STUDY PROTOCOL

Burnout, mood disorders and socioeconomic consequences among civil servants: a protocol for a systematic review

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Abstract

Introduction: Literature shows the existence of a relationship between working conditions and alterations in mood. Civil servants have certain peculiarities in terms of job stability, which suggests that they should be less susceptible to mood disorders and burnout. It is common to find news in various media about higher rates of sickness absence and presenteeism. They have clinical and socio-economic aftermaths. The aim of this review is to know what intervention strategies have been applied for mood disorders and burnout syndrome among civil servants and what are the socioeconomic consequences.

Method: Searches will be performed on: MEDLINE, CINAHL, Scopus, PsycINFO, PsycArticles, EconLit, Web of Science and The Cochrane Library of Systematic Reviews. Only peer reviewed papers and reviews written in English or Spanish will be included. Blind paper selections and data extraction will be performed by two independent researchers. In case of discrepancy, a third researcher will act as a tiebreaker. The review will follow the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).

Discussion: This systematic review will provide evidence to support decision makers from various stakeholder groups, including policymakers, business organisations, labor unions, clinical managers, and the academic community interested in analysing the clinical and socioeconomic consequences of mood disorders among public sector workers regarding issues related to these types of mental health issues.

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Keywords
Burnout, Mood disorders, Depression, Stress, Anxiety, Civil Servant, Public Worker, Economic consequences
Introduction

Previous studies have emphasized the link between mental health and work conditions. Especially since the COVID-19 pandemic, the research on working conditions and mental health has increased, particularly among healthcare personnel. Some of the most frequently evaluated consequences are those related to depression, anxiety, or stress. Particular attention has been paid to what is known as burnout or burnout syndrome, which refers to a prolonged reaction to persistent emotional and interpersonal job-related stressors. Burnout syndrome is characterized by three dimensions: exhaustion, cynicism, and inefficacy.

A civil servant is a member of the administrative branch of the government’s executive body, with the responsibility of creating and executing government policies, programs, and projects. Public sector workers or civil servants generally have greater job security than those in the private sector, which guarantees their impartiality and ensures continuity of projects despite changes in political leadership. Although these job characteristics for public employees should theoretically reduce their susceptibility to work-related mental health issues, there are often reports in the media and studies conducted by certain unions and business organizations, indicating that this group of employees experiences a higher frequency of mood disorders leading to work absences. The population of civil servants has been the subject of some specific studies, such as The Japanese Civil Servants Study (the JACS study) and particularly the British Civil Servants Study (the Whitehall II study). However, in an initial approach to the subject, we have not found a systematic review of the literature that aggregates what is known about mood disorders, and specifically burnout syndrome, among public workers and the socioeconomic consequences of these conditions for the society and for the workers.

Methods

Ethics

Due to the characteristics of the design of this study, it was deemed unnecessary to obtain approval from the ethics committee.

Patient and public involvement

As this is a systematic review protocol, no patient or public will be involved.

Study registration

This systematic review has been registered on the International Prospective Register of Systematic Reviews (PROSPERO) under the registration code CRD42023410761. The review’s development will be based on the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).

Plans for dissemination

The findings of this comprehensive analysis will be shared through peer-reviewed journals, discussed in seminars and presented at relevant conferences and symposia. Any modifications made to the methodology will be meticulously documented, including saved searches and analytical techniques, and stored in bibliographic databases utilized for data gathering and synthesis.

Research objectives

To synthesize what has been published in relation to burnout and mood disorders among civil servants or public workers and the socioeconomic consequences of these conditions for the society and for the workers.

Research questions

Primary research question: What intervention strategies have been applied for mood disorders and burnout syndrome in the case of civil servants or public workers.

Secondary research question: What are the socioeconomic consequences of mood disorders and burnout in this population?

Search strategy

To enhance the methodological transparency and reproducibility of the results, we will conduct a search strategy based on the PRISMA checklist. Furthermore, we formulated a guiding question for this review using the PICO acronym (Population/Intervention/Comparison/Outcome) and the Cochrane Library of Systematic Reviews. Only peer review articles, papers and reviews will be included. They must be written in English or in Spanish, otherwise they are excluded.

As an example of a search strategy, the following equation will be used:

( ( burnout OR (mood AND disorder)) OR anxiety OR depression OR stress) AND (“Civil Servant” OR (public AND worker AND administration) OR “Government Worker” OR “Public Employee” OR state AND worker OR state AND employee) AND (economic AND (consequences OR effects OR results) OR “sick leaves” OR absenteeism OR presenteeism OR “early retirement”))

Selection of studies

The selection of studies will be based on the inclusion and exclusion criteria detailed in Table 1. Search strategies will be developed based on keywords: Burnout, Mood Disorders, Anxiety, Depression, Stress, Civil Servant, Public Worker, Administration, Government Worker, Public Employee, State Worker, State Employee, Economic Consequences, Economic...
Table 1. Inclusion/Exclusion criteria. All inclusion criteria must be met for a paper to be accepted.

