldbacher, E. M.; Bromberger, J.; Matthews, K. A.	127	8.47
10	Risk Factors for Major Depression During Midlife Among a Community Sample of Women With and Without Prior Major Depression: Are They the Same or Different?	2015	Bromberger, J. T.; Schott, L.; Kravitz, H. M.; Joffe, H.	73	8.11

Catatan. R = Rank (Peringkat); TC = Total Citations (Total Sitasi); TC/Year = Total Citation per Year (Total Sitasi per Tahun); Sumber: Pangkalan Data Publikasi Ilmiah Scopus.

in the Journal of Archives of Sexual Behavior titled "Relationships Among Sexual Behavior, Hot Flashes, and Hormone Levels in Perimenopausal Women. This article explores the relationship between hot flashes (sudden sensations of heat often experienced during perimenopause) with menstrual cycle regularity, estradiol levels, testosterone to estradiol ratio (T/E), and sexual activity in perimenopausal women. Meanwhile, the most recent publication is a research article by Sampurna Kundu

Journal of Archives of Sexual Behavior berjudul "Relationships Among Sexual Behavior, Hot Flashes, and Hormone Levels in Perimenopausal Women". Artikel ini mengeksplorasi hubungan antara hot flashes (sensasi panas tiba-tiba yang sering dialami saat perimenopause) dengan keteraturan siklus menstruasi, kadar estradiol, rasio testosteron terhadap estradiol (T/E), dan aktivitas seksual pada perempuan perimenopause. Sedangkan publikasi terbaru adalah artikel penelitian Sampurna Kundu dan

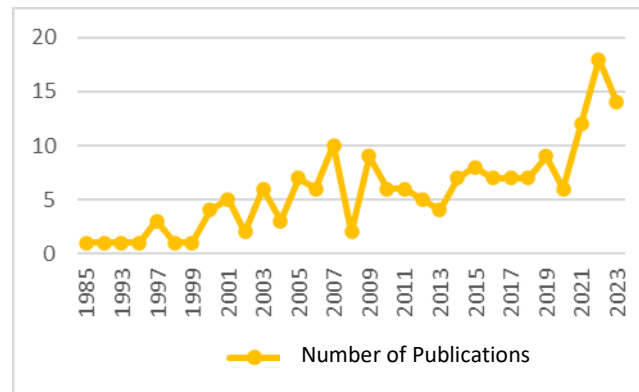


Figure 4. Publications in the field of psychology based on year of publication.

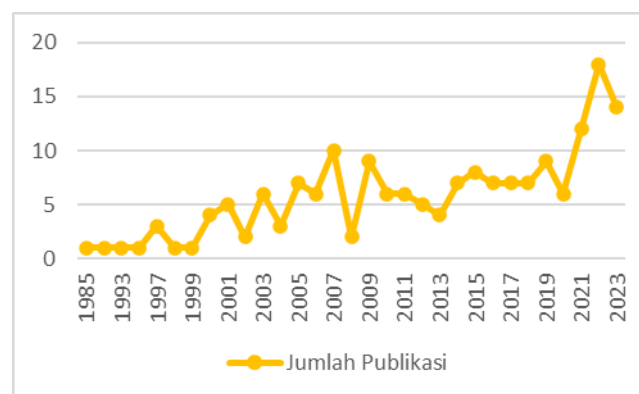
Notes. Source: Scopus Scientific Publication Database.

and Sanghmitra Sheel Acharya (2023) in the *BioMed Central (BMC) Psychology Journal* titled “Linkage of Premature and Early Menopause with Psychosocial Well-Being: A Moderated Multiple Mediation Approach”. This article found that premature menopause (before the age of 40) or early menopause (between the ages of 40-44 years) is associated with cognitive decline, insomnia, and depression; and these effects are exacerbated by smoking habits. Both studies (Kundu & Acharya, 2023; McCoy et al., 1985) indicate that over the past 39 years, phenomena related to the menopausal transition phase have been studied from the perspective of psychological well-being and intersecting mental health. More detailed results are portrayed in Figure 4.

As shown in Figure 4, from 1985 to 2023, the publication of scientific papers in psychology related to the menopausal transition phase has continued to increase. During this period, there have been at least four periods

Sanghmitra Sheel Acharya (2023) dalam *BioMed Central (BMC) Psychology Journal* dengan judul “Linkage of Premature and Early Menopause with Psychosocial Well-Being: A Moderated Multiple Mediation Approach”. Artikel ini menemukan bahwa menopause prematur (sebelum usia 40 tahun) atau menopause dini (antara usia 40-44 tahun) dikaitkan dengan penurunan kinerja kognitif, insomnia, dan depresi; dan efek ini diperburuk oleh kebiasaan merokok. Kedua studi tersebut (Kundu & Acharya, 2023; McCoy et al., 1985) menunjukkan bahwa selama 39 tahun terakhir, fenomena terkait fase transisi menopause telah dipelajari dari perspektif kesejahteraan psikologis dan kesehatan mental yang bersinggungan. Hasil lebih detail digambarkan pada Gambar 4.

