



Prevalence of Psychosomatic and Genitourinary Syndrome Among Menopausal Women: A Systematic Review and Meta-Analysis

Nik Hussain Nik Hazlina¹, Mohd Noor Norhayati^{2*}, Ismail Shaiful Bahari² and Nik Ahmad Nik Muhammad Arif¹

¹ Women's Health Development Unit, School of Medical Sciences, Universiti Sains Malaysia, Health Campus, Kubang Kerian, Malaysia, ² Department of Family Medicine, School of Medical Sciences, Universiti Sains Malaysia, Health Campus, Kubang Kerian, Malaysia

OPEN ACCESS

Edited by:

Isabella Fabietti,
Bambino Gesù Children's Hospital
(IRCCS), Italy

Reviewed by:

Elisa Bevilacqua,
Fondazione Policlinico Agostino
Gemelli IRCCS, Italy
Ana Katherine Gonçalves,
Federal University of Rio Grande do
Norte, Brazil

*Correspondence:

Mohd Noor Norhayati
hayatik@usm.my

Specialty section:

This article was submitted to
Obstetrics and Gynecological Surgery,
a section of the journal
Frontiers in Medicine

Received: 04 January 2022

Accepted: 08 February 2022

Published: 03 March 2022

Citation:

Nik Hazlina NH, Norhayati MN, Shaiful
Bahari I and Nik Muhammad Arif NA
(2022) Prevalence of Psychosomatic
and Genitourinary Syndrome Among
Menopausal Women: A Systematic
Review and Meta-Analysis.
Front. Med. 9:848202.
doi: 10.3389/fmed.2022.848202

Introduction: The menopausal transition represents the passage from reproductive to non-reproductive life and is characterized by a number of menstrual disturbances. We systematically reviewed the evidence on the prevalence of psychosomatic and genitourinary syndrome among menopausal women and compared the risk of symptoms between premenopausal, perimenopausal, and post-menopausal women.

Methods: We performed a systematic search in MEDLINE, CINAHL, and ScienceDirect through March 2021. Case series/reports, conference papers and proceedings, articles available only in abstract form, editorial reviews, letters of communication, commentaries, systematic reviews, and qualitative studies were excluded. Two reviewers independently extracted and assessed the quality of data using the Joanna Briggs Institute Meta-Analysis. The outcomes were assessed with random-effects model using the Review Manager software.

Results: In total, 29 studies had a low risk of bias and were included in the review. Our findings showed that the pooled prevalence of somatic symptoms in post-menopausal women (52.6%) was higher than in the premenopausal and perimenopausal stages (34.6 and 39.5%, respectively). There was a low prevalence of psychological symptoms in premenopausal women (28.4%). The genitourinary syndrome was highest among post-menopausal women (55.1%), followed by perimenopausal (31.9%) and premenopausal (19.2%) women.

Conclusion: Post-menopausal women have a higher risk of experiencing menopausal symptoms particularly genitourinary syndrome than premenopausal and perimenopausal women. It is pertinent for healthcare professionals to evaluate the symptoms in order to provide them with a better quality of life.

Systematic Review Registration: https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD4201235958

Keywords: menopause, prevalence, psychosomatic, genitourinary syndrome, symptom

INTRODUCTION

Natural menopause occurs at a median age of 51 years in Western societies and is assumed to be caused by ovarian follicle exhaustion (1). Based on the Stages of Reproductive Aging Workshop (STRAW) criteria, menopause is defined as 12 or more months of amenorrhea following the final menstrual period (2). Perimenopause is defined as the onset of a varied cycle duration (early stage), two or more missing periods, and at least 2 months of amenorrhea (late-stage) (2). As the population ages, a growing proportion of women are living decades after menopause. At menopause, about 80% of women have vasomotor symptoms (VMS), such as hot flushes and night sweats, and about 20% find them bothersome enough to seek therapy (3).

