*Review Article*

I|J|S|P

International Journal of Social Psychiatry
1–9

DOI: 10.1177/00207640251331898
journals.sagepub.com/home/isp
Sage

# A systematic review and meta-analysis on gender differences in the treatment of anxiety and depression

**María Bernal Arenas[1], Andrés Arroyo-Sánchez[1], Úrsula Torres Parejo[2] and José Eduardo Muñoz-Negro[1]**

## Abstract

**Background:** Gender disparity in mental health treatment has been a longstanding concern in healthcare. Women, who are disproportionately diagnosed with anxiety and depression, often receive more psychotropic medication than men.
**Aims:** This study investigates gender disparity in the treatment of anxiety and depression, aiming to uncover the intersection of medical and social factors and their influence on psychiatric care.
**Methods:** A systematic review methodology following PRISMA guidelines was performed. Literature searches were conducted on PubMed and Web of Science, including observational studies and excluding qualitative studies, which resulted in the screening of eight studies for an in-depth analysis which included meta-analysis. The GRADE approach was considered to address risk of bias.
**Results:** The findings of this review reveal a clear gender disparity in the treatment of anxiety and depression, with women consistently experiencing over-treatment when compared to men, even after adjusting for mental health status and diagnosis frequency, with statistically significant results for the meta-analysis (PR = 1.45, 95% CI [1.12, 1.78]), concluding that women are 54% more likely than men of receiving psychotropic treatment for anxiety and depression. The reduced number of studies included is acknowledged as a limitation of the study.
**Conclusions:** Addressing these issues requires a comprehensive understanding of biopsychosocial factors, integrating gender-inclusive politics into medical education and clinical practices. Recognizing and mitigating these underlying causes is paramount to reduce gender-based disparities in mental health and promoting better practices to achieve equitable health outcomes.

## Keywords

Gender identity, mental health, medicalization, depression, anxiety disorders

## Introduction

Mood and anxiety disorders are current and prevalent mental health conditions. As per the outcomes from the European Study of the Epidemiology of Mental Disorders (ESEMeD), approximately 14.7% of individuals meet criteria for a mood disorder, while 14.5% of participants reported experiencing an anxiety disorder during their lifetime (Alonso, 2007). The gender gap is well established. Furthermore, meta-analyses involving national representative samples of 1.7 million individuals from over 90 different countries confirm a higher depression diagnosis in women, OR = 1.95; 95% CI [1.88, 2.03] with OR = 2.37 at the age of 12 years and peaking in 13 to 15 years age (OR = 3.02) and narrowing slightly as individuals transition into adulthood and remaining stable after that (Salk et al., 2017).

Epidemiological studies show that, while overall prevalence rates do not significantly differ by sex, distinctions arise when scrutinizing specific disorders. Males are diagnosed more often with substance abuse and personality disorders, whereas women have significantly higher rates of depression or anxiety diagnoses (Gili et al., 1998). Conversely, mental health problems often remain underrecognized, largely due to the enduring social stigma surrounding them. When considering gender, evidence suggests that depression is more frequently overdiagnosed in women than underdiagnosed in men, potentially leading

[1]Facultad de Medicina, Departamento de Psiquiatría, Universidad de Granada, Spain
[2]Facultad de Ciencias, Departamento de Estadística e Investigación Operativa, Universidad de Granada, Spain

**Corresponding author:**
Andrés Arroyo-Sánchez, Department of Psychiatry, University of Granada, Parque Tecnológico de la Salud, Avenida de la Investigación 11, Granada 18016, Spain.
Email: arroyosanchez@correo.ugr.es

to false positive in women and false negative in men (Potts et al., 1991).

The reasoning behind this gender gap, however, is much less clearly established. While the mainstream paradigm assigns this differences to the undeniable biological and social differences found between men and women (Andrews & Thomson, 2009); alternative approaches dare to question whether a gender bias in the very conceptualization of these disorders, and hence, in the professionals that assign diagnostic labels to different patients might be at play (Bacigalupe et al., 2020). This would induce a medicalization of women's mental health, understood as a process in which previously non-medical health issues become defined and treated as disease or disorder, in words of Conrad and Slodden (2013).

Altogether, a clear difference is evident in diagnosis of these pathologies between male and female, with the literature supporting this claim (Salk et al., 2017). However, when treatment for these disorders comes into question, less is known regarding gender differences. Logic would have us theorize that, if there is a clear difference in the diagnosis of depression and anxiety between women and men, with a larger risk for overdiagnosis in females, there may also be a higher risk for overtreatment and medicalization in this gender group. Hence, the aim of this study is to confirm there exists a gender bias in the treatment for depression and anxiety, and exploring what might be the reason behind this and what other variables may play a part in the genesis of this bias.

## Methodology

### Searching strategies

To conduct this systematic review, we followed the guidelines to Preferred Reporting Items for Systematic Reviews and Meta-Analyses-Extension (PRISMA; Tricco et al., 2018). PubMed and Web of Science (WOS) search engines were used for article retrieval, for the selection of relevant content to the research topic, ensuring comprehensive coverage of the existing literature.

