ORIGINAL RESEARCH

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Effectiveness of sleep hygiene to reduce insomnia among persons with suffering with obsessive compulsive disorder-pilot analysis

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Abstract

Obsessive-compulsive disorder frequently have insomnia, and those with acute insomnia who also have mental comorbidities without therapy, they are more likely to develop persistent insomnia. We present a case of OCD with acute insomnia that was successfully treated with early non-pharmacological sleep psychiatry intervention. Sleep is necessary for brain function and the maintenance of cognitive and emotional processes. Insomnia and anxiety problems are common, and they're linked to a lot of damage and disability. In addition to being strongly comorbid with major depressive illness, there is evidence that sleeplessness and anxiety disorders frequently co-occur. The majority of insomnia psychological therapies include sleep hygiene. In terms of clinical practice, these instructions are a solid place to start. Obsessive-compulsive disorder is associated with sleep difficulties. Sleep difficulties are also common in people with obsessive-compulsive disorder, with up to 48% reporting them. Obsessive compulsive disorder research reveals a link between specific sleep habits and clinical factors such the severity of obsessive-compulsive symptoms, treatment resistance, and the age at which the disorder.

Keywords

Sleep, Insomnia, Obsession, Compulsion, Anxiety

Imprint

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1 Introduction

Sleep disorders, particularly insomnia, are frequently related with psychiatric diseases, such as neurotic disorders, including Obsessive compulsive disorder, which is a critical component in clinical therapy [1]. It is the inability to get the amount of sleep required for optimal functioning and well-being on a regular basis a daily activity cycle that is followed [2]. Going to the gym, school, and then work, for example, is a daily cycle, whereas sitting on the couch all day and driving to the store and back is not. It's doing something with your body that isn't too strenuous [3].

Insomnia can be short-term or long-term. Acute insomnia can persist for a few weeks or even a single night. Chronic insomnia is described as a person's inability to sleep at least three nights per week for a month or more. [4] Acute insomnia can be caused by a variety of factors, including stress, disease, physical or mental discomfort, and a disrupted sleep cycle [5]. Chronic stress, despair, and worry can all contribute to chronic sleeplessness. Insomnia can manifest itself in a variety of ways, including difficulty falling asleep, waking up too early in the morning, and waking up in the middle of the night and not being able to return to sleep [6]. Yoga and meditation are two stress-reduction strategies that might help you release energy. In addition, addressing insomnia early on can help prevent psychiatric illnesses like depression [7]. The longer you wait to try to cure insomnia, the more difficult it will become. Behavioral therapies for insomnia include relaxation training, stimulus control therapy, sleep restriction therapy, sleep hygiene, paradoxical intention therapy, cognitive restructuring, and other techniques [8]. These are explained shortly. In persons of all ages, behavioral therapies for insomnia have been demonstrated to be efficacious, useful, and potentially cost-effective, with consistent, long-term results [9].

2 Review of Literature

Claudis et al. (2015) sample of 87 individuals with OCD and depression, researchers compared mindfulness with progressive muscle relaxation provid-

ed as a bibliotherapeutic self-help technique. They found no evidence of Mindfulness's benefits in either group. The programme, however, was only 6 weeks long and not therapist-led. According to Claudis et al. (2015), 47% of the respondents said Mindfulness would be more beneficial if it included interaction with a therapist.

Hamilton Fairfax* (2018) Implications for Psychological Intervention in Mindfulness and Obsessive Compulsive Disorder This article summarizes the most recent research on the use of mindfulness as a treatment for Obsessive Compulsive Disorder, which has been a hot topic for more than a decade[3]. The application of specific models is the subject of research. Mindfulness and integrative treatments that incorporate Mindfulness are discussed, as well as how descriptive components of Mindfulness may aid in understanding its role in OCD.

3 Materials and Methods

The effectiveness of sleep hygiene in reducing insomnia among OCD people was evaluated using a quantitative evaluative research approach. The study employed an experimental research design [10]. The sample consisted of people who were addicted to alcohol and were between the ages of 18 and 60. The probability was calculated using a basic random sampling technique [11]. The instrument is divided into three sections: demographics, insomnia severity index scale, and interventions.