Menopause is defined as the permanent cessation of menstruation resulting from the loss of ovarian follicular activity. Natural menopause is recognized to have occurred after 12 consecutive months of amenorrhea, for which there is no other obvious pathological or physiological cause. Menopause occurs with the final menstrual period which is known with certainty only in retrospect a year or more after the event. Perimenopause should include the time immediately prior to the menopause (when the endocrinological, biological and clinical features of approaching menopause commence) and the first year after menopause. The term premenopause is often used ambiguously, either to refer to the 1 or 2 years immediately before the menopause or to refer to the whole of the reproductive period prior to the menopause. The group recommended that the term be used consistently in the latter sense to encompass the entire reproductive period up to the final menstrual period. Post-menopause is defined as dating from the final menstrual period, regardless of whether the menopause was induced or spontaneous (4).

Methods for determining when perimenopause begins (5), and a distinct set of STRAW criteria was developed (2). A variety of menstruation disturbances characterize the menopausal transition. The VMS is a common occurrence, sometimes accompanied by psychosomatic symptoms such as mood swings, anxiety, stress, and genitourinary syndrome of menopause. This includes genital symptoms such as dryness, burning, and irritation, as well as sexual symptoms such as lack of lubrication, discomfort or pain, poor function, and urinary symptoms such as urgency, dysuria, and recurrent urinary tract infections (6). All these symptoms have a significantly negative impact on the quality of life of many women (7). The menopausal transition can be a difficult time in a woman's life when it comes to healthy aging. These distressing symptoms do not affect all middle-aged women. During the menopausal transition, a third of women do not report any problems. Another third has mild to moderate symptoms, and the remaining third has moderate to severe symptoms that necessitate therapy (8).

This systematic review and meta-analysis aimed to determine the prevalence of psychosomatic and genitourinary syndrome among menopausal women. It helps to understand the symptoms better and serves as a basis for more appropriate countermeasures to this natural phenomenon. This updated review could be used

in primary preventative care to help patients control and prevent diseases that harm their quality of life and mental health.

MATERIALS AND METHODS

A systematic review and meta-analysis were conducted to assess the prevalence of psychosomatic and genitourinary syndrome among menopausal women. The study followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (9) and registered in the PROSPERO (CRD42021235958).

Search Strategy and Eligibility Criteria

We (N.A.N.M.A., N.H.N.H.) performed a systematic search in MEDLINE (PubMed), CINAHL (EBSCOhost), and ScienceDirect using the search terms “psycholog*,” “mental,” “anxiety,” “depression,” “stress,” and “menopaus*.” These terms were adaptable to the different electronic databases. To determine their eligibility for inclusion in this study, all studies published from the beginning of the databases until March 2021 were retrieved. The search was limited to full-text articles written in English. The reference lists of the listed citations were cross-checked to locate other potentially eligible research.

The inclusion criteria were studies that reported the prevalence of psychosomatic and genitourinary syndrome among menopausal women. In this review, the definitions of premenopausal, perimenopausal and post-menopausal were as defined by the researchers in their studies. Studies with cross-sectional, case-control, and cohort designs published in English and conducted in the community or at a health institution level were included. Case series/reports, conference papers and proceedings, articles available only in abstract form, letters of communication, editorial reviews, systemic reviews, commentaries, and qualitative studies were excluded.

Study Selection and Quality Assessment

All the records identified using our search strategy were exported to EndNote X8 software (Clarivate Analytics, Philadelphia, PA). Duplicate articles were removed. To determine their appropriateness, the entire texts of the relevant research were obtained and thoroughly examined. A consensus discussion was held between the two reviewers (N.A.N.M.A., N.H.N.H.) in the event of a conflict, and a third reviewer (M.N.N.) was consulted. The search method is presented in the PRISMA flowchart, which shows the studies that were included and excluded with reasons for their exclusion (Figure 1).

To examine the data quality, a critical assessment was carried out using the Joanna Briggs Institute Critical Appraisal Checklist for cross-sectional, case-control, and cohort studies (10). Two reviewers (N.A.N.M.A., N.H.N.H.) performed independent bias evaluations. When more than 70% of the answers were “yes,” the risk of bias was considered low, moderate when 50–69% of the answers were “yes,” and high when up to 49% of the answers were “yes.” This review omitted studies that had a moderate or high risk of bias.