Articles were searched by entering the specified MeSH terms either in pairs or groups of three, including 'depression', 'anxiety disorders', 'gender identity', 'mental health', 'medicalization', 'therapeutics' and 'epidemiology' with grouping as follows:

> *'depression' AND 'gender identity'; 'anxiety disorders' AND 'gender identity'; 'mental health' AND 'gender identity'; 'gender identity' AND 'mental health' AND 'medicalization'; 'gender identity' AND 'depression' AND 'therapeutics'; 'gender identity' AND 'anxiety disorders' AND 'therapeutics'; 'depression' AND 'anxiety disorders' AND 'epidemiology'; 'gender identity' AND 'mental health' AND 'epidemiology'.*

The aforementioned search process was conducted across both search engines, by two independent researchers, which stored data and eliminated duplicate records using automated tools. Additionally, a manual search was conducted using recommended bibliographic references, and terminology which is not MeSH indexed such as 'Trends in Anxiety Treatment' or 'Trends in Depression Treatment'. The selection criteria included articles published in English and Spanish within the last decade.

### Inclusion criteria and exclusion criteria

We included observational studies that had as a subject matter the differences in treatments for depression and anxiety disorders depending on the gender of the patient alongside different factors. Only articles that adjusted their models for diagnoses/comorbidity/mental health symptoms were considered, in order to reduce confounding factors.

Qualitative studies were excluded due to their inability to generalize results. Studies focusing on gender minorities and the LGBTQ+ collective were also excluded, as this topic was considered too complex to include in this revision and deserving of its own study.

### Analysis

Each of the chosen articles was thoroughly reviewed, focusing on the data regarding gender differences in the treatment of anxiety and depression. Relevant data was extracted and the key points outlined. The main characteristics of each study were collected, and no techniques were used to impute assumptions about missing data.

The GRADE approach for grading the quality of evidence (Schünemann et al., 2023) was applied to each of the selected articles, to explore the risk of bias they might induce and the overall risk of the revision, in the form of the ROBVIS (Risk-Of-Bias VISualization) R package and web app (McGuinness & Higgins, 2021), through the ROBINS-E (Risk-Of-Bias In Non-randomized Studies – of Exposure) tool (Higgins et al., 2024).

### Synthesis

Once we concluded synthetizing the most relevant information, the results were interpreted under a gender and medical perspective. After summarizing the information gathered from each of the studies, a narrative synthesis was written, emphasizing the shared characteristics identified among them. In addition, a meta-analysis was performed to estimate the global effect of overmedication in women compared to men. In some occasions, the data had to be prepared to proceed with the meta-analysis, as calculating prevalence ratios when they were not directly provided by the study, or sample sizes when they were not directly provided. Stata 18 statistical software was used to perform the meta-analysis.

