Purpose

Introduction

Important

VI. Study Unit: The psychotherapy of insomnia

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Becoming acquainted with the non-medicinal methods necessary for the efficient treatment of insomnia. Subsequent to the processing you will be familiar with the essence of these procedures, and with the possibilities of their application.

Introduction

In this chapter you will become acquainted with those more simple non-medicinal treatment methods, with which insomnia (sleeping deficiency) can be treated quickly and efficiently even in the general medical practice.

Target group: General practitioners, psychologists, psychology undergraduates and medical students

Key words: insomnia, relapse prevention, sleeping restriction, psychotherapeutic model of insomnia

Suggested study methods:

Read the texts together with the dialogues linked to them.
Following this, answer the summarizing questions.
If you were not able to answer all the questions, survey the problematic parts in the texts again.
Finally do the self-check tests.

We recommend that you survey the study material in two separate parts:

a) VI.1 – VI.3 in one go, then
b) VI.4 in one go.

Total **amount of study-time necessary:** 6 hours

Content of Chapter:

	VI./4.2.: Sleeping-diary VI./4.3.: Sleep hygiene and life-style counselling, stimulus control VI./4.4.: Sleep restriction VI./4.5.: Stress treatment VI./4.6.: "Second-line" interventions VI./4.6.1 Relaxation methods VI./4.6.2.: Cognitive restructuring VI./4.7.: Relapse prevention

Important	## *VI./1: The symptoms of insomnia* The main symptoms of insomnia are the difficulty in falling asleep, difficulty in maintaining sleep, early awakenings, and subjectively non-restorative sleep. A key criterion of insomnia is the presence of at least one additional daytime symptom.
Summary	## VI./1.1.: The daytime symptoms of insomnia - Daytime sleepiness. - Fatigue or indisposition. - Impairment of attention, concentration or of memory. - Impairment of performance in the social sphere, at work or at school. - Mood disturbance or irritability. - Decrease of vigour, motivation or the initiative. - Proneness of errors and/or accidents. - Tension, headache or gastrointestinal symptoms associated sleep loss - Concerns and worries associated with sleeping.
	## VI./1.2.: Additional symptoms and disorders: **Worries** about sleep disorder and its consequences. **Increased frequency of behaviours aiming at the promotion of sleep** in the evening (e.g. use of noise filters, consumption of alcohol as soporific, going to bed too early etc.). **Seeking opportunities to sleep/nap/relax** during the day. **Excessive use of stimulants** (e.g. coffee, tea) making up for sleep loss.
Important	## VI./1.3.: Fundamental considerations Insomnia ranks among the most frequent medical complaints**, its frequency being ca. 20-30% on an average,** but being higher amongst the elderly. One of the most important indicators of physical and mental health is undisturbed and healthy sleep. **Insomnia**, like many frequent medical complaints, **is of multi-causal origin**: mental and somatic illnesses (e.g. depression, hypertension) as well as lifestyle factors may contribute. The appropriate treatment of comorbid conditions is required for the management of insomnia as well. Independently with the precipitating factors, during the course of insomnia sleep connected worries and anxiety develop connected to sleep. The anxiety **manifests** mainly **in the situation of falling asleep/returning to sleep**, and **with the raising level of wakefulness, inhibits those**. These worries could perpetuate the sleep

complaints even after the original precipitating cause has been terminated.
Due to anxiety, insomnia often needs to be treated with psychological counselling as well.
Lifestyle factors in the background of sleep problems: **disorganized daily rhythm; stress; certain sleep impeding habits** (arousal increasing evening activities or psychoactive drugs); the **lack of physical exercise**.
Appropriate sleep hygiene (sleep-friendly lifestyle) is essential for the longer term management of insomnia."

VI./2.: Basic principles of insomniatherapy

1. Treatment of comorbid conditions – if they exist
2. Education: lifestyle and sleep hygiene counselling – it is necessary in all cases
3. Psychotherapy – if significant sleep-related worries, anxiety and inappropriate sleep behaviour occur Sleep-focused pharmacotherapy –a temporary, short-term (maximum 4-8 weeks) treatment. It can only be applied in monotherapy with short-term, situative sleeping disorders (e.g. when travelling or in the presence of burdening life-situations lasting only for a few days, e.g. before a surgical intervention, in crisis, before challenges etc.).

VI./.3. Psychotherapy: Cognitive behaviour therapy of insomnia

The psychotherapeutic model of insomnia has been summarized in Figure 1.

[P_1_abra_VI_1_fejezet.JPG]
Legend: *Figure 1.*

Whatever has been the precipitating cause of insomnia, sooner or later three phenomena can be observed in almost all cases and may perpetuate the complaints. These are: **1.) hyperarousal, 2.) Inadequate coping attempts addressing sleep problems and daytime consequences, 3.) Worries and anxiety connected to sleep.**

VI./3.1.: Hyperarousal

(A paradoxical increase in the level of wakefulness occurring in the situation of falling asleep.)

