INPLASY PROTOCOL

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Support: No.

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Conflicts of interest:
None declared.

Gender-based Differences in Burnout During the COVID-19 Pandemic: Are Female Nurses More Prone to Burnout than Males? A Meta-analysis

Almulihi, Q[1].

Review question / Objective: To investigate the gender-based difference in burnout of nurses during Covid-19 pandemic.
Condition being studied: A systemic search was conducted from electronic databases (PubMed/Medline, Cochrane Library, and Google Scholar) from inception to 12th October 2021. All statistical analysis was conducted in Review Manager 5.4.1. Studies meeting inclusion criteria were selected. A random-effect model was used when heterogeneity was seen to pool the studies, and the result were reported in the Standard Mean Difference (SMD) and corresponding 95% Confidence interval (CI).

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 27 October 2021 and was last updated on 05 February 2022 (registration number INPLASY2021100109).

INTRODUCTION

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Standard Mean Difference (SMD) and corresponding 95% Confidence interval (CI).

METHODS

Participant or population: Health care nurse.

Intervention: Male gender.

Comparator: Female gender.

Study designs to be included: I studies were included if they met the following eligibility criteria: (a) articles having nurses practicing in Covid-19 pandemic; (b) burnout described based on gender; (c) burnout measured by a preformed questionnaire; (d) articles should have a defined number of male and female nurses. Furthermore, strategy for research can be given as PECOS: 1) P (Population): Nurses; 2) E (Exposure): Burnout in Covid-19 pandemic; 3) C (Control): None; 4) O (Outcome): gender-based burnout difference Covid-19 pandemic; 5) S (Studies): Cross-sectional studies, Cohort studies and Human-based Randomized controlled trials published in English only. Cohorts, Case series, Case reports, literature reviews, editorials, and studies not meeting the inclusion criteria were excluded.

Eligibility criteria: Study selection:All studies were included if they met the following eligibility criteria: (a) articles having nurses practicing in Covid-19 pandemic; (b) burnout described based on gender; (c) burnout measured by a preformed questionnaire; (d) articles should have a defined number of male and female nurses. Furthermore, strategy for research can be given as PECOS: 1) P (Population): Nurses; 2) E (Exposure): Burnout in Covid-19 pandemic; 3) C (Control): None; 4) O (Outcome): gender-based burnout difference Covid-19 pandemic; 5) S (Studies): Cross-sectional studies, Cohort studies and Human-based Randomized controlled trials published in English only. Cohorts, Case series, Case reports, literature reviews, editorials, and studies

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Information sources: Cross-sectional studies, Cohort studies and Human-based Randomized controlled trials published in English only.

Main outcome(s): Burnout of nurses during Covid-19 pandemic.

Quality assessment / Risk of bias analysis: As the studies are less than 10, publication bias cannot be assessed. Three studies have Low risk of bias (4,6-7) while other three have Moderate risk of bias (3,5,8).

Strategy of data synthesis: Our analysis included 6 published studies. All are Cross-sectional studies. 16,33 nurses are involved in this analysis. Three studies were from China, two from Turkey and one from Italy. Average age from these studies was 32.02 years. Four studies used Maslach Burnout Inventory (MBI), one used Chinese version of MBI i.e., Human Services Survey (MBI-HSS) for Medical Personnel and another one used Professional quality of Life Scale version 5.

Subgroup analysis: No.

Sensitivity analysis: A sensitivity analysis was conducted to assess the influence of each study on the overall effect by excluding one study at a time, followed by the generation of pooled Standard Mean Difference (SMD) for the rest of the studies. No significant change was observed after the exclusion of any individual study, suggesting the results were robust.

Language: English.

Country(ies) involved: Saudi Arabia.

Keywords: Nurses; Covid-19; Burnout; Female; Male.

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