3.1. Objectives of the Study

3.1.1. To determine the pre and post assessment level of insomnia among persons suffering with obsessive compulsive disorder in study and control group

3.1.2. To compare pre and post assessment level insomnia among persons suffering with obsessive compulsive disorder in study and control group

3.1.3. To evaluate the effectiveness of sleep hygiene to reduce insomnia for persons suffering with obsessive compulsive disorder between study and control group.

3.1.4. To associate demographic variables with posttest level of scores in study group.

4 Results

Table 1 compares the pre-intervention level of insomnia score in the Experiment and control groups of people with obsessive compulsive disorder.

Table 1

Pretest Level of Insomnia score

Level of insomnia	Experiment		Control		Chi square test
	N	%	n	%	
No clinically significant insomnia	0	0.00%	0	0.00%	$\chi 2=0.37$ P=0.54 (NS)
Sub threshold insomnia	1	6.67%	2	13.33%	
Moderate severity	14	93.33%	13	86.67%	
Severe	0	0.00%	0	0.00%	
C Total	15 14	100.00%	15 14	100.00%	

Before the Multi-interventional method, 6.67 percent of those in the Experiment group had Sub-threshold insomnia, while 93.33 percent had Moderate severity insomnia. In the control group, 13.33 percent have a score of Sub threshold insomnia, whereas 86.67 percent have a score of Moderate severity [12]. There is no statistically significant difference. The difference between the Experiment and Control groups are significant. The experimental and control groups' levels of sleeplessness were compared using the chi-square test [13].

Table 2 In the Experiment and control groups of people with insomnia, the post-test level of insomnia score obsessive compulsive disorder before intervention is compared in Table 2. Before the Multi-interventional method, 46.67 percent of the Experiment group had Sub-threshold insomnia, whereas 53.33 percent had Moderate severity insomnia.

Table 2

Posttest Level of Insomnia Score

Level of insomnia	Experiment		Control		Chi square test
	N	%	n	%	
No clinically significant insomnia	0	0.00%	0	0.00%	$\chi 2=3.97$ P=0.05* (S)
Sub threshold insomnia	7	46.67%	2	13.33%	
Moderate severity	8	53.33%	13	86.67%	
Severe	0	0.00%	0	0.00%	
Total	15 14	100.00%	15 14	100.00%	

In the control group, 13.33 percent have a score of Sub threshold insomnia, whereas 86.67 percent have a score of Moderate severity. The difference between the Experiment and Control groups is statistically sig-

nificant. To compare the levels of insomnia in the Experiment and control groups, the chi-square test was utilized.

From Table 3 In the case of the Experiment group, their pretest score was 17.93 and their posttest score was 11.40, a difference of 6.53. This difference is big and statistically significant.

Table 3

Comparison of Pretest and Posttest Mean Insomnia Score

Group		N	Mean	SD	Mean Reduction Score	Paired t-test
Experiment	Pre-Test	15	17.93	1.28	6.53	t=11.55 p=0.001*** (S)
	Post-Test	15	11.40	1.24		
Control	Pre-Test	15	17.67	1.91	0.40	t=1.57 p=0.14 (NS)
	Post-Test	15	17.27	1.00		

In the case of the Control group, their pretest score was 17.67 and their posttest score was 17.27, a difference of 0.40. This distinction is minor and statistically insignificant.

A student paired t-test was used to determine the difference in statistical significance between the pre- and post-test.

Taking the pretest into account, the experimental group has a 17.93 score whereas the control group has a 17.67 score, resulting in a difference of 0.93. This difference is minor and statistically insignificant

From Table 4 the experimental group received a score of 11.40 on the posttest, whereas the control group had a score of 17.07, resulting in a difference of 14.57. This is a large and statistically significant difference. The statistically significant difference between the experiment and the control was calculated using a student independent t-test. The pretest and posttest Insomnia scores in the Experiment and Control groups are compared using a simple bar with two standard errors.

Table 4

Comparison of Mean Insomnia Score between Experiment and Control Group

Group		N	Mean	SD	Mean Difference Score	Student Independent t-test
	Experiment	15	17.93	1.28	0.26	t=0.45 p=0.66 (NS)
	Control	15	17.67	1.91		
	Experiment	15	11.40	1.24	5.87	t=10.73 p=0.001*** (S)
	Control	15	17.27	1.02		

The effectiveness of a multi interventional approach to insomnia is shown in Table 5.

