INPLASY

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A mesh meta-analysis of the effects of non-drug interventions on sleep quality in patients with breast cancer

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ADMINISTRATIVE INFORMATION

Support - Nothing.

Review Stage at time of this submission - Completed but not published.

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 3 February 2025 and was last updated on 3 February 2025.

INTRODUCTION

Review question / Objective To investigate the effect of non-drug intervention on sleep disorders in patients with breast cancer by using meshmeta-analysis.

Condition being studied A systematic search was conducted on The Cochrane Library, PubMed, Embase, Web of Science, CNKI, Wanfang, VIP, China Biomedical Literature Database (CBM), etc. The search period was established until November 2024. Two researchers screened the literature, extracted data, and evaluated the risk of bias in the included studies. Stata 17.0 software was used to perform a mesh meta-analysis.

METHODS

Search strategy Computer search, PubMed, Web of Science, China Biomedical Literature Database, China National Knowledge Network (CNKI), Wanfang Data knowledge service platform, VIP Chinese Science and Technology Journal Database (VIP), the search time is from the establishment of the database to November 2024, using the method of combining subject words and free words. Search for RCT studies on the Effect of intervention on sleep disorders in breast cancer patients. Chinese search terms included: "breast cancer/breast tumor", "sleep disorders/sleep quality", "randomized/randomized control". The English search terms included :"Breast Neoplasms/Breast Cancer/Breast tumors/breast carcinoma/tumor of breast/mammary cancer" and "Sleep" disorders/Sleep Quality/sleeping quality/ quality of sleep" "randomized controlled trial/ randomized clinical trial/RCT/random experiment ".

Participant or population Breast cancer patient.

Intervention The intervention group took one or more non-drug intervention measures.

Comparator The control group took routine nursing.

Study designs to be included (1) Study type: randomized controled trail (RCT); (2) Study subjects: breast cancer patients with definite diagnosis, regardless of treatment methods, age, race, etc.; (3) Intervention measures: the control group took routine nursing, the intervention group took one or more non-drug intervention measures; (4) Outcome measures: Pittsburgh sleep quality index (PSQI) score.

Eligibility criteria Exclusion criteria：(1) Reviews and cases, etc.; (2) Documents whose full text cannot be obtained or whose data cannot be extracted; (3) Literatures with quality evaluation results of grade C; (4) repeated publications; (5) Non-Chinese and English literature.

Information sources The Cochrane Library, PubMed, Embase, Web of Science, CNKI, Wanfang, VIP, China Biomedical Literature Database (CBM), etc.

Main outcome(s) Pittsburgh sleep quality index (PSQI).

Data management The two investigators performed a quality assessment of the full text of the included literature according to the Cochrane Manual 5.1.0 recommended RCT assessment tools, and cross-reviewed the assessment of random sequence generation, assignment concealment, subject and intervention blinding, outcome evaluator blinding, outcome reporting integrity, selective reporting of findings, and other biases. If the included literature meets all evaluation criteria, it is grade A, indicating low degree of bias. If part is satisfied, it is grade B, indicating moderate bias. If none is satisfied, it is grade C, indicating a high degree of bias.

Quality assessment / Risk of bias analysis The two investigators performed a quality assessment of the full text of the included literature according to the Cochrane Manual 5.1.0 recommended RCT assessment tools, and cross-reviewed the assessment of random sequence generation, assignment concealment, subject and intervention blinding, outcome evaluator blinding, outcome reporting integrity, selective reporting of findings, and other biases. If the included literature meets all evaluation criteria, it is grade A, indicating low degree of bias. If part is satisfied, it is grade B, indicating moderate bias. If none is satisfied, it is grade C, indicating a high degree of bias.

Strategy of data synthesis The mvmeta installation package in Stata 17.0 software and related code commands were used for mesh Meta analysis.

Subgroup analysis No.

Sensitivity analysis The inconsistency test model is used for the overall inconsistency test. If P > 0.05, the consistency model is used for data analysis and the results are ranked; otherwise, the non-consistency model is used. If there was a closed loop in the evidence network map, the node-cutting method was used for inconsistency test, and P > 0.05 indicated that there was no significant inconsistency between direct and indirect comparisons. The consistency model was used for mesh meta-analysis.

Country(ies) involved China.

Keywords Non-drug intervention; Breast cancer; Sleep quality; meta-analysis.

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