Causes:

- **Lifestyle effects**. Evening fasting, excessive consumption of stimulants (e.g. coffee, cola), physical exercises or any rousing activities (e.g. work, watching exciting movies, computer games) (too close to bedtime, **Thoughts independ**ent of sleep but inducing tension (e.g. ruminating on the day's worries in the evening)
- Concerns and worries associated with sleep, or to the circumstances of falling asleep or the effect of sleep loss on the following day's performance ("again I cannot fall asleep…", "without sleep I won't be able to work tomorrow …" etc.)
- Unmanaged daytime tress (e.g. a whole day of hard work)
- **Environmental stimuli** that subjectively **irritate** the person ("the neighbours are noisy again")

	VI./3.2.: Behaviours aiming at sleep promotion or the reduction of daytime symptoms, but paradoxically reducing the chances of sleep A. <u>Behaviours which are aimed to facilitate falling asleep, but which paradoxically impede it</u>: - Counting sheep - Evening activities done in bed, "If the urge to fall asleep comes, it should find me in bed" - Striving to control environmental stimuli (e.g. ear-plugs, shading systems) B. <u>Daytime behaviours, which are aimed to manage sleep loss, but which reduce the chances of sleep on the following night</u> - Daytime naps that break circadian rhythm - Increasing time spent in bed ("even if I don't sleep, at least I'm having a rest") - Avoidance of daytime activities (justified by sleep loss) that promote sleep (e.g. socializing, party, physical activities, etc.) - Attempting to force sleep: going to bed too early that breaks circadian rhythm ("I'm tired, at 9 I should be in bed") - Over-consumptions of stimulants (coffee, cola, tea, energy drinks) ***VI./3.3.: Concerns and worries about sleep disorder and its consequences*** - Getting closer to bedtime the patient's tension and arousal gradually increase instead of relaxation - Failed attempts at falling asleep lead to frustration and arousal (he keeps checking the time – "it's already half past ten, and I'm still not asleep…") - Minor night awakenings (which is a normal nocturnal occurrence) facilitate automatic arousal-increasing thoughts, typical of insomnia, e.g. "it's half past two, and I'm already awake" (whereas the way of thinking characteristic of non-insomniacs is: "wow, it's only half past two, I still have time to sleep…") - The frequency of sleep-related concerns and ruminations are increasing throughout the day.

Task:

List the steps of the psychotherapy of insomnia.

VI./4.: The structure of therapy

1. Sleep education

2. Shift focus from Subjective complaints to objective indicators: keeping a sleeping-diary
3. Sleep hygiene and life-style counselling, stimulus control
4. Sleep restriction
5. Teaching stress treatment techniques
6. Introducing "Second-line" interventions (these need further qualification, but not always necessary)
   – Teaching relaxation
   – Cognitive restructuring
7. Relapse prevention

VI./4.1.: Sleeping education – exposition of facts and misconceptions about sleeping

Task:

List the most important topics about sleep education.

The point is to **clear up misconceptions** associated with sleeping and sleeping disorders and to **replace these with valid information**, as well as to render the patient an "expert" on his own problem. Topics:

- The **need for sleep is subjective, there is no "normal amount" of it**. It is 7-7.5 hours on an average (not 8!), but there can be huge deviations from this, and this is not pathological in itself.
- **The measurement of the quality of sleep is our daily activity and freshness**, and not the quantity of our sleep and how deep we consider it to be.
- **Nocturnal awakenings are natural**, they are a frequent occurrence for most people, often they do become conscious.
- Sleeping is a part of the daily biorhythm, thus **the best way to regulate it is to have a lifestyle as orderly as possible**.
- **Sleeping has its set time in the biorhythm**. If "we are not yet at the falling-asleep phase," it is not sure, we can fall asleep, if, however, we succeed, that may impair the quality of our sleep. That is why **it is not worth napping during daytime** (the only exception is the after-lunch siesta, because it is part of the biorhythm) and going to bed earlier than our biorhythm would dictate.
- When we can fall asleep the easiest, and when we can perform best during the day may also be influenced by our so-called **"chronotype."** Some people are more active in the morning (larks), some in the evening (owls). This is worth considering when planning our lifestyles.
- **Doing regular physical exercises** is very important in the regulation of sleep and biorhythm.
- Efforts made to overcome sleep loss (the use of psychostimulants, daytime rest or sleep) **may very easily impair the next night's sleep**, thus preserving the sleeping disorder.

