DANISH MINISTRY OF DEFENCE
PERSONNEL AGENCY

Treating insomnia and trauma related nightmares in military personnel

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DANISH
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Presentation overview

- Sleep disorders in military personnel
- Cognitive Behavioral Therapy for Insomia and Nightmares (CBT-I & N)
- Modular Patient Centered CBT for Complex PTSD

Sleep disorders

- Sleep plays a fundamental role in the development, maintenance, exacerbation, and recovery from PTSD
- Among people who develop PTSD, 71-90% report long-standing sleep disturbances
- Patients with sleep disorders have a degraded quality of life and poorer community integration
  - ➢ Understanding of assesment and treatment of sleep disorders in the context of PTSD is important

(e.g.,Spoormaker & Montgomery, 2008; Koboayashi, Boarts, & Delahanty, 2007; Gilbert et al., 2015; Troxel et al., 2015)

Insomnia ICD-10

The patient observes one or more of the following:

- A.
  1. Difficulty initiating sleep
  2. Difficulty maintaining sleep
  3. Waking up earlier than desired

- B.
  1. Fatique/malise
  2. Attention, concentration or memory impairment
  3. Mood disturbances/irritability
  4. Daytime sleepiness
  5. Proneness to errors/accidents
  6. Concerns about or dissatisfaction with sleep

Insomnia (continued)

- Short term insomnia
  - may be caused by stress or changes in your schedule or environment
  - can last for a few days or weeks
- Chronic (long-term) insomnia
  - Occurs 3 or more nights a week
  - Lasts >3 months
  - cannot be fully explained by another problem or a medicine

Nightmares ICD-10

- Dream experiences loaded with anxiety and fear
- Detailed recall of the dream content – usually themes involving threats to survival, security or self-esteem
- Often recurrence of similar frightening nightmare themes
- Upon awakening the individual rapidly becomes alert and oriented

Nightmares and insomnia in military personnel with PTSD

- Only 2-6% civilians report nightmares that are frequent and severe
- The prevalence rate of nightmares in trauma survivors various considerably across studies, ranging from 19 to 96%
- Insomnia is the most prevalent sleep disorder in military personnel with 50% of recently deployed military members suffering from insomina
- In US veterans with PTSD and insomnia, 89% report traumarelated nightmares

(e.g., Wallace et al., 2011 Mysliwiec et al., 2013; Peterson, Goodie, Sattarfiels, & Brim, 2008; Seelig et al., 2020, Nielson & Zadra, 2011; Leskin, Woodward, Young, & Sheikh, 2002;).

Assessment of sleep disorders

Self-report

Interviews

- Spielman & Anderson's (1999) diagnostic interview
- Morin's (1993) Insomnia Interview Schedule

Sleep diaries

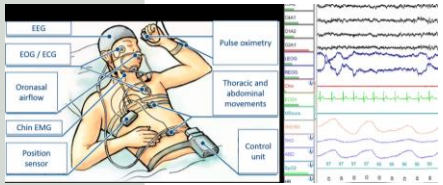
-CBT-I coach (available for free download)

Qestionnaires

- Pittsburgh Sleep Quality Index (PSQI)
- Insomnia Severity Index (ISI)

Objec-tive

Polysomno-graphy



Actigraphy

Combination can guide treatment and suggest whether referral is needed to assessment of breathing-related disoders