Seperti terlihat pada Gambar 4, sejak tahun 1985 hingga tahun 2023, publikasi karya ilmiah di bidang psikologi terkait fase transisi menopause terus meningkat. Dalam kurun waktu tersebut, setidaknya terdapat empat periode



Gambar 4. Publikasi dalam bidang psikologi berdasarkan tahun publikasi.

Catatan. Sumber: Pangkalan Data Publikasi Ilmiah Scopus.

Table 5
Publications Related to the Menopausal Transition Phase in Psychology Based on Time Period

Period	Initial Year	End Year	TP	\bar{x}
1	1985	1994	3	0.30
2	1995	2004	26	2.60
3	2005	2014	61	6.10
4	2015	2023	88	9.78

Notes. TP = Total Publications; \bar{x} = mean number of publications within the periodic year range; Source: Scopus Scientific Publication Database.

where the number of publications and research topic trends can experience significant increases, namely: (1) Period 1: 1985-1994; (2) Period 2: 1995-2004; (3) Period 3: 2005-2014; and (4) Period 4: 2015-2023. Each period spans 10 years, except for the last period, Period 4: 2015-2023, which spans nine years. The distribution of the 178 publications based on the period of years can be reviewed in Table 5.

Period 1: 1985-1994

During Period 1: 1985-1994, there were three publications indexed in the Scopus database. The authors with the most contributions during this period were Norma McCoy (affiliated with San Francisco State University) and Winnifred Berg Cutler (affiliated with the Athena Institute for Women's Wellness Research; Cutler et al., 1987; McCoy et al., 1985).

Female sexuality is a topic addressed by Norma McCoy et al. in two publications written during this period. The first study discusses the relationship between hot flashes phenomena and female sexual behavior (McCoy et al., 1985), while the second study discusses sexuality during the perimenopause phase (Cutler et al., 1987). Thus, it can be concluded that studies on the menopausal transition phase in the field of psychology during Period 1: 1985-1994 in Scopus-indexed publications were dominated by issues of sexuality. More detailed results are available in Table 6.

ketika jumlah publikasi dan tren topik penelitian dapat mengalami peningkatan yang signifikan, yaitu: (1) Periode 1: 1985-1994; (2) Periode 2: 1995-2004; (3) Periode 3: 2005-2014; dan (4) Periode 4: 2015-2023. Tiap periode berlangsung selama 10 tahun, kecuali periode terakhir, Periode 4: 2015-2023, yang berlangsung selama sembilan tahun. Sebaran 178 publikasi berdasarkan periode tahun dapat dilihat pada Tabel 5.

Periode 1: 1985-1994

Selama Periode 1: 1985-1994, terdapat tiga publikasi yang terindeks di pangkalan data *Scopus*. Penulis dengan kontribusi terbesar selama periode ini adalah Norma McCoy (berafiliasi dengan *San Francisco State University*) dan Winnifred Berg Cutler (berafiliasi dengan *Athena Institute for Women's Wellness Research*; Cutler et al., 1987; McCoy et al., 1985).

Seksualitas perempuan adalah topik yang dibahas oleh Norma McCoy et al. dalam dua publikasi yang ditulis selama periode ini. Studi pertama membahas tentang hubungan fenomena *hot flashes* dengan perilaku seksual perempuan (McCoy et al., 1985), sedangkan studi kedua membahas tentang seksualitas pada fase perimenopause (Cutler et al., 1987). Dengan demikian, dapat disimpulkan bahwa kajian mengenai fase transisi menopause dalam bidang psikologi pada Periode 1: 1985-1994 pada publikasi terindeks *Scopus* didominasi oleh isu seksualitas. Hasil lebih rinci tersedia pada Tabel 6.

Tabel 5
Publikasi Terkait Fase Transisi Menopause Dalam Psikologi Berdasarkan Periode Waktu

Periode	Tahun Awal	Tahun Akhir	TP	\bar{x}
1	1985	1994	3	0.30
2	1995	2004	26	2.60
3	2005	2014	61	6.10
4	2015	2023	88	9.78

Catatan. TP = Total Publications (Total Publikasi); \bar{x} = rerata jumlah publikasi dalam periode waktu; Sumber: Pangkalan Data Publikasi Ilmiah *Scopus*.

Table 6

Publications in Period 1: 1985-1994

R	Title	Year	Authors	TC	TC/Year
1	Perimenopausal Sexuality	1987	Cutler, W. B.; Garcia, C. R.; McCoy, N.	55	1.49
2	Relationships Among Sexual Behavior, Hot Flashes, and Hormone Levels in Perimenopausal Women	1985	McCoy, N.; Cutler, W.; Davidson, J. M.	50	1.28
3	Menopausal Symptoms as Consequences of Dysrhythmia	1993	Gannon, L.	10	0.32

Notes. R = Rank; TC = Total Citations; TC/Year = Total Citation per Year; Source: Scopus Scientific Publication Database.