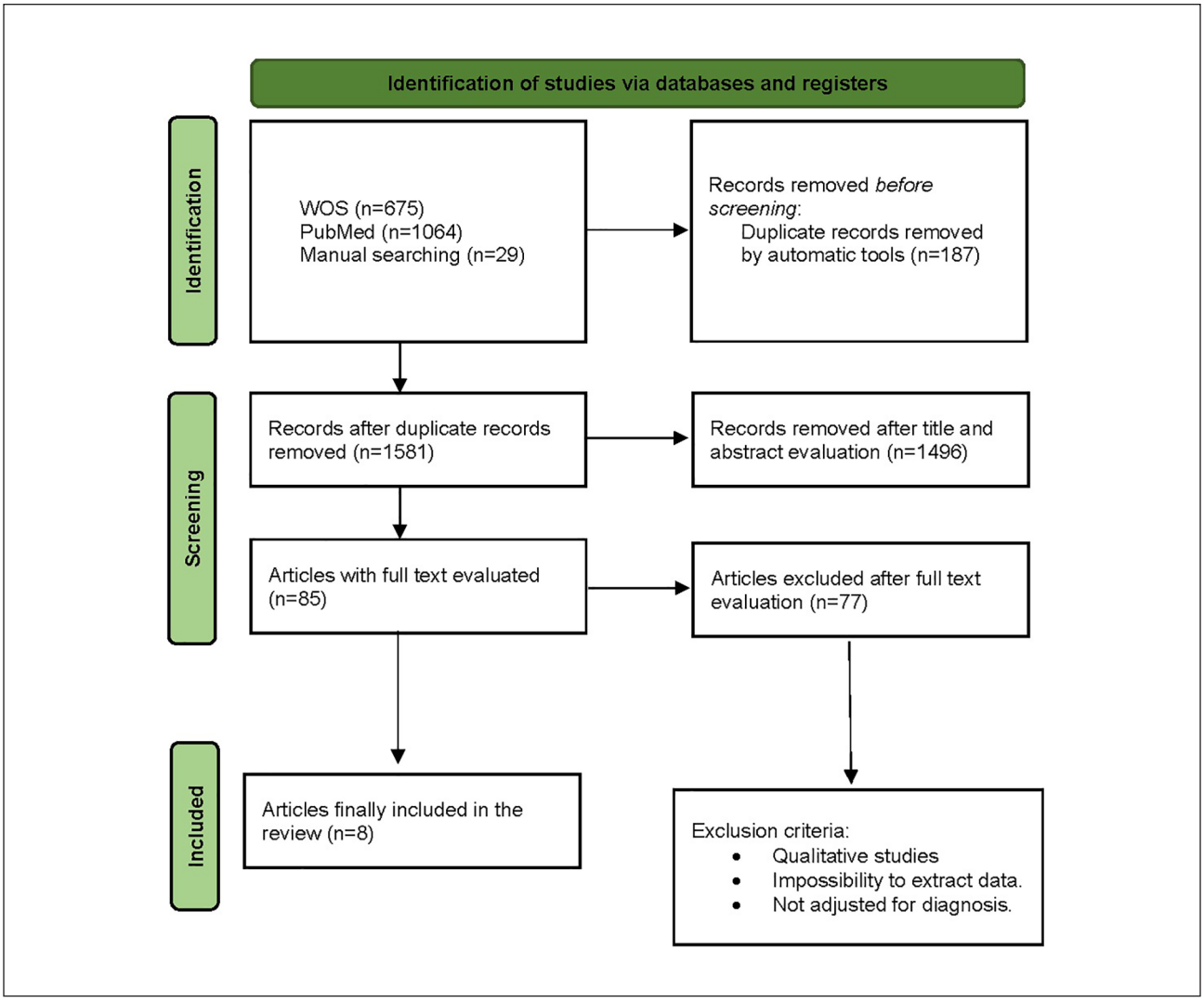


**Figure 1.** PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only.

## Results

### *Database search and screening process*

The initial search identified 1,768 articles, which was reduced to 1,581 after removing duplicates. Following title and abstract screening, 74 articles remained. Hand and citation searching identified 29 studies, which were reduced to 11 after abstract screening. Upon thoroughly examining the full text of all 85 studies pre-screened, 8 articles were selected that met the aforementioned criteria, being suitable for inclusion in the review, each incorporating the most relevant aspects. After checking inclusion/exclusion criteria two other studies were initially considered to be included in the review, Mars et al. (2017) and Noordam et al. (2015), but were ultimately eliminated as they did not adjust for any form of diagnosis. Figure 1 summarizes the screening process.

### *Quality assessment and risk of bias*

Results of the Risk of Bias analysis for each of the articles under the GRADE approach for grading the quality of evidence can be found in Figure 2. While most of the studies fall under the 'Some Concerns of Bias' category, this is due to their nature as epidemiological studies, and the inability of the outcome measurer to act as a blind evaluator. Nevertheless, two studies presented Low Risk of Bias, Jufresa-Blanch et al. (2023) and Ishtiak-Ahmed et al. (2023). The bias found in the articles is somewhat to be expected, as due to the nature of the studies included in this revision, some bias is methodologically inevitable.

### *Synthesis of the information*

Out of the eight analysed studies, three were cross-sectional, observational studies (Bacigalupe et al., 2020;