Task:

Socratic questioning: casting light upon the logical fallacies of the thinking of the patient through questions: *Supplement 1: An example of the Socratic inquiry* [P_1_melléklet_VI_4_fejezet.doc]

VI./4.2.: Sleep-log

Important

The turning of the subjective experience of sleep (and the connected behaviour) **into objective data** is a fundamental part of the therapy, because it renders the symptoms, the effects of the individual behaviours and the change measurable. The patient is asked to keep the sleeping-diary throughout the therapy, and the therapeutic changes are measured with the help of this diary: Supplement 2.: *The most frequent items used in the sleeping-diary* [P_2_melleklet_VI_4_fejezet.JPG]

VI./4.3.: Sleep hygiene and life-style counselling, stimulus control

Its aims:

- Establishment of a "sleep-friendly" lifestyle
- Reducing behaviours, which are directed to the treatment of the symptoms of sleep loss, but which nevertheless impair the following night's sleep
- Resetting/stabilizing the circadian rhythm
- Creating an optimal sleeping environment

Link

Read the supplements.

The most important areas of sleep hygiene counselling can be found in supplement 3 [P_3_melléklet_VI_4_fejezet.doc]. Here the method is the method of Socratic questioning, which can be learnt from supplement 4 [P_4_melléklet_VI_4_fejezet.doc]. *Important information to be delivered:* counselling starts to take effect only after a 3-4 week regular, programme-like application. Rules should be introduced gradually. The behaviours connected to sleep can be tracked with the help of the sleeplog, and the patient is asked to appraise which behaviours inhibit and which ones facilitate sleep. In the course of the process sleep-inhibiting behaviours reduce, and those facilitating sleep are promoted – this process we call stimulus control (the essence of stimulus control interventions is the deconditioning of sleep-impairing stimuli and behaviours and the conditioning of sleep-facilitating stimuli).

VI./4.4.: Sleep restriction

Important

Those methods by which **sleep time is artificially (and temporarily) shortened** and at the same time timed to the circadian rhythm of the patient, is called sleep restriction.

Aims:

- Increasing the homeostatic sleep drive
- Stabilizing the circadian rhythm with proper timing
- Patients experience that in spite of the increased sleep loss, daytime functions deteriorate much less than expected.

Question:
How would you build up a sleep restriction intervention?

Its methods:

- The degree of sleep restriction varies individually.
- Sleep time cannot be reduced to less than 4 and a half hours.
- They should accommodate to the circadian rhythm of the patient
- Putting off bedtime with unchanged (usually alarm-clock induced) awakening
- If there is an 80% improvement in the quality of sleep, bedtime may be

gradually brought forward by 15-30 minute intervals each day, until daytime symptoms disappear.
- A less frequently employed technique is to wake the patient earlieror the sleep-compression (sleeping time is gradually reduced). These latter ones are of less spectacular effect.

Warning: Sleeping restriction temporarily increases the daytime symptoms of sleep loss, and for this reason it is worth starting it at the weekend, and avoiding, during its course, all activities involving accident risk.

VI./4.5.: Stress management

Link

Anxiety; psychotherapeutic techniques; constructive anxiety

Aim: to work off everyday stress.

Tools:

- Developing a regular exercise programme
- Sharing problems with relatives
- The method of constructive anxiety: In a fixed point of time of the day, the patient is asked to include, as a regular daytime activity, a 10-20 minute period, when he thinks his problems over, and writes down what he may do in order to solve them the next day, in a week, in a month, etc. If he has anxious thoughts in a different period of the day, but especially in the evening, before falling asleep, he should write them down on a piece of paper, and the next day he should deal with them in the same period of time.
- Other stress reducing methods (relaxation and cognitive restructuring)

Link

Psychotherapeutic techniques; relaxation

VI./4.6.: "Second-line" interventions

Those methods in the psychotherapy of insomnia, which are necessary only if primary interventions are not successful

VI./4.6.1.: Relaxation methods

Link

Psychotherapeutic techniques; cognitive restructuring

- They decrease the level of arousal.
- They help the patient in distracting his attention from external, disturbing factors
- They help the patient in experiencing physical relaxation

VI./4.6.2.: Cognitive restructuring

Aim: to control anxiety connected to sleep.

Methods:

- **We collect** anxious thoughts connected to sleep.
- By the so-called **standard questions** we submit them to validity check (Figure 2).