Table 7

Publications With the Highest Impact During Period 2: 1995-2004

R	Title	Year	Authors	TC	TC/Year
1	Sexual Functioning and Practices in a Multi-ethnic Study of Midlife Women: Baseline Results From SWAN	2003	Cain, V. S.; Johannes, C. B.; Avis, N. E.; Mohr, B.; Schocken, M.; Skurnick, J.; Ory, M.	220	10.48
2	The Menopause and Sexual Functioning: A Review of the Population-based Studies	2003	Dennerstein, L.; Alexander, J. L.; Kotz, K.	189	9.00
3	Estrogen-mediated Effects on Depression and Memory Formation in Females	2003	Shors, T. J.; Leuner, B.	140	6.67
4	Marital Status and Quality in Middle-aged Women: Associations With Levels and Trajectories of Cardiovascular Risk Factors	2003	Gallo, L. C.; Matthews, K. A.; Troxel, W. M.; Kuller, L. H.	113	5.38
5	A "feminine" Model of Vulnerability to Depressive Symptoms: A Longitudinal Investigation of Middle-aged Women	1996	Bromberger, J. T.; Matthews, K. A.	75	2.68
6	Menopausal Stage and Age and Perceptions of Body Image	2001	Deeks, A. A.; McCabe, M. P.	46	2.00
7	Relationships Between Premenstrual Complaints and Perimenopausal Experiences	1998	Morse, C. A.; Dudley, E.; Guthrie, J.; Dennerstein, L.	43	1.65
8	Well-being and the Menopausal Transition	1997	Dennerstein, L.; Dudley, E.; Burger, H.	43	1.59
9	Predictors of Declining Self-rated Health During the Transition to Menopause	2003	Dennerstein, L.; Dudley, E. C.; Guthrie, J. R.	33	1.57
10	Educational Attainment and Coronary and Aortic Calcification in Postmenopausal Women	2001	Gallo, L. C.; Matthews, K. A.; Kuller, L. H.; Sutton- Tyrrell, K.; Edmundowicz, D.	34	1.48

Notes. R = Rank; TC = Total Citations; TC/Year = Total Citation per Year; Source: Scopus Scientific Publication Database.

Period 2: 1995-2004

Interest in scientific studies related to the menopausal transition phase in the field of psychology increased during Period 2: 1995-2004. The Scopus publication database

Periode 2: 1995-2004

Minat terhadap kajian ilmiah terkait fase transisi menopause di bidang psikologi meningkat pada Periode 2: 1995-2004. Pangkalan data publikasi *Scopus* mencatat

Tabel 6

Publikasi Dalam Periode 1: 1985-1994

R	Judul	Tahun	Penulis	TC	TC/Year
1	Perimenopausal Sexuality	1987	Cutler, W. B.; Garcia, C. R.; McCoy, N.	55	1.49
2	Relationships Among Sexual Behavior, Hot Flashes, and Hormone Levels in Perimenopausal Women	1985	McCoy, N.; Cutler, W.; Davidson, J. M.	50	1.28
3	Menopausal Symptoms as Consequences of Dysrhythmia	1993	Gannon, L.	10	0.32

Catatan. R = Rank (Peringkat); TC = Total Citations (Total Sitasi); TC/Year = Total Citation per Year (Total Sitasi per Tahun); Sumber: Pangkalan Data Publikasi Ilmiah Scopus.

Tabel 7

Publikasi Dengan Impact Factor Tertinggi Dalam Periode 2: 1995-2004

R	Judul	Tahun	Penulis	TC	TC/Year
1	Sexual Functioning and Practices in a Multi-ethnic Study of Midlife Women: Baseline Results From SWAN	2003	Cain, V. S.; Johannes, C. B.; Avis, N. E.; Mohr, B.; Schocken, M.; Skurnick, J.; Ory, M.	220	10.48
2	The Menopause and Sexual Functioning: A Review of the Population-based Studies	2003	Dennerstein, L.; Alexander, J. L.; Kotz, K.	189	9.00
3	Estrogen-mediated Effects on Depression and Memory Formation in Females	2003	Shors, T. J.; Leuner, B.	140	6.67
4	Marital Status and Quality in Middle-aged Women: Associations With Levels and Trajectories of Cardiovascular Risk Factors	2003	Gallo, L. C.; Matthews, K. A.; Troxel, W. M.; Kuller, L. H.	113	5.38
5	A "feminine" Model of Vulnerability to Depressive Symptoms: A Longitudinal Investigation of Middle-aged Women	1996	Bromberger, J. T.; Matthews, K. A.	75	2.68
6	Menopausal Stage and Age and Perceptions of Body Image	2001	Deeks, A. A.; McCabe, M. P.	46	2.00
7	Relationships Between Premenstrual Complaints and Perimenopausal Experiences	1998	Morse, C. A.; Dudley, E.; Guthrie, J.; Dennerstein, L.	43	1.65
8	Well-being and the Menopausal Transition	1997	Dennerstein, L.; Dudley, E.; Burger, H.	43	1.59
9	Predictors of Declining Self-rated Health During the Transition to Menopause	2003	Dennerstein, L.; Dudley, E. C.; Guthrie, J. R.	33	1.57
10	Educational Attainment and Coronary and Aortic Calcification in Postmenopausal Women	2001	Gallo, L. C.; Matthews, K. A.; Kuller, L. H.; Sutton- Tyrrell, K.; Edmundowicz, D.	34	1.48

Catatan. R = Rank (Peringkat); TC = Total Citations (Total Sitasi); TC/Year = Total Citation per Year (Total Sitasi per Tahun); Sumber: Pangkalan Data Publikasi Ilmiah Scopus.

recorded at least 26 publications published during Period 2: 1995-2004. The 10 publications with the highest impact during this period can be reviewed in Table 7.

minimal terdapat 26 publikasi terbit pada Periode 2: 1995-2004. Sepuluh publikasi dengan dampak tertinggi pada periode ini dapat dilihat pada Tabel 7.

