Cognitive Behaviour Therapy for Insomnia

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& Assistant Psychologists

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Cognitive Behaviour Therapy for Insomnia

Dr Lucy M. Moore (Principal Clinical Psychologist) & Assistant Psychologists

Presented by Conal Duffy (Assistant Psychologist)

Cluain Mhuire Secondary Adult Mental Health Service

Insomnia

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A self report of **difficulty initiating sleep**, difficulty **maintaining sleep**, **waking up too early** or sleep that is **chronically nonrestorative**

(Buysee, 2013)

Individuals with insomnia are reliably distinguished from good sleepers by self- reported sleep symptoms, such as sleep latency (time to fall asleep) or wakefulness after sleep onset of longer than 30 minutes.

(Lichstein, Durrence, Taylor, Bush & Riedel, 2003)

Background

- *Physical Health + Economic Burden*
- *Epidemiology*
- *Mental Health*
- *International Treatment Guidelines*
- *Application to Secondary Mental Health*

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The Current Study

- *Method*
- *Procedure*
- *Results*
- *Case Study*
- *Feedback*

Sleep…

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..'is the most beneficial thing we can do to reset our brain and bodily functions every day' (Walker, 2017, pg. 8)

…….AND THEREFORE SLEEP DEFICIENCY MATTERS!

Physical Health

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- Daylight Saving Time (Sandhu, Seth & Gurm, 2014)
  - *Lose an hour – 24 % Increase in Myocardial Infarction*
  - *Gain an hour – 21 % Decrease in Myocardial Infarction*

  A negative binomial regression model was used to adjust for trend and seasonal variation.

Responsible for 30 deaths a year in the US (Smith, 2016)

- *Economic Burden*
  - *Sleep disorders in the UK - £50billion (Hafner et al, 2017)*

Who suffer the most with insomnia?

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- Females
- Older age
- Lower socioeconomic status
- Concurrent medical and mental disorders

(Ohayon, 2002)

Mental Health

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- Reduced **cognitive performance** (Balkin et al, 2008)
- Poor **decision making** (Harrison & Horne, 2000)
- Less **flexible thinking** (Lim & Dinges, 2010)

- **PTSD** & **Depression** (Picchioni et al. 2010)
- Increased **suicidality** (thoughts/plans/behaviours) (Wojnar et al, 2009)
- Increased vulnerability to **relapse** in depression and bipolar disorder.

Treatment Guidelines

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- **UK - NICE** **(NICE, 2019)**
  - CBTi before Pharmacological Interventions
  - ‘Short course of a hypnotic drug only if daytime impairment is severe’

- **EU - European Sleep Research Society** **(Riemann, 2017)**
  - CBT-i is recommended as first-line treatment for chronic insomnia in adults of any age (strong recommendation, high-quality evidence)
  - Pharmacological intervention can be offered if CBTi is not sufficiently effective or not available

APPLICATION TO OUR SERVICE

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Lack of knowledge on sleep symptomatology among CMH clinicians in a **UK** study (O' Sullivan, 2015)

In Ireland

- Sleep clinics emerging in Hospitals - St James, Mater Private, Bon Secours
- No other secondary mental health settings offering CBTi

Current Study - Method

- **Population**
  - **17** individuals attending an urban community secondary m service
    - (**completers n=15**, m=7, f=8)
- **Pathway**
  - Referred by clinical teams
- **Initial Assessment**
  - Structured clinical interview **Time 1 Measures**
- **Therapy**
  - 5 weekly group CBT(i) sessions *(2 hours duration)*
  - Follow up session *(3 weeks after)* **Time 2 Measures**

Current Study - Method

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Inclusion criteria: interest in a psychological approach to sleep management

Exclusion criteria: regular use of hypnotics (excepting occasional PRN)

Psychological measures

- Pittsburgh Sleep Quality Index (PSQI)
- Beck Anxiety Inventory (BAI)
- Beck's Depression Inventory (BDI-II)
- WHOQoL – Bref (WHOQoL)

Current Study - Method

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Intervention

- Based on **R.E.S.T. program** (Lee, 2018)
- and **CBT-i** (Espie, Inglis, Tessier & Harvey, 2001)

Education & Behavioural Goals

R =	ROUTINE	Session 1
E =	ENVIRONMENT	Session 2
S =	STIMULATION CONTROL	Session 3
T =	THINKING	Session 4&5

