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**INSOMNIA: A REVIEW** 

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#### **ABSTRACT**

Insomnia is a highly prevalent sleep disorder that frequently occurs in its acute form and occurs at a rate of approximately 10 per cent in its chronic form in many countries. There is a high prevalence of insomnia in a variety of medical and psychiatric conditions for which insomnia often serves as a risk factor. The aetiology and

pathophysiology of insomnia is such that several factors may predispose individuals for or precipitate and/or perpetuate the condition. Both sedative-hypnotic and cognitive behavioural interventions exist for insomnia and each type of intervention have substantial levels of empirical support for their efficacy.

**KEYWORDS**: Aetiology, assessment, co-morbidity, diagnosis, insomnia & treatment.

#### What is insomnia?

Insomnia is the perception or complaint of inadequate or poor-quality sleep because of one or more of the following:

- difficulty falling asleep
- waking up frequently during the night with difficulty returning to sleep
- > waking up too early in the morning
- > unrefreshing sleep

Insomnia is not defined by the number of hours of sleep a person gets or how long it takes to fall asleep. Individuals vary normally in their need for, and their satisfaction with, sleep. Insomnia may cause problems during the day, such as tiredness, a lack of energy, difficulty concentrating, and irritability. Insomnia can be classified as transient (short term),

intermittent (on and off), and chronic (constant). Insomnia lasting from a single night to a few weeks is referred to as transient. If episodes of transient insomnia occur from time to time, the insomnia is said to be intermittent. Insomnia is considered to be chronic if it occurs on most nights and lasts a month or more.

#### What causes it?

Certain conditions seem to make individuals more likely to experience insomnia.

Examples of these conditions include:

- ➤ advanced age (insomnia occurs more frequently in those over age 60)
- > female gender
- ➤ a history of depression

  Insomnia has many causes which can include:
- Some medicines and drugs, e.g. asthma or blood pressure medication, caffeine, alcohol or smoking
- ➤ Chronic pain and other uncomfortable illnesses
- > Stress at work or in your personal life
- > Depression
- A friend or loved one passing away
- Anxiety and worrying, including worrying about not getting enough sleep
- ➤ Another sleep problem (see Ten Common Sleep Disorders)
- > environmental noise
- > extreme temperatures
- > change in the surrounding environment
- > sleep/wake schedule problems such as those due to jet lag
- > medication side effects

Sometimes there is no clear cause for insomnia, in which case it is called primary insomnia.

Chronic insomnia is more complex and often results from a combination of factors, including underlying physical or mental disorders. One of the most common causes of chronic insomnia is depression. Other underlying causes include arthritis, kidney disease, heart failure, asthma, sleep apnea, narcolepsy, restless legs syndrome, Parkinson's disease, and hyperthyroidism. However, chronic insomnia may also be due to behavioral factors, including the misuse of caffeine, alcohol, or other substances; disrupted sleep/wake cycles as may occur with shift work or other nighttime activity schedules; and chronic stress.

In addition, the following behaviors have been shown to perpetuate insomnia in some people:

- > expecting to have difficulty sleeping and worrying about it
- ingesting excessive amounts of caffeine
- > drinking alcohol before bedtime
- > smoking cigarettes before bedtime
- > excessive napping in the afternoon or evening
- irregular or continually disrupted sleep/wake schedules

These behaviors may prolong existing insomnia, and they can also be responsible for causing the sleeping problem in the first place. Stopping these behaviors may eliminate the insomnia altogether.

#### How common is insomnia?

Most people have experience insomnia symptoms at some time of their lives. At any given time around 10% of people have at least mild insomnia.

#### Who is at risk?

Older people with poor health have a higher risk. Also women have twice the rates compared to men. This may be related to higher rates of anxiety and depression, which can be associated with insomnia. Shift workers have a higher risk too.

## How does it affect people?

You might feel that it's harder to focus and remember things. But most people think their memory is worse than it really is. The same goes for concentration. Your risk of a traffic accident or other injury may be higher (see Drowsy Driving). You may be more emotional and a lack of sleep can cause depressed mood. Some people feel sleepy during the day, but this can be caused by many things (see Excessive Daytime Sleepiness).

#### How is it diagnosed?

Patients with insomnia are evaluated with the help of a medical history and a sleep history. The sleep history may be obtained from a sleep diary filled out by the patient or by an interview with the patient's bed partner concerning the quantity and quality of the patient's sleep. Specialized sleep studies may be recommended, but only if there is suspicion that the patient may have a primary sleep disorder such as sleep apnea or narcolepsy.

#### How is it treated?

This depends on what is causing the insomnia.

- ➤ If poor sleep habits are the cause then these need to be improved.
- ➤ If your sleep habits seem to be okay but you are still having problems then you may need more specialist help. Cognitive-behavioural therapy for insomnia has been shown to be more effective in the medium and long term than sleeping tablets.
- > Stress, depression and anxiety are best treated by specialists, but taking steps to improve your sleep can also help with these.
- > Sometimes sleep specialists will suggest a sleep study to be sure they understand what may be causing the poor sleep and also check for sleep apnoea.