Table 8
Publications With the Highest Impact During Period 3: 2005-2014

R	Title	Year	Authors	TC	TC/Year
1	Depressive Symptoms During the Menopausal Transition: The Study of Women's Health Across the Nation (SWAN)	2007	Bromberger, J. T.; Matthews, K. A.; Schott, L. L.; Brockwell, S.; Avis, N. E.; Kravitz, H. M.; Everson-Rose, S. A.; Gold, E. B.; Sowers, M.; Randolph Jr. J. F.	355	20.88
2	Major Depression During and After the Menopausal Transition: Study of Women's Health Across the Nation (SWAN)	2011	Bromberger, J. T.; Kravitz, H. M.; Chang, Y. -F.; Cyranowski, J. M.; Brown, C.; Matthews, K. A.	259	19.92
3	Physical Activity and Mental Health Outcomes During Menopause: A Randomized Controlled Trial	2007	Elavsky, S.; McAuley, E.	157	9.24
4	Lifetime History of Major Depression Predicts the Development of the Metabolic Syndrome in Middle-aged Women	2009	Goldbacher, E. M.; Bromberger, J.; Matthews, K. A.	127	8.47
5	A Cognitive Model of Menopausal Hot Flashes and Night Sweats	2010	Hunter, M. S.; Mann, E.	106	7.57
6	Marital Happiness and Sleep Disturbances in a Multi-ethnic Sample of Middle-aged Women	2009	Troxel, W. M.; Buysse, D. J.; Hall, M.; Matthews, K. A.	99	6.60
7	Reproductive Cycle-associated Mood Symptoms in Women With Major Depression and Bipolar Disorder	2007	Payne, J. L.; Roy, P. S.; Murphy-Eberenz, K.; Weismann, M. M.; Swartz, K. L.; McInnis, M. G.; Nwulia, E.; Mondimore, F. M.; MacKinnon, D. F.; Miller, E. B.; Nurnberger, J. I.; Levinson, D. F.; DePaulo Jr. J. R.; Potash, J. B.	102	6.00
8	Depression and Midlife: Are We Overpathologising the Menopause?	2012	Judd, F. K.; Hickey, M.; Bryant, C.	68	5.67
9	Anxiety During the Menopausal Transition: A Systematic Review	2012	Bryant, C.; Judd, F. K.; Hickey, M.	64	5.33
10	Emotional Antecedents of Hot Flashes During Daily Life	2005	Thurston, R. C.; Blumenthal, J. A.; Babyak, M. A.; Sherwood, A.	98	5.16

Notes. R = Rank; TC = Total Citations; TC/Year = Total Citation per Year; Source: Scopus Scientific Publication Database.

The increase in the number of publications during this period is accompanied by the expansion of various research topics related to the menopausal transition phase in the field of psychology. The issue of sexuality still has a strong influence during this period, especially studies related to sexual function and behavior during the menopausal transition phase based on women's health survey data (Cain et al., 2003; Dennerstein, Alexander, &

Peningkatan jumlah publikasi pada periode ini diikuti dengan perluasan berbagai topik penelitian terkait fase transisi menopause di bidang psikologi. Isu seksualitas masih mempunyai pengaruh yang kuat pada periode ini, terutama studi terkait fungsi dan perilaku seksual pada fase transisi menopause berdasarkan data survei kesehatan wanita (Cain et al., 2003; Dennerstein, Alexander, & Kotz, 2003). Selain isu seksualitas, studi mengenai topik