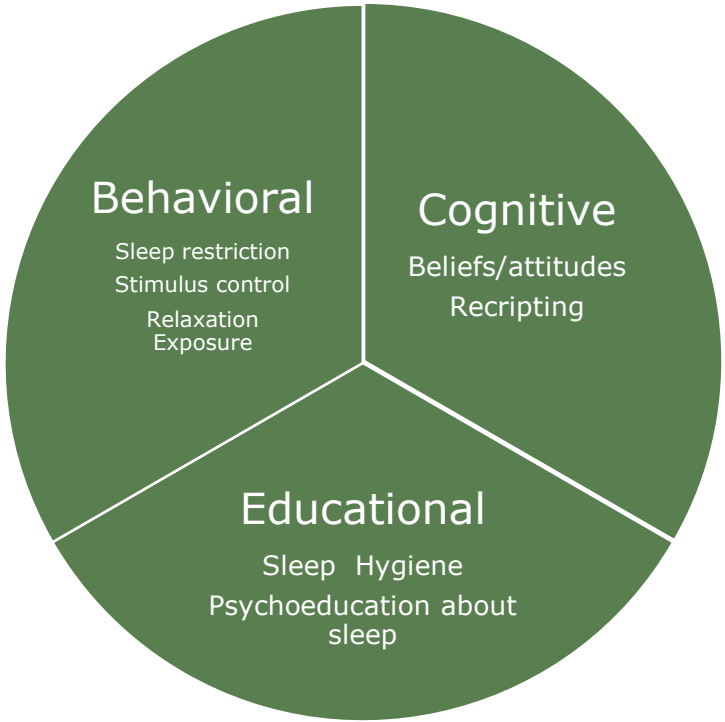
Three approaches

Cognitive Behavioral Therapy for Insomnia (CBI-I)	•Taylor, DJ, Peterson, AL, Goodie, JL, Grieser, E, Hryshko-Mullen, AS, Rowan, A, Wilkerson, A, Pruiksma, KE, Dietch, JR, Hall-Clark, B, & Fina, B, (2019). *Cognitive-Behavioral Therapy for Insomnia in the military: Patient guide.*
Exposure, Relaxation & Rescripting Therapy (ERRT)	•Davis, J.L. (2009)
Combined CBT-I & Exposure, Relaxation & Rescripting Therapy (CBT-I & N)	•Pruiksma, K. E., Taylor, D. J. et al. (2019). *Cognitive-Behavioral Therapy for Insomnia and Nightmares in the military: Therapist guide.*

Treatment elements in CBT-I & N

Method	Purpose
Psychoeducation about sleep and nightmares	Give the client an overall knowledge about sleep and thereby an understanding of the rationale behind the things that have to be changed
Good sleep habits	Eliminate habits that damage good sleep and increase good sleep habits
Sleep restriction	Only use time in bed, that is actually slept through, increase sleep drive and strengthen the signals of the circadian rhythms
Stimulus control	Create positive sleep associations
Bodily relaxation-exercises (progressive relaxation)	Increase relaxation and decrease arousal
General cognitive therapeutic strategies	Decrease arousal caused by catastrophic thinkning, misconceptions about sleep etc.
Exposure & Rescripting	Change nightmares/reduce nightmares

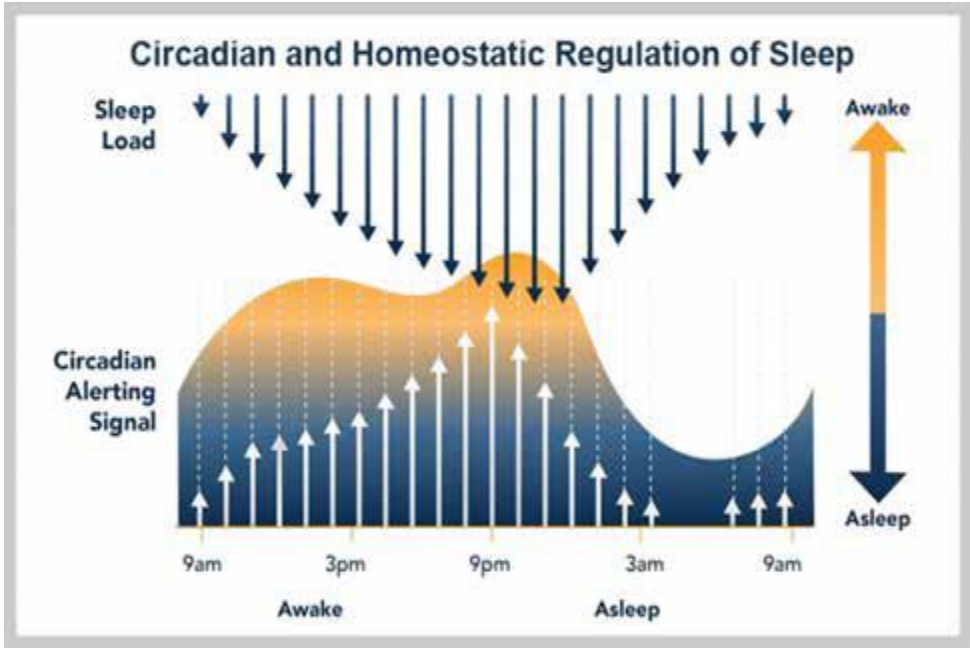
CBT-I & N – the three components



Sleep education

Two process model

- Two basic processes regulate sleep and wakefulness: the sleep drive and the circadian process
- The body has a "sleep drive" that naturally pushes you towards a regular schedule
- Both the sleep drive and wakefulness is built up over the day