(R)EST programme – ROUTINE

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- **90 minute sleep cycle**

- **Blue light (AM)** **Red light (PM)**

  Get up and outside early in the day

  Limit screen time in evening

- **Consistency through weekends**

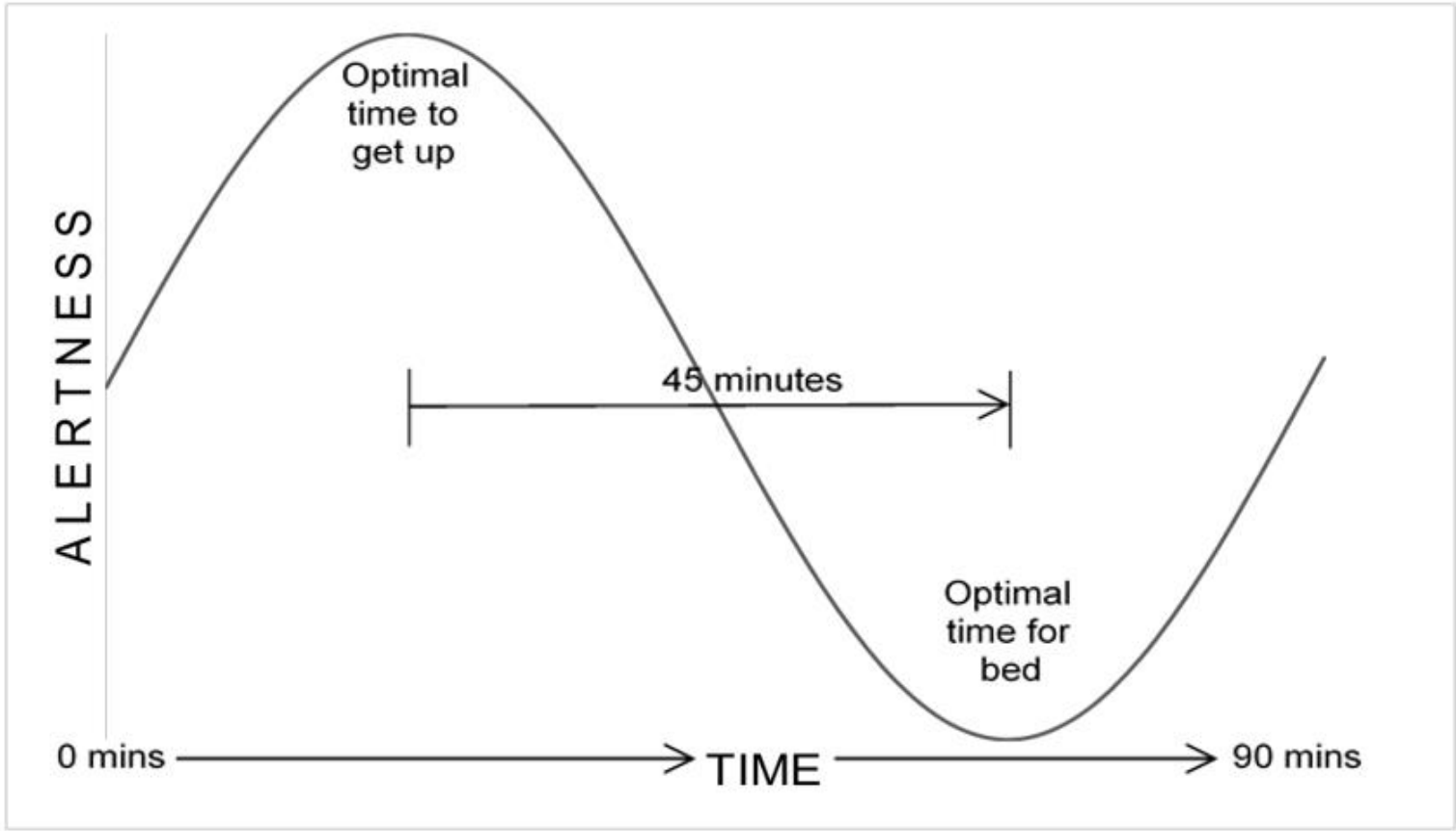
- **Chronotypes**

  Night owl

  Morning lark

  Ambivalent

- **Behavioural goals**



R(E)ST programme - Environment

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RE(S)T Programme – Stimulant Control

