## Parallel Session 4: Translating Knowledge to Primary Healthcare

## T4c - Effectiveness of Auriculotherapy on Older People with Insomnia

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Introduction and Project Objectives: Insomnia is common among the elderly. Given the adverse effects of prolonged use of hypnotics, three minimally invasive procedures, namely, laser auriculotherapy (LAT), magneto-auriculotherapy (MAT), and their combination, were investigated to determine the desirable treatment modality to improve the sleep conditions of elderly. This study aims to determine the optimum treatment protocol of AT for improving sleep conditions and quality of life in elderly with insomnia.

Methods: This is a three-arm double-blinded randomised trial. A total of 145 eligible subjects were randomised into (1) placebo LAT and MAT; (2) LAT and placebo MAT; and (3) LAT plus MAT. Seven auricular points namely 'shenmen', 'heart', 'liver', 'spleen', 'kidney', 'occiput' and 'subcortex' were used. Treatment was delivered three times a week, for six weeks. The subjects were assessed at baseline, 6 weeks, and follow-up after 6 weeks, 3 months and 6 months. Generalised Estimating Equations were used for evaluating interactions among the groups over time on the primary outcome – Pittsburgh Sleep Quality Index (PSQI), and secondary outcomes (sleep parameters using actigraphic monitoring, quality of life using SF-12, and Patient Health Questionnaire (PHQ-9) for assessing depression status).

**Results:** The treatment effects of the three protocols were comparable. Significant improvements in all the subjective measures (PSQI, health-related quality of life, depression status) for individual groups over time were indicated. Significant deduction in the awakening time after sleep onset and increase in sleep efficiency were detected in subjects who received MAT but not in those who received LAT alone. The combined MAT and LAT approach did not show any advantage over MAT alone.

Conclusion and Discussions: The findings of this meticulous RCT can provide valuable information and increase the understanding of the therapeutic effect of AT, either combined MAT, and LAT or MAT alone. It is suggested that a longer therapeutic course and more frequent administration of LAT may be considered in future trials to achieve the optimal treatment effect. In general, AT was demonstrated to be a well-received treatment modality with minimal adverse effects, and effective in improving sleep conditions of the elderly. This project addresses the thematic priority of Chinese Medicine under the Health and Health Services Theme of HMRF. The findings can offer insights in future research directions, and to translate knowledge to primary healthcare in the community.

Trial Registration: ClinicalTrials.gov: NCT02970695

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