Adapted from Edgar, Dement & Fuller 1993

Sleep hygiene

- Stop drinking caffeine after noon
- Cut down on substances at bedtime
- Exercise during the morning or during the day
- Make the bedroom enviornment comfortable
- Don’t go to bed hungry
- Avoid liquids near bedtime
- Avoid naps

Stimulus control

Stimulus control instructions

- Use the bed only for sleep or sex
- Only go to bed when sleepy
- Get out of bed if awake > 15 minutes
- Return to bed only when sleepy
- Wake up at the same time each day

Sleep restriction

Sleep plans

- Clients register weekly conditions about their sleep, sleep time, number of awakenings, nightmares etc.
- The clients' actual amount of sleep is calculated
- Time spend in bed is reduced to the amount of time the client is actually sleeping
- A fixed awakening time is established
- Sleep plans are created and reconsidered weekly on the basis of the client's sleep-efficacy.

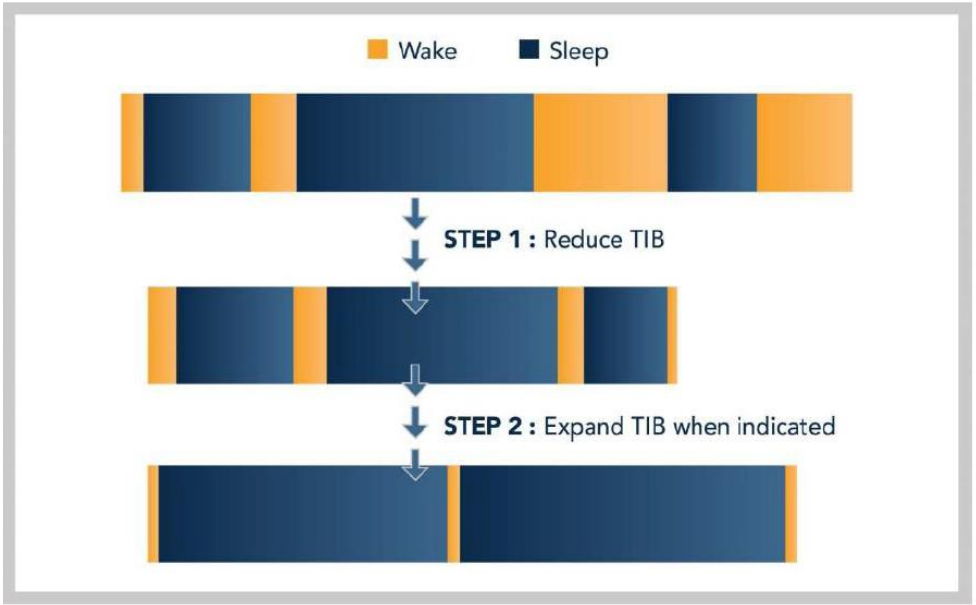
Sleep efficiency

- The definition of sleep efficiency is the percentage of time we spend asleep while in bed.
- The amount of time spend in bed is increased based on the sleep efficiency.

- Sleep efficacy (SE) > 90% - Change prescribed time spent in beed (TIB) to 15 minutes earlier.
- SE is between 85% and 90% - No change in prescribed bedtime.
- SE < 85% - change prescribed bedtime to 15 minutes later.
- SE < 70 % start over

Sleep restriction

- Decrease time in bed to the average total sleep time.
- The amount of time spend in bed is increased based on the sleep efficiency
- The amount of sleep is thereafter gradually increased, as the sleep gets less disturbed and falling asleep gets easier.