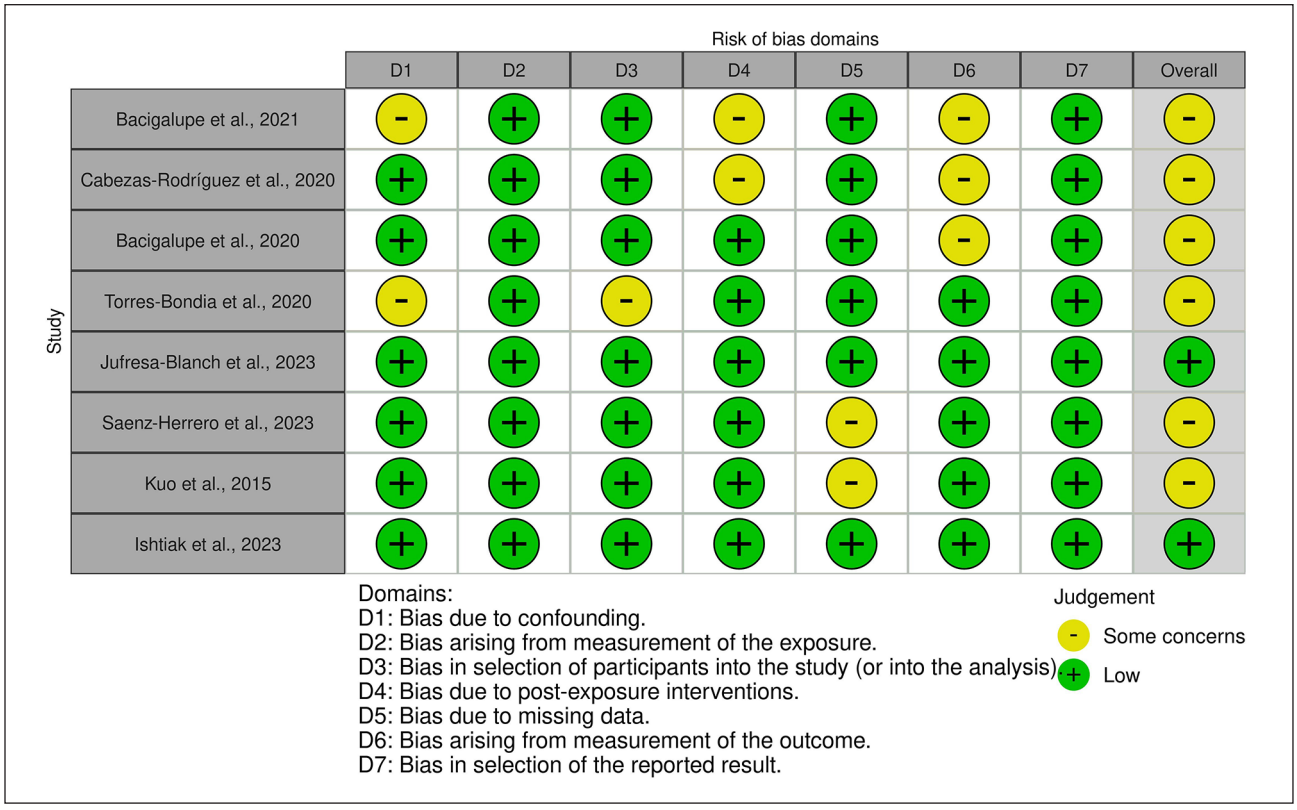


**Figure 2.** Risk of bias plot for the selected studies, after ROBINS-E criteria.

Bacigalupe & Martín, 2021; Cabezas-Rodríguez et al., 2020), four were retrospective cohort studies (Jufresa-Blanch et al., 2023; Kuo et al., 2015; Sáenz-Herrero et al., 2023; Torres-Bondia et al., 2020) and one was a prospective cohort study (Ishtiak-Ahmed et al., 2023). More information about characteristics of each individual study can be found in Table 1.

Throughout the studies, larger prescription figures are found for women, with rates ranging from Prevalence Ratios (PRs) of 0.78 (95% Confidence Interval [CI] [0.53–1.14] to 1.52 (95% CI [1.28, 1.82]), or total Prevalences ($P_t$), ranging from 6.40 to 18.84; regardless of the measurement performed. This is further evidenced by the Meta-analysis carried out considering these eight studies, results of which are shown in Figure 3. The studies are heterogeneous according to the T2, H2 and I2 indices. Using Cochran's $Q$ statistical test it is rejected that the studies can be homogeneous, with a $Q$ value equal to 1,229.03, $p = .00$, so a random-effects model is run instead of a fixed-effects model.

The overall effect size is PR 1.45, (95% CI [1.12, 1.78]), which is considered significant ($z$ test value = 8.61, $p = .00$), which would indicate that women are 45% more likely to be treated with medication to combat anxiety and depression than men.

Across the studies, several factors have been found to influence these higher prescription rates in women. Notably, age was found to be a factor that all studies accounted for, and a positive correlation between higher prescription rates in older populations was constant throughout the studies. The Prevalence Ratios (PR) of the younger population groups throughout the studies ranged from 0.93 in a 25 to 49 years old population group (Bacigalupe et al., 2020) to 1.61 in a 16 to 29 years old population group (Bacigalupe & Martín, 2021); while for the older populations groups, the PR ranged from 1.02 in a group of 75 to 84 years old (Kuo et al., 2015) to 2.31 in an older than 80 years old group (Bacigalupe et al., 2020), the prescription rates being therefore higher in the older age groups. Socio-economic status was present in most of the studies, with an inverse correlation being found between socio-economic status and prescription rates, as the lower social classes were found, almost in all studies, to relate with higher prescription rates. The PR for prescription rates for the higher socio-economic levels ranged from 0.78 (Cabezas-Rodríguez et al., 2020) to 1.35 (Bacigalupe & Martín, 2021). Meanwhile, the PR found in the lower socio-economic classes ranged from 1.23 (Kuo et al., 2015) to 1.64 (Bacigalupe & Martín, 2021), which accounts for higher prescription rates in lower socio-economic classes.

Other relevant variables that were taken into account were educational level, number of healthcare visits, mental health status, previous diagnoses of anxiety or depression, marital status or comorbidities, both medical and mental,