## What about sleeping pills?

If you only take them occasionally, sleeping pills can get you a good night's sleep. However if you take them often, you will get used to them and they will stop working as effctively. Also they can be habit-forming and it can then become difficult to stop taking them.

## Where and when should you seek help?

If you are having ongoing trouble sleeping, persistent problems with mood, restlessness in bed, severe snoring or wakening unrefreshed, make sure that you go and see your doctor. Your GP can refer you to a sleep specialist or psychologist.

Insomnia treatment services in Australia are listed here:

http://www.sleep.org.au/information/sleep-servicesdirectory

## Is there on-line help available?

Yes, on-line, low cost, sleep improvement programs are available, such as:

http://www.sleeptherapy.com.au/index.php?page=1

(Note: The Sleep Health Foundation does not endorse any program or product and this link is provided for information only.)

#### Where can i find out more?

http://www.counselling.cam.ac.uk/selfhelp/leaflets/ insomnia

Treatment for chronic insomnia consists of:

- First, diagnosing and treating underlying medical or psychological problems.
- ➤ Identifying behaviors that may worsen insomnia and stopping (or reducing) them.

- ➤ Possibly using sleeping pills, although the long-term use of sleeping pills for chronic insomnia is controversial. A patient taking any sleeping pill should be under the supervision of a physician to closely evaluate effectiveness and minimize side effects. In general, these drugs are prescribed at the lowest dose and for the shortest duration needed to relieve the sleep-related symptoms. For some of these medicines, the dose must be gradually lowered as the medicine is discontinued because, if stopped abruptly, it can cause insomnia to occur again for a night or two.
- > Trying behavioral techniques to improve sleep, such as relaxation therapy, sleep restriction therapy, and reconditioning.

## **Relaxation Therapy**

There are specific and effective techniques that can reduce or eliminate anxiety and body tension. As a result, the person's mind is able to stop "racing," the muscles can relax, and restful sleep can occur. It usually takes much practice to learn these techniques and to achieve effective relaxation.

## **Sleep Restriction**

Some people suffering from insomnia spend too much time in bed unsuccessfully trying to sleep. They may benefit from a sleep restriction program that at first allows only a few hours of sleep during the night. Gradually the time is increased until a more normal night's sleep is achieved.

## Reconditioning

Another treatment that may help some people with insomnia is to recondition them to associate the bed and bedtime with sleep. For most people, this means not using their beds for any activities other than sleep and sex. As part of the reconditioning process, the person is usually advised to go to bed only when sleepy. If unable to fall asleep, the person is told to get up, stay up until sleepy, and then return to bed. Throughout this process, the person should avoid naps and wake up and go to bed at the same time each day. Eventually the person's body will be conditioned to associate the bed and bedtime with sleep.

## Where to get more information

Talk to your doctor if you are having trouble getting good, refreshing sleep each night. Together you can identify possible reasons for your sleeping difficulty and then try appropriate measures to correct the problem. For additional information on sleep and sleep

disorders, contact the following offices of the National Heart, Lung, and Blood Institute of the National Institutes of Health.

## **♣** National Center on Sleep Disorders Research (NCSDR)

The NCSDR, located within the National Heart, Lung, and Blood Institute, supports research, scientist training, dissemination of health information, and other activities on sleep disorders and related concerns. The NCSDR also coordinates sleep research activities with other Federal agencies and with public and nonprofit organizations.

## National Heart, Lung, and Blood Institute Information Center

The Information Center acquires, analyzes, promotes, maintains, and disseminates programmatic and educational information related to sleep disorders and sleep-disordered breathing. Write for a list of available publications or to order additional copies of this fact sheet.

Table: Marketed product for insomnia.

S No.	Active constitutes	Brand name	Company name	Product image
1.	5-hydroxy tryptophan	5-HTP-100mg	Jarrow formulas	Jarrow FORMULAS'  5-HTP  Incountryptophan 100 mg  and the second Synthesis'
2.	Valrrian extract	VALERIAN EXTRACT- 650-mg	Plantary herbals	PLANETARY VALERIAN EXTRACT MAINTON FOR MAINTAIN MO MQ - 1484211
3.	seditol	Seditol-365mg	Jarrow formulas	SEDITOL Assists Relaxation and Rest
4.	Sensoril/relora	Cortisol control	Vitamin research product since-1979	Cortisol Control

5.	Amino	acid	Theanine-200	Jarrow formulas	
	drevatives				Jorrow FORMULAS'
					Theaning
					THE CATHING
					Mintransmitter 200
					Minime"
					and Learning Ability

# **REFERENCES**

- 1. www.apsfa.org/docs/insomnia.pdf
- 2. sleephealthfoundation.org.au/pdfs/Insomnia.pdf
- 3. https://css-scs.ca/files/resources/brochures/Insomnia\_Adult\_Child.pdf
- 4. https://www.sleepoz.org.au/files/fact.../AT04%20-%20Insomnia.pdf
- 5. www.springer.com/cda/content/.../cda.../9781907673726-c2.pdf