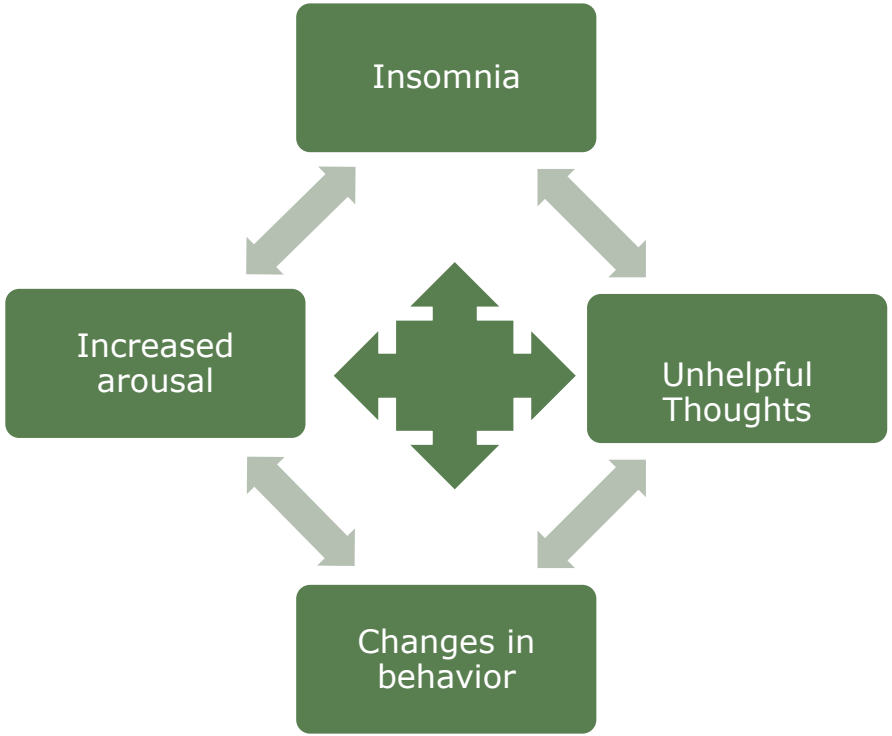


Michael Smith, in Taylor et. Al.,2019

Cognitive interventions

Cognitive strategies

- Psychoeducation
- Cognitive Restructuring
- Identify and challenge general dysfunctional thoughts and beliefs about sleep
- Behavioral experiments
- Plan worry-time during the day
- Problemsolving



Relaxation

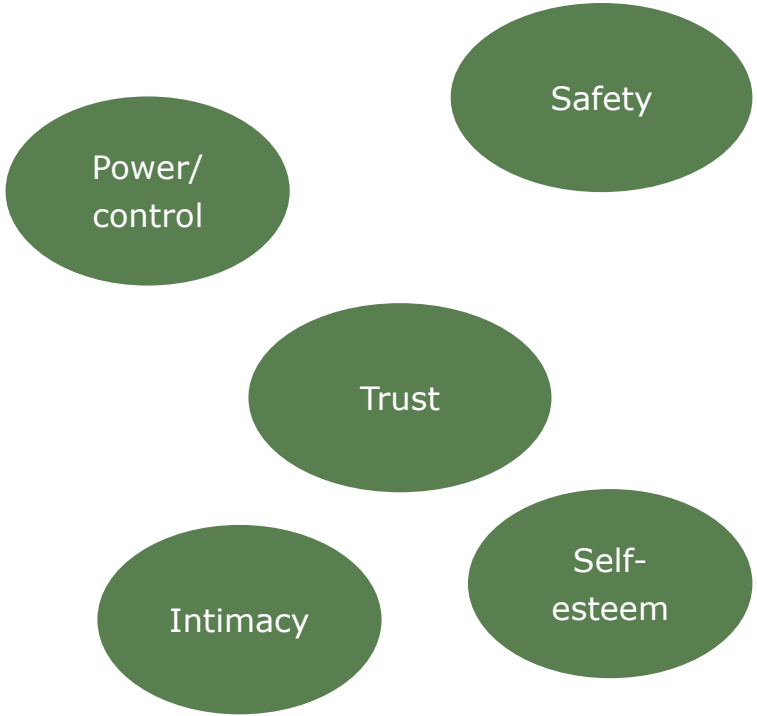
Relaxation training

- The client is instructed in deep breathing and Progressive Muscle Relaxation (PMR)
- The purpose is to decrease physical and mental unrest and arousal

Exposure and rescripting

Written exposure to the nightmare

1. Choosing the nightmare
2. The nightmare is written down in first-person and present-tens with as many sensory details as possible.
3. Themes are identified
4. The nightmare is read out loud



Rescripting the nightmare & relaxation

5. Significant elements are changed; e.g., the plot, adding people who can help, gaining new abilities

6. The client writes down the new version and reads it out loud

- Every night the rescripted nightmare is rehearsed for 15 minutes, followed by a relaxation exercise

Relapse prevention

Relapse prevention

- Identifying changes after the treatment,
- identifying teqniques that were particularly effective or ineffective,
- Discussing continued use of skills learned in the treatment,
- Anticipating high risk times and problemsolving.

