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Correlates of depressive mood for patients with breast cancer: a meta-analysis

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ADMINISTRATIVE INFORMATION

Support - Traditional Chinese Medicine Science and Technology Plan of Zhejiang Province (no. 2020ZB202) in China.

Review Stage at time of this submission - Data extraction.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 04 January 2024 and was last updated on 04 January 2024.

INTRODUCTION

Review question / Objective P: Stage I to III female patients with breast cancer; I: female patients with breast cancer who reported depressive mood; C: female patients with breast cancer who did not report depressive mood; O:correlates associated with depressive mood in female patients with breast cancer (e.g., demographic variables); S: cohort, cross sectional, and case-control studies.

Condition being studied Depressive symptoms are the most common negative emotions of breast cancer patients. Many studies show that for female breast cancer, the incidence of depressive

symptoms in different regions of the world is about 10% -70%, the average incidence rate in China is 43.6%, the average incidence in the world is about 32.2%, and the ultimate incidence rate of depression is about 11.0% . There are many studies on its related risk factors, but the results are not consistent. This study intends to use meta-analysis methods to identify its risk factors and OR values.

METHODS

Participant or population Female patients (age≥18 years) with breast cancer (Stage I to III) .

Intervention Female patients with breast cancer who reported depressive mood.

Comparator Female patients with breast cancer who did not report depressive mood.

Author 2 - Dan Wang.
Author 3 - Rui Fang.

Study designs to be included Cohort, cross sectional, and case-control studies.

Eligibility criteria Exclusion criteria: Previous reports of mental and psychological disorders; Have used psychotropic drugs or psychotherapy before; Non Chinese or English articles; Meeting summary; Review articles; Meta analysis articles; Letter articles; Articles that mix other negative emotions (such as anxiety). Inclusion criteria: Must include multiple regression factors.

Information sources PubMed, Cochrane Library, Web of Science, Embase, China National Knowledge Infrastructure, China Science and Technology Journal Database and Wan Fang Database.

Main outcome(s) To find out the risk factors of depression in female patients with breast cancer and obtain their OR values.

Quality assessment / Risk of bias analysis I^2 test was used to assess the heterogeneity among the included studies. $I^2 > 50\%$ and $P < 0.05$ indicate heterogeneity among the studies, and a random effect model was used. Otherwise, a fixed effect model was used. Sensitivity analysis was used to eliminate individual studies individually to evaluate the stability of the meta-analysis results, and subgroup analysis was conducted to explore the possible sources of heterogeneity. Egger's test was used to assess publication bias.

Strategy of data synthesis A meta-analysis was conducted using Review Manager 5.3 and Stata 16.0 software, with $P < 0.05$ as statistically significant. Odds ratio (OR) were used as effect sizes.

Subgroup analysis Stage I to III; country.

Sensitivity analysis One by one elimination method.

Language restriction Chinese; English.

Country(ies) involved China PR.

Keywords Breast Cancer; Risk Factors; Meta-analysis.

Contributions of each author

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