**Table 1.** Relevant characteristics of the studies included in the review.

| Study | Objective measure | Results | Findings | Adjusted for |
|---|---|---|---|---|
| Bacigalupe and Martín (2021) | Assessed gender inequalities in the diagnosis of depression/anxiety and in psychotropic consumption. | PR (diagnosis) = 1.86 (1.40–2.47)<br>PR (prescription) = 1.52 (1.28–1.82) | Gender inequalities in the diagnosis and prescription exist, and these cannot be explained by differences in mental health status or health-care visit frequency. | Age, socio-economic status, mental health status, previous healthcare visits, diagnosis of depression/ anxiety. |
| Cabezas-Rodríguez et al. (2020) | Analysed gender inequalities in the medicalization of depression from an intersectional perspective. | PR = 0.78 (0.53–1.14) −1.55 (1.18–2.04) throughout the models | Gender inequalities found cannot be completely attributed to a higher level of depressive symptoms in women or greater frequency of visits to primary care. | Age, socio-economic status depressive symptoms, primary care visits, diagnosis of depression |
| Bacigalupe et al. (2020) | Described the gender inequalities in mental health and the main underlying factors. | PR = 1.17 (1.10–1.25) | Prescription of psychotropic drugs is also of greater intensity in women, given equal need. | Age, socio-economic status, education level, mental health symptoms, diagnosis of depression/ anxiety. |
| Torres-Bondia et al. (2020) | Analysed trends in the consumption prevalence of BZDs to explore patterns of use and characteristics. | $P_t$ (women) = 18.84<br>$P_t$ (men) = 9.58 | The use of BZDs was greater in women, especially elderly. | Age, healthcare setting, medical diagnosis, BZD class |
| Jufresa-Blanch et al. (2023) | Determined the influence of GP and patient sex on the treatment of major depression. | $OR_m$ = 1.11 (1.05–1.17)<br>$OR_f$ = 1.13 (1.09–1.17) | Female patients were more likely to be prescribed an antidepressant from any GP. Female GPs prescribed less than male GPs | Age, nationality, socio-economimc status, morbidity groups. |
| Sáenz-Herrero et al. (2023) | Examined gender-based differences in the management of psychiatric disorders in the ED. | PR = 1.12 (1.01–1.24) −1.40 (1.04–1.88) throughout the models | Female gender was found to be overrepresented in anxiety/mood/personality disorders. Female patients were more likely to be prescribed medication | Age, gender, socio-economic status, clinical diagnosis, prescribed treatment |
| Kuo et al. (2015) | Investigated trends, in ADs consumption in the elderly. | $P_t$ (Women) = 6.4–10.0<br>$P_t$ (Men) = 5.3–9.7 | Overall AD use was higher for the 75 to 84 years age group, females and those with higher Comorbidity scores. | Age, gender, socio-economic status, urbanization, geographical distribution, comorbidity. |
| Ishtiak-Ahmed et al. (2023) | Examined trends in AD prescription. | IRR (women vs. men) = 1.20 (1.07–1.34) | A higher rate of initiating antidepressants was found in females. | Age, gender, urbanization, education, marital status, comorbidity, past treatment. |

*Note*. PR = prevalence ratio; *OR* = odds ratio; BZD = benzodiazepine; GP = general practitioner; ED = emergency department; $P_t$ = prevalence (total); $I_t$ = incidence (total); PY = person years; AD = antidepressant; IRR = incidence rate ratio.

among others. However, some of these variables were not present in all of the studies. Nevertheless, regardless of the measure adjusted for, an almost universal relation to higher prescription rates in women was found, only in a few factors was correlation not found.

## Discussion

To the best of our knowledge, the present study innovates as the first systematic review and metaanalysis on gender disparities in the treatment of depression and anxiety and hence, direct comparisons with previous research is not possible. Despite an exhaustive search, only a few studies providing valid data for this review were identified, emphasizing the fact that this topic has not been extensively studied. This highlights the added value of the scarce literature existing and the pressing need for additional research and intervention to understand the complex relationship between gender, socioeconomic status and mental health treatment. However, despite this limitation, the studies used in this review offer robust data, being large observational studies. They consistently converge on

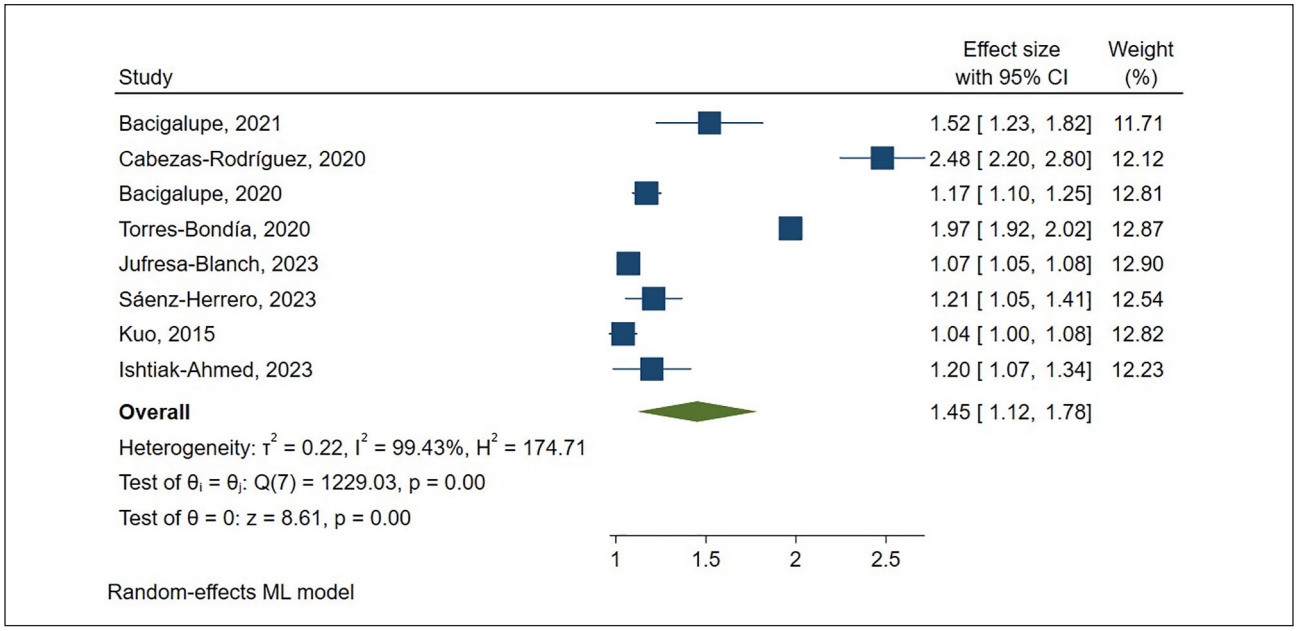


**Figure 3.** Meta-analysis performed for the selected studies.

similar conclusions, the clear presence of gender differences in the psychopharmacological treatment for depression and anxiety. In some, this even applies adjusting for mental health status and medical visits. Moreover, it becomes evident that these gender differences are particularly pronounced within lower socioeconomic classes, suggesting not only a medicalization of women but also it being poverty-related. These findings lead us to a great inquiry into the reasons behind the factors underlying gender disparities in mental health, the overtreatment tendencies in women or the future steps needed to mitigate these inequities.