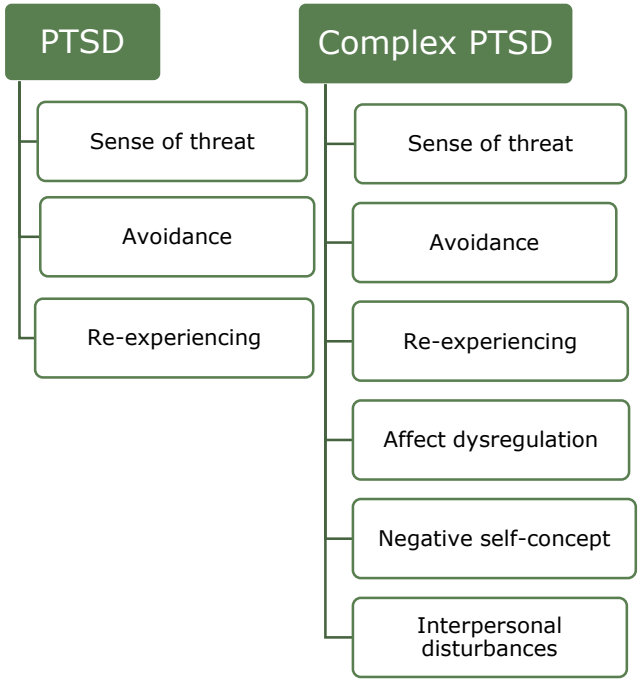
PTSD and sleep problems

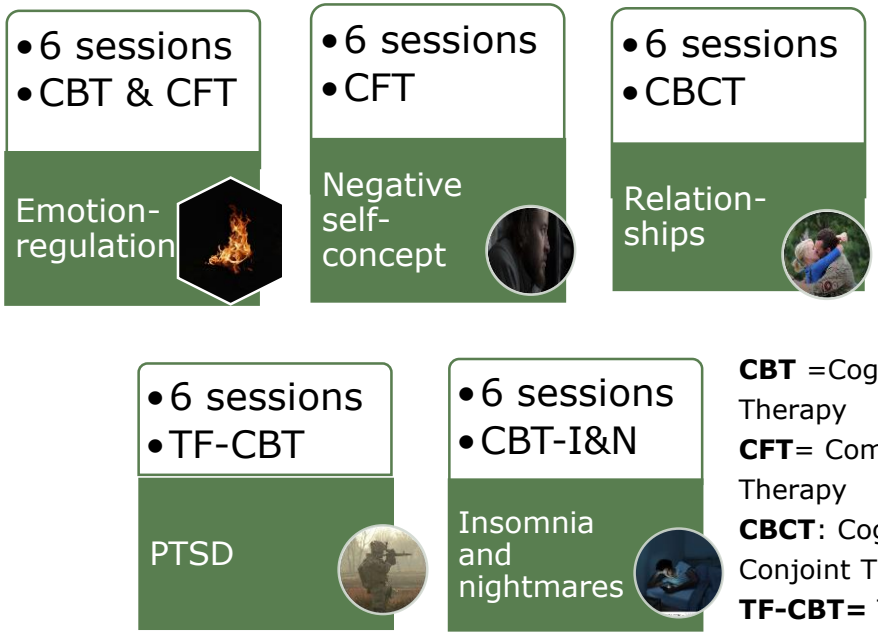
- Sleep problems in the immediate aftermath of trauma exposure increase the risk of PTSD
- Treating PTSD does not [typically or completely] affect sleep problems
- Treating sleep problems alleviates PTSD symptoms

➢ Necessary to assess and treat both disorders

(Belleville et al., 2011; Mellman et al., 2007; Nielsen et al., 2010; Pruiksma et al., 2016; Zayfert & DeViva, 2004)