Tabel 8

Publikasi Dengan Impact Factor Tertinggi Dalam Periode 3: 2005-2014

<i>R</i>	Judul	Tahun	Penulis	<i>TC</i>	<i>TC/Year</i>
1	Depressive Symptoms During the Menopausal Transition: The Study of Women's Health Across the Nation (SWAN)	2007	Bromberger, J. T.; Matthews, K. A.; Schott, L. L.; Brockwell, S.; Avis, N. E.; Kravitz, H. M.; Everson-Rose, S. A.; Gold, E. B.; Sowers, M.; Randolph Jr. J. F.	355	20.88
2	Major Depression During and After the Menopausal Transition: Study of Women's Health Across the Nation (SWAN)	2011	Bromberger, J. T.; Kravitz, H. M.; Chang, Y. -F.; Cyranowski, J. M.; Brown, C.; Matthews, K. A.	259	19.92
3	Physical Activity and Mental Health Outcomes During Menopause: A Randomized Controlled Trial	2007	Elavsky, S.; McAuley, E.	157	9.24
4	Lifetime History of Major Depression Predicts the Development of the Metabolic Syndrome in Middle-aged Women	2009	Goldbacher, E. M.; Bromberger, J.; Matthews, K. A.	127	8.47
5	A Cognitive Model of Menopausal Hot Flashes and Night Sweats	2010	Hunter, M. S.; Mann, E.	106	7.57
6	Marital Happiness and Sleep Disturbances in a Multi-ethnic Sample of Middle-aged Women	2009	Troxel, W. M.; Buysse, D. J.; Hall, M.; Matthews, K. A.	99	6.60
7	Reproductive Cycle-associated Mood Symptoms in Women With Major Depression and Bipolar Disorder	2007	Payne, J. L.; Roy, P. S.; Murphy-Eberenz, K.; Weismann, M. M.; Swartz, K. L.; McInnis, M. G.; Nwulia, E.; Mondimore, F. M.; MacKinnon, D. F.; Miller, E. B.; Nurnberger, J. I.; Levinson, D. F.; DePaulo Jr. J. R.; Potash, J. B.	102	6.00
8	Depression and Midlife: Are We Overpathologising the Menopause?	2012	Judd, F. K.; Hickey, M.; Bryant, C.	68	5.67
9	Anxiety During the Menopausal Transition: A Systematic Review	2012	Bryant, C.; Judd, F. K.; Hickey, M.	64	5.33
10	Emotional Antecedents of Hot Flashes During Daily Life	2005	Thurston, R. C.; Blumenthal, J. A.; Babyak, M. A.; Sherwood, A.	98	5.16

Catatan. *R* = Rank (Peringkat); *TC* = Total Citations (Total Sitasi); *TC/Year* = Total Citation per Year (Total Sitasi per Tahun); Sumber: Pangkalan Data Publikasi Ilmiah Scopus.

Kotz, 2003). In addition to sexuality issues, studies on psychological well-being topics published during this period also have a strong influence, both general psychological well-being (PWB) studies (Dennerstein et al., 1997) and issues in the dimension of self-acceptance (Deeks & McCabe, 2001; Morse et al., 1998). The variety of research topics that emerged and had a strong

kesejahteraan psikologis yang dipublikasikan pada periode ini juga memiliki pengaruh yang kuat, baik kajian kesejahteraan psikologis secara umum (Dennerstein et al., 1997) maupun permasalahan atau isu pada dimensi penerimaan diri (Deeks & McCabe, 2001; Morse et al., 1998). Beragamnya topik penelitian yang muncul dan berdampak kuat pada periode ini adalah permasalahan atau

Table 9
Publications With the Highest Impact During Period 4: 2015-2023

R	Title	Year	Authors	TC	TC/Year
1	Sleep Problems During the Menopausal Transition: Prevalence, Impact, and Management Challenges	2018	Baker, F. C.; De Zambotti, M.; Colrain, I. M.; Bei, B.	137	22.83
2	Sleep and Sleep Disorders in the Menopausal Transition	2018	Baker, F. C.; Lampio, L.; Saaresranta, T.; Polo-Kantola, P.	80	13.33
3	Depression During the Perimenopause: A Meta-analysis	2016	de Kruif, M.; Spijker, A. T.; Molendijk, M. L.	92	11.50
4	Risk Factors for Major Depression During Midlife Among a Community Sample of Women With and Without Prior Major Depression: Are They the Same or Different?	2015	Bromberger, J. T.; Schott, L.; Kravitz, H. M.; Joffe, H.	73	8.11
5	Mood Sensitivity to Estradiol Predicts Depressive Symptoms in the Menopause Transition	2021	Gordon, J. L.; Sander, B.; Eisenlohr-Moul, T. A.; Sykes Tottenham, L.	24	8.00
6	Efficacy of Estradiol in Perimenopausal Depression: So Much Promise and So Few Answers	2015	Rubinow, D. R.; Johnson, S. L.; Schmidt, P. J.; Girdler, S.; Gaynes, B.	59	6.56
7	Psychobiological Factors of Sexual Functioning in Aging Women - Findings from the Women 40+ Healthy Aging Study	2019	Mernone, L.; Fiacco, S.; Ehlert, U.	30	6.00
8	Naturally Occurring Changes in Estradiol Concentrations in the Menopause Transition Predict Morning Cortisol and Negative Mood in Perimenopausal Depression	2016	Gordon, J. L.; Eisenlohr-Moul, T. A.; Rubinow, D. R.; Schrubbe, L.; Girdler, S. S.	47	5.88
9	Assessment of Perimenopausal Depression: A Review	2019	Willi, J.; Ehlert, U.	29	5.80
10	Applying a Women's Health Lens to the Study of the Aging Brain	2019	Taylor, C. M.; Pritschet, L.; Yu, S.; Jacobs, E. G.	27	5.40

Notes. R = Rank; TC = Total Citations; TC/Year = Total Citation per Year; Source: Scopus Scientific Publication Database.

impact during this period were mental health issues, ranging from depression problems (Bromberger & Matthews, 1996; Shors & Leuner, 2003), to various issues connecting mental health with physical health vulnerabilities during the menopausal transition phase (Dennerstein, Dudley, & Guthrie, 2003; Gallo et al., 2001, 2003). More detailed results are available in Table 7.

