The Efficacy of Nabilone, a Synthetic Cannabinoid, in the Treatment of PTSD-Associated Nightmares: A Preliminary Randomized, Double-blind, Placebo-Controlled Crossover Design Study

10 male Canadian military personnel with PTSD participated in a study investigating the efficacy of nabilone capsules (a synthetic cannabinoid) in treating PTSD-associated nightmares. 50% of the participants who received nabilone versus 1% of those who received the placebo reported much improved nightmares.

**Key Findings:**
- At the end of a 7 week period of taking nabilone, 70% of the subjects scored “very much” or “much” improved compared to 22% at the end of the placebo period.
- There was a significant reduction in recurring and distressing dreams between the conditions for both frequency and intensity.
- The nabilone group reported significantly greater improvement in terms of their perception of change compared to the placebo group.
- There was also a significant improvement in wellbeing for the nabilone group compared to the placebo group (who reported a decline in wellbeing).
- At the end of the treatment period, 44% of participants reported no distressing dreams in the last week compared to 0 in the placebo group. However, there was no reported change in sleep quantity or quality over the study period.

**Implications for Programs:**
- Programs could include modules in their educational programs for Service members about sleep issues and how to change one’s behavior to improve the quality of sleep.
- Programs could provide family members of Service members living with PTSD classes and support groups in which they can learn about how to effectively manage PTSD in the family.
- Programs could create opportunities for family members to engage in social activities together to promote exchange of social support.

**Implications for Policies:**
- Policies could allocate funding to more formally explore the use of synthetic cannabinoids to treat nightmares and sleep problems.
- Policies could recommend screening returning Service members for nightmares and other sleep-related problems.
- Policies could recommend that programs serving military personnel with PTSD specifically incorporate education about sleep hygiene.

**Avenues for Future Research:**
- Future research could replicate these findings in a larger cohort of U.S. military personnel.
- Additional studies could assess PTSD symptoms pre and post intervention to test the impact of the drug on other PTSD symptoms beyond nightmares.
- Future research could examine varying combinations of medication and psychotherapies to assess their effectiveness.

Prepared by the Military REACH Team.
For additional information, please visit [reachmilitaryfamilies.umn.edu](http://reachmilitaryfamilies.umn.edu)
Developed in collaboration with the Department of Defense’s Office of Family Policy, the National Institute of Food and Agriculture, and the U.S. Department of Agriculture under The University of Minnesota Award No. 2013-48710-21515.
Active Duty male Canadian military personnel who had PTSD and were referred to a military trauma clinic were recruited. Participants had to have a traumatic event at least two years prior, a history of current distressing nightmares, and difficulty falling asleep.

Subjects were randomly assigned to receive either nabilone tablets (a synthetic cannabinoid) or placebo tablets. Participants then switched to the other condition for 7 additional weeks. At the beginning and end of each 7 week trial, patients completed measures of dreams, insomnia, PTSD, and general wellbeing. A sleep diary log was completed during the final week which recorded total sleep time and number of awakenings per night.

10 male Canadian Active Duty military personnel participated. Average age = 43.60 years (SD=8.20 years). Racial/ethnic composition: 100% Caucasian. No other demographic characteristics were reported.

The sample was small and homogenous, and results are preliminary. One of the outcome measures was a single item measure which may not be reliable.

### Research Design and Sample

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### Implications

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Not applicable because authors do not discuss implications