

# SLEEP IS CANCELLED: OVERCOMING FEAR OF SLEEP IN A YEAR OF COVID

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## Introduction

Insomnia symptoms have an annual prevalence of 35 to 50% in the general adult population and are associated with medical and psychiatric comorbidity, psychosocial impairment and significant distress in the individual. Sleep disturbance is a common difficulty in the psychiatric patient population, both as a symptom of mental illness, a consequence of mental illness and as a contributing factor in the development of psychiatric disorders. Sleep problems have become particularly prevalent and distressing over the past 18 months, in the context of social restrictions and disruption to routine brought about by the COVID-19 pandemic. This is a pilot intervention that sought to develop and trial a novel minimal or no-contact, clinician-initiated, patient-guided 'sleep workbook' intervention, combining principles of sleep hygiene education and CBT-I behavioural strategies, and to evaluate its efficacy in a mixed methods study.

## Methods

Multidisciplinary team members collaborated to develop a sleep workbook following review of existing resources. The aim of the workbook was to improve understanding of sleep and sleep difficulties, to develop helpful sleep behaviours and to improve the length and quality of sleep. Service users of the community mental health service were invited to participate. Thirty service users agreed to participate. Fifteen participants completed both the intervention and the mixed methods survey, and four participated in the focus group. The survey collected quantitative and qualitative data eliciting information about demographics, experience of using the sleep workbook and benefits of using the sleep workbook. The focus group involved a semi-structured interview which was developed by the researchers and used to lead participants through discussion around their experience of the workbook. Descriptive and inferential statistics were performed on the collected quantitative data. Data was analysed using the mean and standard deviation for effect size. A two-tailed paired t-test was used to evaluate a statistical significance in the change in quantity and quality of sleep before and after the intervention. Utility of the different items in the workbook was measured using four point Likert scales. This data was analysed using descriptive statistics of frequencies. A thematic analysis was carried out of qualitative survey responses and focus group discourse. Ethical approval was received from Tallaght University Hospital's Research Ethics Committee.

## Results

There was a statistically and clinically significant improvement in both quantity and quality of sleep. Mean hours of sleep prior to the intervention was 4.4 hours (SD=2.2), compared to 6.1 hours (SD=2.2) afterwards ( $p = 0.003$ ). Quality of sleep improved from a mean of 2.5 (SD=2.1) to 6.1 (SD=2.3) following the sleep workbook intervention ( $p = <0.001$ ).

**Table 1. Participants ratings of the content of the workbook**

Table 1				
Workbook Content	Poor	Fair	Good	Very good
Layout	0	0	66.7%	33.3%
Length	0	13.3%	53.3%	33.3%
Clarity	0	6.7%	33.3%	60%
Relevance	0	0	33.3%	66.7%

**Table 2. Participants ratings of areas covered in the workbook**

Table 2				
Areas in the workbook	Not helpful	Partially helpful	Helpful	Very helpful
The importance of sleep	0%	13.3%	46.7%	40%
The stages of sleep	0%	13.3%	33.3%	53.3%
Common sleep problems	0%	13.3%	46.7%	40%
Creating positive sleep habits	0%	13.3%	40%	46.7%
Tips to get to sleep	0%	13.3%	46.7%	40%
Frequently asked questions	0%	0%	46.7%	53.3%
Sleep diary	20%	13.3%	26.7%	40%
Sleep restriction	20%	13.3%	46.7%	20%
Further reading/references	13.3%	26.7%	40%	20%

Four themes were developed using the qualitative data elicited from open survey questions and the focus group: 'under-recognition of sleep difficulties', 'ruminations', 'practical utility' and 'therapeutic autonomy'.

**Table 3: Qualitative data - Themes and Quotations**

Theme	(Quotations)	
Under-recognition of sleep difficulties	<ul style="list-style-type: none"> <li>'I didn't understand how important it was to get sleep'</li> <li>'At the start I really didn't think it was a problem I needed to share with the doctors...I was thinking I'm depressed, I'm this, I'm that...I never thought to say my sleep is gone'</li> </ul>	
Ruminations	<ul style="list-style-type: none"> <li>'My problem is over analysing...in bed my brain keeps going; thinking about the worst case scenario...what's going to happen the next day'</li> <li>'as soon as my head hits the pillow my head is going 90'</li> <li>'found it useful to put a label on racing thoughts'</li> </ul>	
Clinical Utility	Ease of use	<ul style="list-style-type: none"> <li>'good basics'</li> <li>'good to identify where the problem is'</li> <li>'not too scientific'</li> </ul>
	Consistency	<ul style="list-style-type: none"> <li>'consistency was the main issue'</li> <li>'need to re-read the workbook to make it useful'</li> <li>'I am glad to have the sleep workbook that I can look back on if my sleep deteriorated in the future'</li> </ul>
Therapeutic Autonomy	<ul style="list-style-type: none"> <li>'lots of different techniques... not everything applies'</li> <li>'a customisation thing...focus on your problem rather than the others'</li> <li>'sometimes one thing works and when I try it again it might not work... good to have a variety of things to try from the workbook'</li> </ul>	

## Conclusions

The results of evaluating the efficacy of our novel clinician-initiated, patient-guided sleep workbook intervention are both positive and promising that this is an effective resource in the management of patients with sleep difficulties. In particular this resource has been shown to be useful in clinical practice as it is a cost-neutral psychotherapeutic intervention that provides patients with therapeutic autonomy and improves both quantity and subjective quality of patient sleep. It is also deliverable as a minimal or no contact intervention, which could be of benefit in the coming years, with the possibility that repeated, social restrictions could be a feature of the Irish landscape for some time to come. Future research could beneficially focus on comparing the relative benefits of this intervention versus an intervention that is co-led by patient and clinician, in order to determine whether the benefit of clinician involvement would be of sufficient magnitude to devote additional resources to treating insomnia. COVID presents as a vicious cycle when it comes to sleep, increasing sleep related problems and reducing access to sleep interventions. This novel approach with a patient guided sleep workbook may just be the key to breaking that cycle.

References available on request



Tallaght University Hospital  
Ospidéal Ollscoile Thamhlachta  
An Academic Partner of Trinity College Dublin