Over-treatment harms emerge when ordinary life experiences are pathologized, or when diseases are 'created' from problems related to the patient's individual social context ('The Paradox of Mental Health', 2013). In both cases, individuals are transformed into patients, and their issues are deemed to require medical intervention, even if it may not be necessary or could lead to harm. Our results show how these matters affects women specially.

The ground-breaking aspect of this revision's findings is evident when analysing way that prescription becomes influenced by different factors, and the link between medicalization, older age and lower social status and educational level in women is established. The data analysed by this revision seems to point out that there may be more to what were previously considered no more than confounding factors, as they could interact with the medical know-how and management, more so, when one of the findings of some of the studies considered was the fact that the increase in prescription rates was independent of women's mental health status, diagnosis or frequency of healthcare visits and so, must be related to other factors such as gender itself, age, social class or educational level. This highlights the interaction between gender and purchasing power, both rooted in the sociocultural context of patients. Moreover, the interplay with social status, is supported by Data from the Clinical Primary Care Database (BDCAP) of the Spanish National Health System in 2022. It reveals an income gap in prescription rates: 56% among higher socioeconomic classes compared to 74% among lower (incomes below 18,000 euros) and 84% in the unemployed (*Ministerio de Sanidad – Sanidad En Datos – Base de Datos Clínicos de Atención Primaria – BDCAP*, n.d.). As socioeconomic stressors escalate, leading to lower social backgrounds and difficulting access to education, these differences become more pronounced, influencing clinical practices and resulting in a medicalization of social problems (Forcades I Vila, 2012). This difference is already an established fact supported by the literature, in prescription rates of other psychiatric medication such as antipsychotics (Bonnot et al., 2017; Currie et al., 2024), which are found to be higher in lower socio-economic classes, and hence, the same conclusion can be drawn after our own findings when these factors are taken into account.

In addition, the dichotomic, predefined roles of 'feminine' and 'masculine' are present in a society that mainly promotes the dominant position of men and the subordinate position of women (Vafaei et al., 2016), and despite significant advances towards gender equality, women still struggle with discrimination. This constant struggle derived from being largely responsible for caregiving leads to a delicate balance between professional pursuits and family obligations (Cabezas-Rodríguez et al., 2021),

that becomes manifest as high levels of stress and burnout, and as a result, some seek medical interventions to cope with these pressures (Roberts & Parry, 2023).

Furthermore, women's identity has often been defined in relation to masculinity, a trend reflected in medical diagnostics, where female characteristics are often viewed as deviations from a norm centred around the male figure. This creates an androcentric bias to attributing symptoms in women to emotional rather than physical causes, leading to incorrect diagnoses and treatments. Women tend to express distress verbally, which can be misdiagnosed as mental illness instead of being recognized as non-pathological responses to psychological stress. These signs include being more analytical towards potential sources of psychological stress, with an enhanced sensitivity towards threats to social relationships (Andrews & Thomson, 2009), which may also be incorrectly characterized as psychological impairment. Conversely, men's expressions of distress, such as irritability and impulsivity, are frequently overlooked by doctors (Markez et al., 2004). However, when women express distress similarly to men, they are often dismissed as hormonal or 'crazy'. Women become overdiagnosed and overprescribed, and the opposite happens to men. This background knowledge contributes to the current framework, which defines a supposed susceptibility to psychopathology in females. As a result, healthcare professionals tend to label psychological distress caused by social issues, contextual problems or other variables as anxiety or depression, leading to a systematic treatment with psychotropic drugs without investigating the underlying social causes of this distress (del Río-Pedraza, 2022) overshadowing the social and political context of it. This medicalization not only fails to ameliorate the existing problems, but can also exacerbate them due to the adverse effects of psychotropic drugs.

### *Limitations*

The scarce research in the field of mental health regarding gender disparities in the treatment of depression and anxiety is acknowledged as a limitation of the study. Considering gender as a binary construct is another of the study's limitations, as many articles were excluded in the selection process that focused on gender minorities and the LBTIQ+ collective regarding mental health issues. This was done because it would have excessively broadened the scope of the revision, and possibly provided less clear results.

Besides, another major limitation of the present study is that only eight individual studies were included in the analysis which may limit the external validity of the presented conclusions. Further research, with a larger, more representative sample, may help in supporting the conclusions reached by this study.

## Conclusions

There is a clear overtreatment of women for psychiatric conditions such as anxiety and depression, independently of diagnosis and not exclusively related to poorer mental health, or frequent doctor visits. This points out a highly probable medicalization of social problems in women. These findings highlight the prevailing gender bias evident in treatment, which becomes more pronounced when considering other social factors such as age, education or social status.

