

## A STUDY ON THE EFFECTIVENESS OF ELECTROACUPUNCTURE IN THE MANAGEMENT OF SLEEP DISORDER AMONG METHADONE MAINTENANCE THERAPY PATIENTS IN KAJANG: A PRELIMINARY INVESTIGATION

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**Introduction:** High prevalence of poor sleep quality has been reported among Methadone Maintenance Therapy (MMT) patients. In order to reduce side effects and prevent relapse, new treatment approaches should be considered and recently, electroacupuncture (EA) has been believed to have a therapeutic effect in the treatment of drug addiction.

**Aims:** To investigate the effects of EA on sleep quality in patients receiving MMT.

**Methods:** A prospective, open-labelled, parallel, randomized-controlled trial was conducted among MMT patients in Kajang, Selangor, Malaysia. A total of 22 drug misusers who met DSM-IV were randomly assigned into two groups. The treatment group was given methadone plus EA stimulation at 1.1+80Hz while the control group received methadone plus Sham EA without increasing the intensity of the stimulation. Both groups received the EA treatment 30 minutes per session for 14 days. Sleep quality was assessed by validated Pittsburgh Sleep Quality Index.

**Results:** In terms of pre and post treatment comparison, we found that there were significant differences of mean sleep latency ( $p=0.011$ ), use of medication ( $p=0.043$ ) and global PSQI ( $p=0.009$ ) for the treatment group. However, only sleep efficiency ( $p=0.014$ ) showed a significant difference between pre and post treatment for the control group. In terms of group comparison, we found that there was significant difference of mean sleep latency ( $p=0.004$ ), sleep efficiency ( $p=0.004$ ) and global PSQI ( $p=0.008$ ) for post treatment. No significant difference was found for pre treatment.

**Conclusion:** Electroacupuncture may have an adjunct effect on sleep improvement and have potential to reduce Benzodiazepine use among MMT patients.