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- Alcohol
- Caffeine
- Smoking
- Eating (nutrition and timing)
- Exercise (timing),
- Fluid consumption (timing)
- Sleeping tablets

- Information about naps - building up Adenosine or sleep pressure

RES(T) programme #4 & 5 THINKING

Cognitive barriers to sleep

- Future worry thoughts - **constructive worry technique**
- Rumination - **cognitive substitution** + **relaxation/meditation** –
- Inaccurate **sleep beliefs**
- **Cost-benefit analysis** on repeat offending behaviours
- **Flashbacks and nightmares** – describe methods to deal with these

  & where to access help: (i) Exposure therapy, (ii) EMDR, (iii) CBT, (iv) Image restructuring

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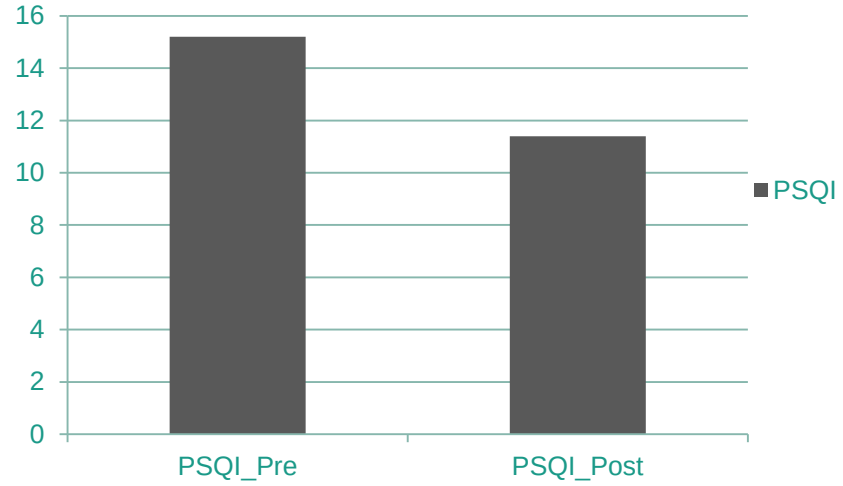
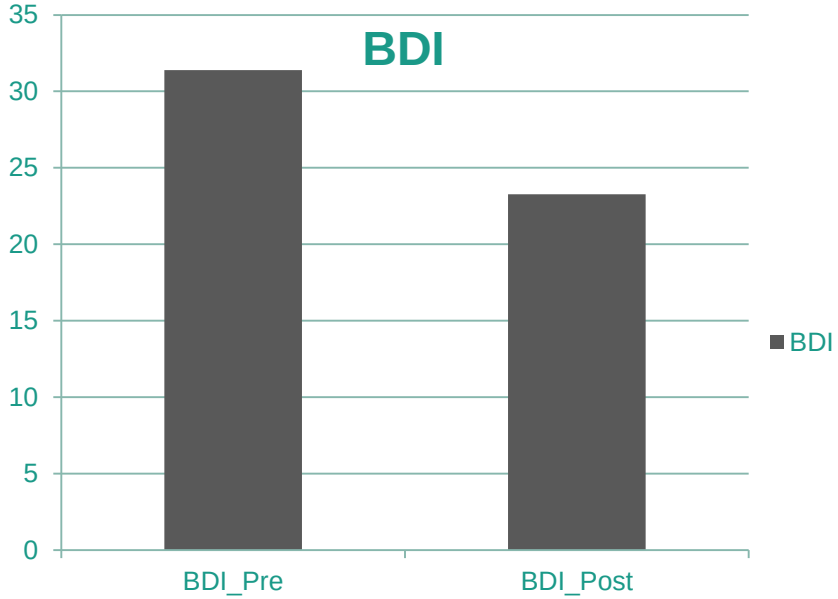
RESULTS

- 15 people completed *(11% attrition)*
- T-tests comparing T1 and T2 scores show significant results for:
- **Pittsburgh Sleep Quality Index, BDI-II & BAI**