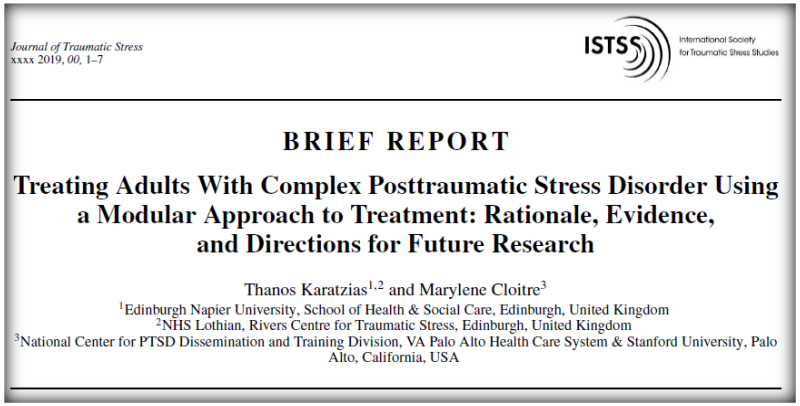
Modular Patient Centered CBT for Complex PTSD





CBT =Cognitive Beharioural Therapy
CFT= Compassion Focused Therapy
CBCT: Cognitive Behavioral Conjoint Therapy
TF-CBT= Trauma-focused CBT
CBT-I= CBT for Insomnia
ERRT= Exposure, Relaxation, and Rescripting Therapy

Modular Patient Centered CBT for CPTSD



Journal of Traumatic Stress
xxxx 2019, *00*, 1–7

ISTSS International Society for Traumatic Stress Studies

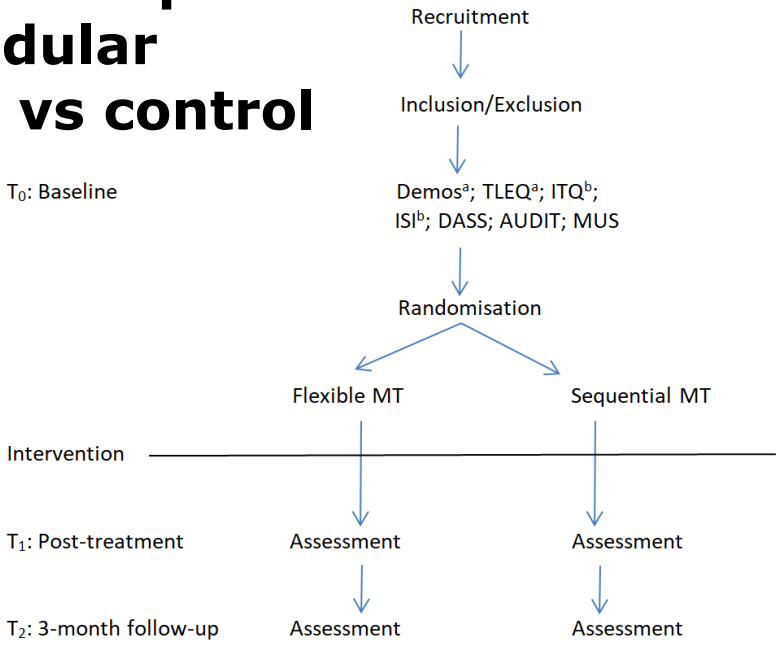
BRIEF REPORT

Treating Adults With Complex Posttraumatic Stress Disorder Using a Modular Approach to Treatment: Rationale, Evidence, and Directions for Future Research

Thanos Karatzias[1,2] and Marylene Cloitre[3]
[1]Edinburgh Napier University, School of Health & Social Care, Edinburgh, United Kingdom
[2]NHS Lothian, Rivers Centre for Traumatic Stress, Edinburgh, United Kingdom
[3]National Center for PTSD Dissemination and Training Division, VA Palo Alto Health Care System & Stanford University, Palo Alto, California, USA

- Modules are given in a flexible manner, tailored to the individuals' preferences and most pressing symptoms
- At the end of every treatment module, an assessment is conducted (ITQ+ISI) and the next therapeutic target is selected

Randomized controlled pilot trial of flexible modular therapy for CPTSD vs control



Demos[a:] demographics; TLEQ[a]: Traumatic Life Events Questionnaire; ITQ[b]: International Trauma Questionnaire; ISI: Insomnia Severity Index; DASS: Depression, Anxiety and Stress scale; AUDIT: Hazardous Alcohol Use; MUS: Medically Unexplained Symptoms. [a]= Baseline only assessment. [b]= Assessment after every 6th sessions.

Thank you

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