



Supporting
Military Families
Through Research
and Outreach

PUTTING RESEARCH TO WORK FOR MILITARY FAMILIES

The Efficacy of Nabilone, a Synthetic Cannabinoid, in the Treatment of PTSD- Associated Nightmares:

A Preliminary Randomize, Double-blind, Placebo-Controlled crossover Design Study

Jetly, R., Heber, A., Fraser, G. & Boisvert, D. (2015). The efficacy of nabilone, a synthetic cannabinoid, in the treatment of PTSD-associated nightmares: A preliminary randomized, double-blind, placebo-controlled crossover design study. *Psychoneuroendocrinology*, 51, 585-588.



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

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Background Information

Methodology:

- 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.

Participants:

- 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.

Limitations:

- 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.

Assessing Research that Works

Research Design and Sample				Quality Rating:	
	Excellent (★★★★)	Appropriate (★★★)	Limited (★★)	Questionable (★)	
The design of the study (e.g., research plan, sample, recruitment) used to address the research question was....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Research Methods				Quality Rating:	
	Excellent (★★★★)	Appropriate (★★★)	Limited (★★)	Questionable (★)	
The research methods (e.g., measurement, analysis) used to answer the research question were...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Limitations				Quality Rating:	
	Excellent Minor Limitations (★★★★)	Appropriate Few Limitations (★★★)	Limited Several Limitations (★★)	Questionable Many/Severe Limitations (★)	
The limitations of this study are...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Implications				Quality Rating:	
	Excellent (★★★★)	Appropriate (★★★)	Limited (★★)	Questionable (★)	
The implications of this research to programs, policies and the field, stated by the authors, are...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Not applicable because authors do not discuss implications					
Overall Quality Rating					