15.2 11.4

p=0.0001 n=15



31.4 (Severe) 23.26 (Mod)

p=0.02 n=15

RESULTS

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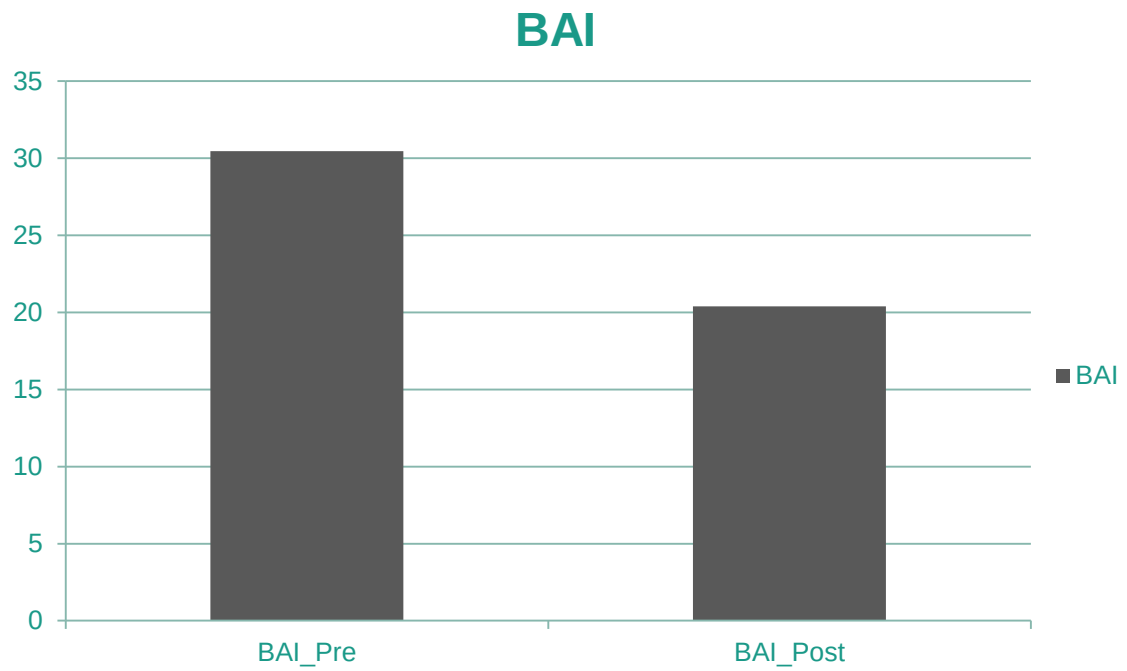

30 (severe)

p=0.02

20 (moderate)

n=15

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Case Study – what made a difference?

- Using 90 minute sleep cycle to set realistic sleep & wake times
- Realising he was going to bed too early & was learning to associate bed with being awake
- Changing time of day for exercise, food and hydration
- Started to exercise outdoors in the morning to get more “blue light”
- Stopped drinking 1.5 litres of regular Coca Cola between 8 and 11pm each night. Cut down to one can of Coke at lunch time. Less late night sugar and caffeine. Less need to get up in the night to use the toilet.
- Setting up a group chat forum so he did not need to be online at 1am to chat to his buddies in the USA
- Cognitive substitution or worry thoughts for FIFA transfer candidates!

Feedback from other participants

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- “Learning about the physical requirements necessary for sleep; hearing about other participants’ experiences & issues and how to solve (them). Shared experience. Didn’t feel isolated”
- “Becoming informed was the most helpful thing, learning what changes I could make, what to avoid. Finding out that routine over everything would give an improvement to my sleep”
- “Helping me plan a routine. Hearing other people discuss similar issues and working on ways to resolve my issues through advice/techniques”
- “I think it was run very well. Lucy Moore should make her own sleep meditation podcasts and sell them on itunes”

Strengths & Limitations

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Strengths

- Evidence based intervention
- First study carried out in an Irish secondary mental health service
- Low drop out rate (11.76%) compared to other studies (Romiszewski, 2018).

Limitations

- No control group
- Pilot study, small numbers

FUTURE RESEARCH & DIRECTIONS

- Continue pilot study. Increase numbers.
- Consider running an audit on sleep problems & sleep interventions in the service
- Consider auditing staff knowledge about sleep
- Encourage clinicians to ask more questions about sleep
- Encourage referrals to both streams of psychological therapy for insomnia
- Offer the REST programme to interested staff members! (I can't be the only one who struggles to sleep!)

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