Period 3: 2005-2014

Throughout Period 3: 2005-2014, the number of scientific publications related to studies on the menopausal transition phase in the field of psychology was

isu kesehatan mental, mulai dari masalah depresi (Bromberger & Matthews, 1996; Shors & Leuner, 2003), hingga berbagai permasalahan atau isu yang menghubungkan kesehatan mental dengan kerentanan kesehatan fisik pada fase transisi menopause (Dennerstein, Dudley, & Guthrie, 2003; Gallo et al., 2001, 2003). Hasil lebih rinci tersedia pada Tabel 7.

Periode 3: 2005-2014

Sepanjang Periode 3: 2005-2014, jumlah publikasi ilmiah terkait kajian fase transisi menopause dalam bidang psikologi sebanyak 62 publikasi. Jumlah tersebut

Tabel 9

Publikasi Dengan Impact Factor Tertinggi Dalam Periode 4: 2015-2023

R	Judul	Tahun	Penulis	TC	TC/Year
1	Sleep Problems During the Menopausal Transition: Prevalence, Impact, and Management Challenges	2018	Baker, F. C.; De Zambotti, M.; Colrain, I. M.; Bei, B.	137	22.83
2	Sleep and Sleep Disorders in the Menopausal Transition	2018	Baker, F. C.; Lampio, L.; Saaresranta, T.; Polo-Kantola, P.	80	13.33
3	Depression During the Perimenopause: A Meta-analysis	2016	de Kruif, M.; Spijker, A. T.; Molendijk, M. L.	92	11.50
4	Risk Factors for Major Depression During Midlife Among a Community Sample of Women With and Without Prior Major Depression: Are They the Same or Different?	2015	Bromberger, J. T.; Schott, L.; Kravitz, H. M.; Joffe, H.	73	8.11
5	Mood Sensitivity to Estradiol Predicts Depressive Symptoms in the Menopause Transition	2021	Gordon, J. L.; Sander, B.; Eisenlohr-Moul, T. A.; Sykes Tottenham, L.	24	8.00
6	Efficacy of Estradiol in Perimenopausal Depression: So Much Promise and So Few Answers	2015	Rubinow, D. R.; Johnson, S. L.; Schmidt, P. J.; Girdler, S.; Gaynes, B.	59	6.56
7	Psychobiological Factors of Sexual Functioning in Aging Women - Findings from the Women 40+ Healthy Aging Study	2019	Mernone, L.; Fiacco, S.; Ehlert, U.	30	6.00
8	Naturally Occurring Changes in Estradiol Concentrations in the Menopause Transition Predict Morning Cortisol and Negative Mood in Perimenopausal Depression	2016	Gordon, J. L.; Eisenlohr-Moul, T. A.; Rubinow, D. R.; Schrubbe, L.; Girdler, S. S.	47	5.88
9	Assessment of Perimenopausal Depression: A Review	2019	Willi, J.; Ehlert, U.	29	5.80
10	Applying a Women's Health Lens to the Study of the Aging Brain	2019	Taylor, C. M.; Pritschet, L.; Yu, S.; Jacobs, E. G.	27	5.40

Catatan. R = Rank (Peringkat); TC = Total Citations (Total Sitasi); TC/Year = Total Citation per Year (Total Sitasi per Tahun); Sumber: Pangkalan Data Publikasi Ilmiah Scopus.

62 publications. This number indicates a rapid growth in research interest, even reaching 138% more than the total publications issued in the previous period (Period 2: 1995-2004), which amounted to 26 publications, as shown in Table 8.

The topic of mental health during this period, particularly concerning perimenopausal depression, has had a profound influence in the academic world. In fact, as of the data collection period, the top 10 publications with the highest citation rates per year (Total Citation per Year [TC/Year]) in this period are predominantly

menunjukkan pertumbuhan minat penelitian yang pesat, bahkan mencapai 138% lebih banyak dibandingkan total publikasi yang diterbitkan pada periode sebelumnya (Periode 2: 1995-2004) yang berjumlah 26 publikasi, seperti terlihat pada Tabel 8.

Topik kesehatan mental pada periode ini, khususnya mengenai depresi perimenopause, memiliki pengaruh yang besar dalam dunia akademis. Faktanya, hingga periode pengumpulan data, 10 publikasi teratas dengan tingkat sitasi tertinggi per tahun (Total Citation per Year [TC/Year]) pada periode ini sebagian besar merupakan

studies on perimenopausal depression symptoms analyzed through national survey data (Bromberger et al., 2007, 2011; Goldbacher et al., 2009) and psychopathological issues related to perimenopausal depression (Judd et al., 2012). The topic of mental health during this period, particularly concerning perimenopausal depression, has had a profound influence in the academic world.