The experiment group's insomnia score was lowered by 23.32 percent, whereas the control group's score was only reduced by 3.39 percent

The differences and generality of insomnia reduction score between pretest and posttest scores were computed using the mean difference with 95 percent confidence intervals and the proportion with 95 percent confidence intervals.

This Table 6 illustrates association between post test level of insomnia score and persons demographic variables such as, age, religion, type of family, marital status, occupation and sleep duration and sleep habits.

The relationship between the post-test level of insomnia score and demographic factors of people is shown in Table 6. Business people/others, as well as family support people, profit more than others. The Chi square test/Yates corrected chi square test was used to determine statistical significance.

5. Discussion

Psychological and behavioral therapies with insomnia related with medical and psychiatric illnesses, there are consistent abnormalities in various sleep metrics [14]. Sleep psychiatry (a physiologically and psychologically based psychiatric therapy method based on sleep science) has gotten a lot of press around the world [15]. We sought an early intervention in this patient to break the vicious cycle of acute sleeplessness.

6. Conclusion

With insomnia related with medical and psychiatric illnesses, there are consistent abnormalities in various sleep metrics. Sleep psychiatry (a physiologically and psychologically based psychiatric therapy method based on sleep science) has gotten a lot of press around the world. We sought an early intervention in this patient to break the vicious cycle of acute sleeplessness. We hope that this study highlights the many non-pharmacological treatments that mental health professionals can utilize to treat insomnia symptoms that influence their patients' cognition, mental health, and physical well-being. Importantly, re-associating the bed and bedroom with sleep-friendly behaviors, reducing sleep-incompati-

Table 5

Effectiveness of Multi interventional Approach and Generalization of Insomnia reduction Score

Group	Test	Maximum score	Mean score	Mean Difference of insomnia reduction score with 95% Confidence interval	Percentage Difference of insomnia reduction score with 95% Confidence interval
Experiment	Pretest	28	17.93	6.53(5.31 –7.75)	23.32%(18.96% –27.67%)
	Posttest	28	11.40		
Control	Pretest	28	17.67	0.40(-0.15 – 0.95)	1.42%(-0.54% –3.39%)
	Posttest	28	17.27		

Table 6

Association between Posttest Level of Insomnia Score and Persons Demographic Variables (Experiment Group)

Demographic Variables		Posttest level of Insomnia				n	Chi square test
		Sub threshold insomnia		Moderate severity			
		n	%	n	%		
Age	31-40 years	4	50.00%	4	50.00%	8	$\chi 2=0.07 p=0.78$(NS)
	41-50 years	3	42.86%	4	57.14%	7	
Religion	Hindu	3	20.00%	7	80.00%	10	$\chi 2=0.83 p=0.36$(NS)
	Muslim/Christian	4	100.00%	1	0.00%	5	
Type Of Family	Nuclear family	6	54.55%	5	45.45%	11	$\chi 2=1.02 p=0.31$(NS)
	Joint family	1	25.00%	3	75.00%	4	
Marital Status	Married	7	46.67%	8	53.33%	15	$\chi 2=0.00 p=1.00$(NS)
	Unmarried	0	0.00%	0	0.00%	0	
Occupation	Cooley /Drivers	2	20.00%	8	80.00%	10	**$\chi 2=5.65 p=0.01$**(S)**
	Businessman/others	5	100.00%	0	0.00%	5	
Support System	Family	7	63.64%	4	36.36%	11	**$\chi 2=4.77 p=0.05$*(S)**
	Relatives	0	0.00%	4	100.00%	4	
Duration Of Slep Per Day	2- 3 hours	1	16.67%	5	83.33%	6	$\chi 2=1.88 p=0.17$NS)
	3- 4 hours	6	66.67%	3	33.33%	9	
Sleep Habits	Listing to music/others	1	16.67%	5	83.33%	6	$\chi 2=2.88 p=0.17$(NS)
	Watching TV	6	66.67%	3	33.33%	9	

ble behaviors, establishing a regular sleep and waking routine, and changing maladaptive thought patterns are all necessary for healing insomnia symptoms. Each of the remedies suggested has been shown to be effective in improving daily function, sleepiness, and sleep quality over time. Patients can be treated in a variety of ways, with one of the most promising being web-based administration.

Statement on ethical issues

Research involving people and/or animals is in full compliance with current national and international ethical standards.

Conflict of interest

None declared.

Author contributions

The authors read the ICMJE criteria for authorship and approved the final manuscript.

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