<table>
<thead>
<tr>
<th>Inclusion criteria</th>
<th>Exclusion criteria</th>
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<tbody>
<tr>
<td><strong>1. Type and quality of the studies</strong></td>
<td></td>
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<tr>
<td>It was a paper or a review.</td>
<td>It was not a paper or a review.</td>
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<tr>
<td>It was written in English or in Spanish.</td>
<td>Books, book chapters and conference proceedings were excluded.</td>
</tr>
<tr>
<td>It was a peer-reviewed scientific study published.</td>
<td>It was not written in English or in Spanish.</td>
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<tr>
<td></td>
<td>It was not a peer-reviewed scientific study.</td>
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<td><strong>2. Population</strong></td>
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<td>Participants were civil servants who currently work or have worked for any public administration at any level.</td>
<td>People who were not civil servants and people who worked for the State but did not do it as civil servants (E.g. outsourced services)</td>
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<td><strong>3. Intervention (exposure)</strong></td>
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<td>Studies that included interventions for mood disorders in the selected population that include diagnostic and or treatment and an appraisal of the socioeconomic consequences for this population or for the society. The interventions include both pharmacological and non-pharmacological types and can take place in hospital settings, health centres, or any other environment, including homes or work environments (e.g. organisational or job design modifications)</td>
<td>Studies that did not include any type of intervention to diagnose or treat mood disorders and burnout syndrome in the target population, or did not include any appraisal of economic consequences. Papers that were focused on other conditions where mood disorders were a consequence of them (e.g. Neurological disorders, personality disorders) or did not consider the appraisal of socioeconomic consequences.</td>
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<td><strong>4. Comparator (control)</strong></td>
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<td>The comparison was made with the treatment as usual, with the alternative control group that was included, wherever possible, or a comparison with population data or data extracted from the literature on this topic.</td>
<td>The study did not include any comparison with a control group, alternative treatment or diagnostic method, or other reference population.</td>
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<tr>
<td><strong>5. Outcomes</strong></td>
<td></td>
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<td>The paper assessed the changes in the number of cases detected, duration, and intensity of the clinical or any other clinical outcome. The paper included an appraisal of the socioeconomic consequences of cases of mood disorders and burnout syndrome among civil servants.</td>
<td>The paper did not assess the changes in the number of cases detected, duration, and intensity of the clinical or any other clinical outcome. The paper did not include an appraisal of the socioeconomic consequences of cases of mood disorders and burnout syndrome among civil servants.</td>
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Effects, Economic Results, Sick Leaves, Absenteeism, Early Retirement. Boolean operators ‘AND’ and ‘OR’ will be combined with keywords.

Screening
The screening phase will utilize the online software Covidence, which is endorsed by Cochrane. Covidence offers a free trial period for its systematic review software. To ensure precision, two independent reviewers will conduct the screening process. In case of any inconsistencies, Covidence will highlight them. To resolve such issues, a third reviewer, who has no affiliation with the previous two, will act as a tiebreaker. It’s important to note that the decision of the third reviewer will not be automatically accepted, and if necessary, further discussion may take place.

The evidence selection process will be done as shown in the flowchart formulated based on the PRISMA recommendations\(^\text{19}\). See Figure 1.

Data extraction
To assess the quality of the included studies and synthesize the evidence, a Microsoft Excel spreadsheet, which has been pre-defined and tested through a pilot sample, will be utilized to extract data. The data extracted will comprise of title, reference, publication year, study design, population under study, study location, participants’ general and demographic characteristics, diagnostic criteria employed, treatments or intervention applied, study methodology, identified costs, main findings, funding sources, and methods for assessing the risk of bias.
Two researchers who will be blind to each other’s work will perform the data extraction. A third researcher will review the extraction without the knowledge of the others. In case of discrepancies, the third researcher will act as a tiebreaker. Finally, the obtained data will be discussed among the entire participating team to establish a final consensus.

**Methodological evaluation**

In order to assess the risks of bias, aspects such as the use of randomisation in studies involving the formation of treatment groups, treatment allocation, blinding, and timing of outcome assessment (during evaluation or at the time of results) will be considered. Mixed Methods Appraisal Tool (MMAT) version 2018\(^\text{21}\) will be used to guide the quality assessment.

**Data synthesis**

The content of the included studies will be subject to a descriptive synthesis, which will cover population characteristics, study context, type of diagnostics investigated, cost identified, methods used, and significance of results. There is no minimum number of studies required to be included in this review. To ensure evidence synthesis and control the risk of bias due to selective publication, the methodological evaluation steps described earlier will be followed. In the event that a sufficient
number of studies following a similar strategy were found, which consequently would allow for data synthesis, they would be grouped based on the similarity of design, type of intervention, and sample size. In the analysis of the extracted data, special focus will be placed on gender analysis, as well as the consequences for women at different levels of responsibility or leadership positions.

Discussion
This systematic review protocol includes a description of all review steps, as well as the data search and extraction strategy. The review comprises identification, study inclusion, data extraction, and data synthesis, and all the information and characteristics of the included studies will be thoroughly described.

The results will provide evidence to inform on the number and type of cases detected, duration of consequences, intensity of clinical and socioeconomic consequences of cases of mood disorders and burnout syndrome among civil servants or public workers. Additionally, we expect to find results related to reduction in the number of health service uses, reduction in sick leave, reduction of costs associated with different types of cases or demographic profiles, as well as work-related absences.

The evidence expected to be derived from this study will be valuable to help decision makers for multiple stakeholders, such as policy makers, business organisations, labor unions, clinical managers, and the academic community interested in analysing the consequences of mood disorders among public sector workers.

Data availability
No data are associated with this article.

Reporting guidelines
Ruiz-Adame, Manuel; Martínez Rodríguez, Susana (2023): Figure PRISMA_2020_flow_diagram Burnout - Burnout, mood disorders and socioeconomic consequences among civil servants. figshare. Figure. https://doi.org/10.6084/m9.figshare.2275975.v1

Data are available under the terms of the Creative Commons Attribution 4.0 International license (CC-BY 4.0).

References