Apart from depression issues, there are other mental health issues that have become sub-topics of study with significant influence. Firstly, the phenomenon of sleep disturbances during perimenopause, whether caused by physical symptoms such as hot flashes (Hunter & Mann, 2010) or psychosocial issues such as marital happiness levels (Troxel et al., 2009). Secondly, symptoms of anxiety during the menopausal transition phase (Bryant et al., 2012). Thirdly, the relationship between physical activity during the menopausal transition phase and mental health issues such as emotional fluctuations (Thurston et al., 2005) as well as various other mental health issues (Elavsky & McAuley, 2007). More detailed results are available in Table 8.

Period 4: 2015-2023

In Period 4: 2015-2023 (up to October), the number of publications related to the menopausal transition phase in the field of psychology recorded in the Scopus database increased by 42% compared to the previous period. In Period 3: 2005-2014, there were 62 publications, while in Period 4: 2015-2023, there were 88 publications, as shown in Table 9. During this period, the 10 publications with the highest influence based on the citation index per year (Total Citation per Year [TC/Year]) can be reviewed in Table 9.

Between 2015 and 2023, mental health topics that emerged and evolved in previous periods continued to dominate research interest in this period. The majority of influential publications are studies related to perimenopausal depression phenomena, ranging from studies using meta-analysis methods (de Kruif et al., 2016) and Systematic Literature Review (SLR; Willi & Ehlert, 2019), to studies on risk factors (Bromberger et al., 2015) and predictors of perimenopausal depression symptoms (Gordon et al., 2016; Gordon et al., 2021; Rubinow et al., 2015). In addition to depression, mental health issues such as sleep disturbances during the menopausal transition phase occupy the top rankings based on the highest Total Citation per Year (TC/Year) scores (Baker, de Zambotti, Colrain, & Bei, 2018; Baker, Lampio, Saaresranta, & Polo-Kantola, 2018; see Table 9).

studi tentang gejala depresi perimenopause yang dianalisis melalui data survei nasional (Bromberger et al., 2007, 2011; Goldbacher et al., 2009), dan masalah atau isu psikopatologis terkait depresi perimenopause (Judd et al., 2012). Topik kesehatan mental pada periode ini, khususnya mengenai depresi perimenopause, telah memberikan pengaruh yang besar dalam dunia akademis.

Selain masalah atau isu depresi, ada masalah atau isu kesehatan mental lain yang menjadi sub-topik kajian dengan pengaruh signifikan. Pertama, fenomena gangguan tidur pada masa perimenopause, baik yang disebabkan oleh gejala fisik seperti *hot flashes* (Hunter & Mann, 2010) maupun masalah atau isu psikososial seperti tingkat kebahagiaan pernikahan (Troxel et al., 2009). Kedua, gejala kecemasan pada fase transisi menopause (Bryant et al., 2012). Ketiga, hubungan aktivitas fisik pada fase transisi menopause dengan masalah atau isu kesehatan mental seperti fluktuasi emosi (Thurston et al., 2005) serta berbagai masalah atau isu kesehatan mental lainnya (Elavsky & McAuley, 2007). Hasil lebih rinci tersedia pada Tabel 8.

Periode 4: 2015-2023

Pada Periode 4: 2015-2023 (sampai dengan bulan Oktober), jumlah publikasi terkait fase transisi menopause bidang psikologi yang tercatat di pangkalan data *Scopus* meningkat sebesar 42% dibandingkan periode sebelumnya. Pada Periode 3: 2005-2014 terdapat 62 publikasi, sedangkan pada Periode 4: 2015-2023 terdapat 88 publikasi, seperti terlihat pada Tabel 9. Pada periode ini, 10 publikasi dengan pengaruh tertinggi berdasarkan indeks sitasi per tahun (*Total Citation per Year [TC/Year]*) dapat dilihat pada Tabel 9.

Antara tahun 2015 dan 2023, topik kesehatan mental yang muncul dan berkembang pada periode sebelumnya terus mendominasi minat penelitian pada periode ini. Mayoritas publikasi yang berpengaruh adalah studi terkait fenomena depresi perimenopause, mulai dari studi yang menggunakan metode meta-analisis (de Kruif et al., 2016) dan *Systematic Literature Review (SLR; Willi & Ehlert, 2019)*, hingga studi mengenai faktor risiko. (Bromberger et al., 2015) dan prediktor gejala depresi perimenopause (Gordon et al., 2016; Gordon et al., 2021; Rubinow et al., 2015). Selain depresi, permasalahan atau isu kesehatan mental seperti gangguan tidur pada fase transisi menopause menempati peringkat teratas berdasarkan skor *Total Citation per Year (TC/Year)* tertinggi (Baker, de Zambotti, Colrain, & Bei, 2018; Baker, Lampio, Saaresranta, & Polo-Kantola, 2018; lihat Tabel 9).

Apart from mental health issues such as sleep disturbances and perimenopausal depression, there are other mental health topics that are gaining attention and significantly influencing the development of research on the menopausal transition phase in the field of psychology. Firstly, studies related to psychobiological factors influencing sexual function in aging women (Mernone et al., 2019). Secondly, neuroscience studies intersecting with psychology disciplines regarding how neuroendocrine changes can significantly occur in women's lives during the menopausal transition phase (Taylor et al., 2019).