[P_2_abra_VI_4_fejezet.jpg
Legend: *Figure 2: Standard questions for questioning worrying*

Important	- **Behavioural experiments**: 1. Plan the next day as if you had no sleep disorder and had no sleep loss, so abandon all behaviours that attempt to combat the symptoms of sleep loss (e.g. the rests, more coffee). 2. Abandon all evening activities which are intended to promote sleep (ear-plugging, going to bed early, etc.). The sleep log will probably show that the quality of sleep has improved.. **VI./4.7.: Relapse prevention** Most important is to discuss the four fundamental rules with the patient. We should talk them over, write them down, put the paper into an envelope, seal it, and then tell the patient that he should only open it when the symptoms of the sleep disorder appear – even if only in a mild form. 1) **Everyone has bad nights occasionally,** this is only natural, there's no need to to worry.. 2) In such cases **we should never make up for the symptoms of sleep loss the following day,** that is: 3) we should always bear in mind that **if we don't do anything, the next night will be much better;** 4) we should never remain in bed awake **for more than 10-15 minutes.**

Figure 3. The five column method

Situation	Feeling 0-10	Anxious thought	Alternative explanations	Revaluation of feeling

The most frequent items used in sleep log

Date 2014 ../..:	Time of going to bed and of getting up the next day	Total sleep time	Total time spent in bed (including periods spent awake in bed):	What did you do when trying to fall asleep? if you have taken some medicine or some curative substance, please, record it here.	What happened during the day that may make falling asleep difficult?	Number of night awakenings (estimated)	Sleep loss effects, daytime energy level 5: fully relaxed 1: so sleepy that you are not able to work	Hav mana loss
.../../Monday	…h…m …h…m							
../../Tuesday	…h…m …h…m							
../../Wednesday	…h…m …h…m							
../../Thursday	…h…m …h…m							
../../Friday	…h…m …h…m							
../../Saturday	…h…m …h…m							
../../Sunday	…h…m …h…m							

Figure 2. Diary outline for facilitating symptom monitoring

	1. (symptom) ……. Its acuteness 1-10	2. (symptom) ……. Its acuteness 1-10	3. (symptom) ……. Its acuteness 1-10	Time spent on being occupied with symptoms (estimated) in minutes	What have I done today for overcoming my complaints?	What other activities have I had today (listing)?	Stress situations today (listing)	My stress level today 1-10	

Sleep hygiene: helpful hints for the promotion of quality sleep

Lifestyle advice:

1. **Develop regular lifestyle**! Sleep problems may be the most obvious sign of a disturbed biorhythm. The entrainment of regular daily rhythm may improve our sleep a lot. We should, therefore, try to live as regularly as possible: that is we should eat and go to work at definite hours of the day (with certain jobs this may seem difficult at first, but it should be strived for anyway), and we should install as much regularity also into our leisure time as possible. And what is most important: every day (at weekends and on vacations as well) we should make an effort to **get up and go to bed at the same times of day!**
2. If cannot sleep at night, **avoid lying down and dozing** (except in the cases of certain special sleep disorders, and even in those cases only upon expressed medical instructions). If you'd like to take a siesta, have a rest or read, you shouldn't do it in bed!
3. **From the afternoon on (after 14:00) avoid consuming food and drink of arousing effect** (coffee, tea, cola, energy drinks, excessive amounts of cocoa and chocolate). If you insist on your tea, drink fruit teas. **Avoid eating too much before bedtime. Avoid smoking close to bedtime (the best, of course, is to quit completely**).
4. Although some people are easily sent to sleep by alcohol, its metabolit has a wakening effect, and for this reason (also) its excessive consumption in the evening should be avoided.
5. **Regular exercises is a great help in overcoming sleep disorders.** Note: Do not do sports too close to bedtime.

Sleeping habits and the sleeping environment:

1. **Beds only for sleep and love-making**. Avoid resting, reading, using electronic devices, studying or watching television in bed; for these purposes use a comfortable armchair or a sofa but not night bed!
2. **Devise a sleeping environment which is the most convenient for us. Develop bedtime habits. Switch off mentally before bedtime. The** time before falling asleep (a minimum of 20-30 minutes) should **always** be about relaxation. **Set up daily worry time, if everyday worries are whirling around in your mind at bedtime, insert a short afternoon period into your day and** think over your worri**es, a**nd find out, what you can do in order to **solve** them**.**
3. Learning relaxation (breath control, progressive relaxation, yoga methods, etc.) may be exceedingly useful in the case of sleeping difficulties.
4. Set the alarm clock, but place it out of sight and reach, so that you don't worry ab**out what time** it is when waking up at night.

Hints for falling asleep:

1. **Go to bed only if you are sleepy (not tired!).** Don’t go to bed only because you think that you ought to sleep.
2. **Don’t try to force falling asleep.**
3. **If you cannot fall asleep within a short period of time (within approximately 20 minutes), get up, do some activities and go back to bed only if you feel sleepy again (not tired!).**

(Source: Purebl György-Székely Eszter: *Életmódosító Útravaló – önsegítő kézikönyv a testi-lelki egészség fenntartásához.* DIMENZIÓ, 2007.)