INPLASY PROTOCOL

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The effect of acupressure for insomnia : A systematic review and meta-analysis

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Review question / Objective: This study aims to discuss the effectiveness of acupressure, without combining any other objects or methods, in treating insomnia.

Condition being studied: Previous studies mostly chose acupuncture as intervention ; even if relevant studies were found, it was rare for them to solely focus on acupressure as many of which combined other methods to compare with the control groups. In the recent systematic reviews about insomnia, selected populations, hemodialysis and hypertensive patients, in particular, were put more emphasis on. Nevertheless, most of the studies included in these reviews have the same problem mentioned above. On top of that, the placebo effect in control group was not often considered, making it hard for us to truly distinguish the effectiveness of acupressure.

INTRODUCTION

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Rationale: The most common treatments for insomnia include medication use, psychological therapy, acupuncture, and acupressure. Among these, the effectiveness of medication use can decline due to tolerance, concerns are also raised when long-term usage causes reliance and side effects to occur. In some cases, rebound insomnia may be present once the medication is halted. The scholar though the other treatments, psychological therapy and acupuncture, do not have direct physical impacts like medications

do, their practice is only limited to licensed personnel. Thus, acupressure is the most applicable approach for treating insomnia patients in the clinical setting.

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METHODS

Search strategy: We searched nine databases: Embase, MEDLINE, Cochrane CENTRAL, CINAHL, Psychology & Behavioral Sciences Collection, NCL Taiwan Periodical Literature, National Digital Library of Theses and Dissertations in Taiwan, CNKI, Wanfang Data from inception to end of July, 2020, to identify randomized controlled trials in English and Chinese language. The search terms were following keywords and synonym such as "insomnia", "sleep", "acupressure", "massage". The authors would discuss and made a final consensus if the disagreements for the studies selection.

Participant or population: Adult with insomnia.

Intervention: The intervention was acupressure.

Comparator: Usual care.

Study designs to be included: RCT design.

Eligibility criteria: The inclusion criteria: 1) adult with insomnia; 2) RCT design; 3) the intervention was acupressure; 4) the

measurement tool was The Pittsburgh Sleep Quality Index (PSQI).

Information sources: Electronic databases.

Main outcome(s): The main outcome for purpose was the effect of decreasing insomnia using acupressure. Therefore, the scores of PSQI were used to compare at before and after intervention.

Additional outcome(s): The secondary outcomes were the various population characteristics such the participants with disease or age.

Data management: Two authors executed independently for article quality assessment, evaluation of eligibility criteria, data extraction, and made the table of characteristics for included studies.

Quality assessment / Risk of bias analysis: We adopted the Joanna Briggs Institute (JBI) appraisal tool to assess the level of evidence and the Cochrane risk-of-bias (RoB) tool was used to assess the risk of bias for randomized controlled trials.

Strategy of data synthesis: The Cochrane Review Manager (RevMan, version 5.4) was adopted to analyze data. The mean differences with 95% confidence interval (CI) were calculated to summarize estimates; The Higgins' I2 test was used to examine the heterogeneity, it might be moderate heterogeneity between 30% and 60% and high heterogeneity over 75%. If the heterogeneity among studies was incorporate, the random-effects meta-analysis may be used. The effect of different characteristics of population were checked using subgroup analyses.

Subgroup analysis: The various population such as chronic disease and age.

Sensitivity analysis: When I square over 75%, the sensitivity analysis will be conducted.

Country(ies) involved: Taiwan.

Contributions of each author:
Author 1 - Huan-Fang Lee.
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Author 3 - Pei-Chun Lai.