Conclusion

As far as the authors' exploration goes, this study represents the first bibliometric analysis to map Scopus-indexed publications related to women's research during the menopausal transition phase in the field of psychology. The main insights generated by this study are based on four analytical findings. Firstly, psychology is not the only discipline examining issues related to the menopausal transition phase, and psychology is not the most prolific field producing scientific publications on this research theme. Secondly, publications related to the menopausal transition phase with the highest impact in the field of psychology are dominated by mental health topics such as perimenopausal depression and sleep disturbances during the menopausal transition phase. Thirdly, academic interest in studying the menopausal transition phase in psychology is increasing in each publication period. Fourthly, diversity in research topics emerges with the increasing interest in studying the menopausal transition phase, but in the last two decades, there has been a tendency towards stagnation in studies on perimenopausal depression topics and a low interest in research topics on various dimensions of psychological well-being.

Limitations and Suggestions

In addition to the four main insights presented through the analytical findings, this bibliometric study has limitations that need to be considered. Firstly, this study does not encompass the exploration, mapping, and analysis of scientific publications related to the menopausal transition phase in various publications outside the Scopus database. Secondly, the analysis of publication impact levels or impact factors in this study cannot include parameters other than Total Citation per Year (TC/Year). The metadata of scientific publications that researchers can export from the Scopus database only includes the total citation variable without calculating

Selain masalah atau isu kesehatan mental seperti gangguan tidur dan depresi perimenopause, ada topik kesehatan mental lain yang mendapat perhatian dan berpengaruh signifikan terhadap perkembangan penelitian fase transisi menopause di bidang psikologi. Pertama, studi terkait faktor psikobiologis yang mempengaruhi fungsi seksual pada perempuan lanjut usia (Mernone et al., 2019). Kedua, kajian ilmu saraf yang bersinggungan dengan disiplin ilmu psikologi mengenai bagaimana perubahan *neuroendocrine* dapat terjadi secara signifikan dalam kehidupan perempuan pada fase transisi menopause (Taylor et al., 2019).

Simpulan

Sejauh eksplorasi para penulis, studi ini merupakan analisis bibliometrik pertama yang memetakan publikasi terindeks *Scopus* terkait penelitian perempuan pada fase transisi menopause di bidang psikologi. Wawasan utama yang dihasilkan oleh studi ini didasarkan pada empat temuan analitis. Pertama, psikologi bukan satu-satunya disiplin ilmu yang mengkaji isu terkait fase transisi menopause, dan psikologi bukanlah bidang ilmu paling produktif yang menghasilkan publikasi ilmiah mengenai tema penelitian ini. Kedua, publikasi terkait fase transisi menopause dengan dampak tertinggi di bidang psikologi didominasi oleh topik kesehatan mental seperti depresi perimenopause dan gangguan tidur pada fase transisi menopause. Ketiga, minat akademisi untuk mengkaji fase transisi menopause dalam psikologi semakin meningkat pada tiap periode publikasi. Keempat, keberagaman topik penelitian muncul dengan meningkatnya minat mempelajari fase transisi menopause, namun dalam dua dekade terakhir terdapat kecenderungan stagnasi studi pada topik depresi perimenopause dan rendahnya minat terhadap topik penelitian berbagai dimensi kesejahteraan psikologis.

Keterbatasan dan Saran

Selain empat wawasan utama yang dipaparkan melalui temuan analitis, kajian bibliometrik ini memiliki keterbatasan yang perlu diperhatikan. Pertama, studi ini tidak mencakup eksplorasi, pemetaan, dan analisis publikasi ilmiah terkait fase transisi menopause di berbagai publikasi di luar pangkalan data *Scopus*. Kedua, analisis tingkat dampak publikasi atau *impact factor* pada studi ini tidak dapat mencantumkan parameter selain *Total Citation per Year (TC/Year)*. Metadata publikasi ilmiah yang dapat peneliti ekspor dari pangkalan data *Scopus* hanya mencakup variabel total sitasi tanpa memperhitungkan *impact factor* lainnya. Ketiga, metadata bibliografi suatu korpus

other impact factors. Thirdly, the bibliographic metadata of a corpus of scientific publications is dynamic, so various metrics such as the list and number of documents and the number of citations of each publication may change over time. Therefore, future research suggestions include researchers utilizing more than one database. Additionally, the database only includes scientific articles focusing on the psychological well-being of women in the menopausal transition phase.

publikasi ilmiah bersifat dinamis, sehingga berbagai metrik seperti daftar dan jumlah dokumen serta jumlah sitasi tiap publikasi dapat berubah seiring waktu. Maka dari itu saran penelitian selanjutnya adalah agar peneliti memanfaatkan lebih dari satu pangkalan data. Selain itu, pangkalan data hanya memuat artikel ilmiah yang berfokus pada kesejahteraan psikologis perempuan dalam fase transisi menopause.

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