Further research is needed to explore the larger prevalence of treatment in women. This might lead to relevant repercussions for public health, to the negative consequences of medicalization, and to enable the implementation of public policies that address the gender gap in the treatment for these disorders.

### Author contributions

MBA: Investigation, Data Curation, Writing-Original Draft, review and Editing, Visualization. AAS: Investigation, Data Curation, Writing-Original Draft, review and Editing. UTP: Statistical Analysis, Writing-Review and Editing. JEMN: Conceptualization, Methodology, Writing-Review and Editing, Supervision, Project Administration. All authors contributed to editorial changes in the manuscript. All authors read and approved the final manuscript. All authors have participated sufficiently in the work and agreed to be accountable for all aspects of the work.

### Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

### Ethical considerations

Not applicable.

### Consent to participate

Not applicable.

### Consent for publication

Not applicable.

### ORCID iDs

Andrés Arroyo-Sánchez https://orcid.org/0009-0007-3137-141X

José Eduardo Muñoz-Negro https://orcid.org/0000-0002-6133-9732

### Data availability statement

The data that support the findings of this study are available from the corresponding author, Andrés Arroyo-Sánchez, upon reasonable request.

### References

Alonso, L. (2007). Overview of key data from the European Study of the Epidemiology of Mental Disorders (ESEMeD). *Journal of Clinical Psychiatry*, *68*(Suppl. 2), 3–9.

Andrews, P. W., & Thomson, J. A. (2009). The bright side of being blue: Depression as an adaptation for analyzing complex problems. *Psychological Review*, *116*(3), 620–654. https://doi.org/10.1037/a0016242

Bacigalupe, A., Cabezas, A., Bueno, M. B., & Martín, U. (2020). El género como determinante de la salud mental y su medicalización. Informe SESPAS 2020. *Gaceta Sanitaria*, *34*, 61–67. https://doi.org/10.1016/j.gaceta.2020.06.013

Bacigalupe, A., & Martín, U. (2021). Gender inequalities in depression/anxiety and the consumption of psychotropic drugs: Are we medicalising women's mental health? *Scandinavian Journal of Public Health*, *49*(3), 317–324. https://doi.org/10.1177/1403494820944736

Bonnot, O., Dufresne, M., Herrera, P., Michaud, E., Pivette, J., Chaslerie, A., Sauvaget, A., & Vigneau, C. (2017). Influence of socioeconomic status on antipsychotic prescriptions among youth in France. *BMC Psychiatry*, *17*(1), Article 82. https://doi.org/10.1186/s12888-017-1232-3

Cabezas-Rodríguez, A., Bacigalupe, A., & Martín, U. (2020). Diagnosis and treatment of depression in Spain: Are there gender inequalities? *International Journal of Environmental Research and Public Health*, *17*(24), Article 9232. https://doi.org/10.3390/ijerph17249232

Cabezas-Rodríguez, A., Utzet, M., & Bacigalupe, A. (2021). Which are the intermediate determinants of gender inequalities in mental health?: A scoping review. *International Journal of Social Psychiatry*, *67*(8), 1005–1025. https://doi.org/10.1177/00207640211015708

Conrad, P., & Slodden, C. (2013). The medicalization of mental disorder. In C. S. Aneshensel, J. C. Phelan, & A. Bierman (Eds.), *Handbook of the sociology of mental health* (pp. 61–73). Springer. https://doi.org/10.1007/978-94-007-4276-5_4

Currie, J., Kurdyak, P., & Zhang, J. (2024). Socioeconomic status and access to mental health care: The case of psychiatric medications for children in Ontario Canada. *Journal of Health Economics*, *93*, Article 102841. https://doi.org/10.1016/j.jhealeco.2023.102841

del Río-Pedraza, C. (2022). La medicalización del malestar en la mujer. Una valoración crítica. *Revista de La Asociación Española de Neuropsiquiatría*, *42*(141), 55–73. https://doi.org/10.4321/s0211-57352022000100004

Forcades I, & Vila, T. (2012). La medicalización de los problemas sociales. *Revista Cubana de Salud Pública*, *38*, 803–809. https://doi.org/10.1590/S0864-34662012000500013

Gili, M., Ferrer-Pérez, V., Roca, M., & Bernardo, M. (1998). Diferencias de género en un estudio epidemiológico de salud mental en población general en la isla de Formentera. *Actas Espanolas de Psiquiatria*, *26*, 90–96.

