INPLASY

Acupuncture for cancer-related insomnia: evidence mapping and reflection

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ADMINISTRATIVE INFORMATION

INTRODUCTION

Review question / Objective P: cancer-related insomnia I: acupuncture : C: all controls : O: insomnia-related instruments S: randomized controlled trials/SRs and MAs.
The evidence for acupuncture for cancer-related insomnia is mixed, and it is necessary to evaluate and summarize the available evidence. We used AMSTAR-2 to assess the methodological weaknesses of SRs/MAs and ROB 2.0 to assess the risk of bias of RCTs. Finally, we used evidence maps for comprehensive analysis and scientific evaluation to integrate, condense, and concisely and intuitively present the current state of research, problems, directions for development, and evidence gaps.

Background Insomnia is a common sleep disorder in patients with cancer, and CRI has become a prominent complication of cancer, ranking alongside pain and fatigue, and significantly diminishes the prognosis and quality of life of cancer survivors. CRI is characterized by poor sleep experiences, including difficulty falling asleep and waking up easily in the middle of the night. Usually, > 3 days in 1 week is defined as acute insomnia, and duration of > 4 weeks is considered chronic insomnia. The prevalence of CRI among patients with cancer ranges from 25% to 59%, tripled that of the general population. CRI can impair daytime functionality, including diminished attention, memory, and motor functions; adversely affect the immune system; and exacerbate inflammatory responses.Currently, the treatment of CRI primarily relies on benzodiazepines or non-benzodiazepines (hypnotic medications), which, while effective in the general population, still lacks sufficient evidence of efficacy in the cancer cohort.Given the limitations of current treatments, better options are desirable. Acupuncture has been recognized for its beneficial effects on cancer since 1869, with increasing of evidence demonstrating its efficacy in alleviating cancer-related symptoms. Recently, RCTs as well as SRs/MAs for acupuncture for CRI have been emerging, however no one has presented evidence for this,

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Rationale Recently, RCTs as well as SRs/MAs for acupuncture for CRI have been emerging, however no one has presented evidence for this, and we decided to use evidence mapping (EM) to fully summarize this.

METHODS

Strategy of data synthesis Two reviewers reviewed literature from eight premier databases (Pubmed,Embase,CNKI,WOS,WanFang,SInomed, VIP etc). Key terms included "cancer," "insomnia, " "sleep disturbances," "acupuncture," "systematic review," and "meta-analysis."Our selection included SRs and MAs that randomized controlled trials (RCTs).

Eligibility criteria P: cancer-related insomnia I: acupuncture : C: all controls : O: insomnia-related instruments S: randomized controlled trials/SRs and MAs.

Source of evidence screening and selection Two independent evaluators (Guo, Z.N. and Wang, Y.T.) screened the titles and abstracts based on the inclusion and exclusion criteria. Discrepancies were resolved through discussion and consensus or with guidance from a third evaluator (Liu, W.H.) if needed. The selected articles were imported into EndNote 20, and duplicate removal features were used. Full-text screening was conducted for articles that met the criteria. Reasons for article exclusion after full-text reading are documented and reported.

Data management We used Excel method to preformulate the table to extract the first author information including name, country, etc. Acupuncture intervention details we followed STRICTA required details information including time of acupuncture, treatment period etc. Also due to the statistical data required for the evidence map, we extracted the sample size, p-value, etc.

Language restriction No limtied.

Country(ies) involved China (Guangzhou University of Chinese Medicine).

Keywords Acupuncture; Cancer; Insomnia; Evidence mapping.

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