Higgins, J. P. T., Morgan, R. L., Rooney, A. A., Taylor, K. W., Thayer, K. A., Silva, R. A., Lemeris, C., Akl, E. A., Bateson, T. F., Berkman, N. D., Glenn, B. S., Hróbjartsson, A., LaKind, J. S., McAleenan, A., Meerpohl, J. J., Nachman, R. M., Obbagy, J. E., O'Connor, A., Radke, E. G., . . . Sterne, J. A. C. (2024). A tool to assess risk of bias in non-randomized follow-up studies of exposure effects (ROBINS-E). *Environment International*, *186*, Article 108602. https://doi.org/10.1016/j.envint.2024.108602

Ishtiak-Ahmed, K., Köhler-Forsberg, O., Mortensen, E. L., Nierenberg, A. A., & Gasse, C. (2023). Trends, patterns and associated user characteristics of antidepressant prescriptions in older adults: A nationwide descriptive cohort study in Denmark. *Drugs & Aging*, *40*(4), 355–368. https://doi.org/10.1007/s40266-023-01018-4

Jufresa-Blanch, E., Carrilero, N., & García-Altés, A. (2023). The influence of general practitioner and patient sex on the treatment of major depression. *Frontiers in Pharmacology*, *14*, Article 1274774. https://doi.org/10.3389/fphar.2023.1274774

Kuo, C.-L., Chien, I.-C., Lin, C.-H., & Cheng, S.-W. (2015). Trends, correlates, and disease patterns of antidepressant use among elderly persons in Taiwan. *Social Psychiatry and Psychiatric Epidemiology*, *50*(9), 1407–1415. https://doi.org/10.1007/s00127-015-1052-z

Markez, I., Póo, M., Romo, N., Meneses, C., Gil, E., & Vega, A. (2004). Mujeres y psicofármacos: La investigación en atención primaria. *Revista de La Asociación Española de Neuropsiquiatría*, *91*, 37–61.

Mars, B., Heron, J., Kessler, D., Davies, N. M., Martin, R. M., Thomas, K. H., & Gunnell, D. (2017). Influences on antidepressant prescribing trends in the UK: 1995–2011. *Social Psychiatry and Psychiatric Epidemiology*, *52*(2), 193–200. https://doi.org/10.1007/s00127-016-1306-4

McGuinness, L. A., & Higgins, J. P. T. (2021). Risk-of-bias VISualization (robvis): An R package and Shiny web app for visualizing risk-of-bias assessments. *Research Synthesis Methods*, *12*(1), 55–61. https://doi.org/10.1002/jrsm.1411

*Ministerio de Sanidad—Sanidad en datos—Base de Datos Clínicos de Atención Primaria—BDCAP*. (n.d.). Retrieved 20 July 2024, from https://www.sanidad.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/SIAP/home.htm

Noordam, R., Aarts, N., Verhamme, K. M., Sturkenboom, M. C. M., Stricker, B. H., & Visser, L. E. (2015). Prescription and indication trends of antidepressant drugs in the Netherlands between 1996 and 2012: A dynamic population-based study. *European Journal of Clinical Pharmacology*, *71*(3), 369–375. https://doi.org/10.1007/s00228-014-1803-x

Potts, M. K., Burnam, M. A., & Wells, K. B. (1991). Gender differences in depression detection: A comparison of clinician diagnosis and standardized assessment. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, *3*(4), 609–615. https://doi.org/10.1037/1040-3590.3.4.609

Roberts, S., & Parry, S. (2023). Girl's and women's experiences of seeking mental health support for symptoms associated with psychosis. A narrative review. *Clinical Psychology & Psychotherapy*, *30*(2), 294–301. https://doi.org/10.1002/cpp.2819

Sáenz-Herrero, M., Recio-Barbero, M., López-Atanes, M., Santorcuato, A., Bacigalupe, A., & Segarra, R. (2023). Gender differences in the management of acute psychiatric episodes in the emergency department: A cross-sectional analysis of the 2017–2019 triennium. *Archives of Women's Mental Health*, *26*(6), 777–783. https://doi.org/10.1007/s00737-023-01360-x

Salk, R. H., Hyde, J. S., & Abramson, L. Y. (2017). Gender differences in depression in representative national samples: Meta-analyses of diagnoses and symptoms. *Psychological Bulletin*, *143*(8), 783–822. https://doi.org/10.1037/bul0000102

Schünemann, H. J., Brennan, S., Akl, E. A., Hultcrantz, M., Alonso-Coello, P., Xia, J., Davoli, M., Rojas, M. X., Meerpohl, J. J., Flottorp, S., Guyatt, G., Mustafa, R. A., Langendam, M., & Dahm, P. (2023). The development methods of official GRADE articles and requirements for claiming the use of GRADE—A statement by the GRADE guidance group. *Journal of Clinical Epidemiology*, *159*, 79–84. https://doi.org/10.1016/j.jclinepi.2023.05.010

The Paradox of Mental Health: Over-Treatment and Under-Recognition. (2013). *PLOS Medicine*, *10*(5), Article e1001456. https://doi.org/10.1371/journal.pmed.1001456

Torres-Bondia, F., De Batlle, J., Galván, L., Buti, M., Barbé, F., & Piñol-Ripoll, G. (2020). Trends in the consumption rates of benzodiazepines and benzodiazepine-related drugs in the health region of Lleida from 2002 to 2015. *BMC Public Health*, *20*(1), Article 818. https://doi.org/10.1186/s12889-020-08984-z

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D. J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garritty, C., . . . Straus, S. E. (2018). PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Annals of Internal Medicine*, *169*(7), 467–473. https://doi.org/10.7326/M18-0850

Vafaei, A., Ahmed, T., Freire, A., do, N. F., Zunzunegui, M. V., & Guerra, R. O. (2016). Depression, sex and gender roles in older adult populations: The International Mobility in Aging Study (IMIAS). *PLOS ONE*, *11*(1), Article e0146867. https://doi.org/10.1371/journal.pone.0146867