Self-help therapy for insomnia: a meta-analysis

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E-mental health summit 15 oktober 2009



Sleep disorders

- Hypersomnia
 - Sleeping too much
- Para-insomnia
 - E.g. nightmares, sleep-walking
- Insomnia
 - Secondary
 - Primary



Insomnia

Symptoms

- Time awake and asleep at night
- Number of nights a week
- Duration of the sleep problem
- Day-time consequences

DSM

- Awake for at least 30 minutes
- For at least 3 nights a week
- For one month (3 in next DSM)
- Disability in daily life



Prevalence and consequences

- 30% of population suffer sleep initiation or maintenance problem
- 10% has daytime consequences
 - Fatigue
 - Mood swings
 - Difficulties in concentration
- Long-term consequences
 - Poor quality of life
 - Reduced work performance
 - (traffic) accidents



High co-morbidity

- Medical diseases
- Mood disorders
 - 90% of all with MDD suffer from insomnia
 - people with insomnia 10 times more likely to develop MDD
- Anxiety disorders
 - People with insomnia 15 times more likely to develop an anxiety disorder
- Substance abuse



Co-morbidity

- Cause?
- Consequence?
- Third factor explaining both?
- More and more evidence
 - Insomnia precede mental disorders
- Treating insomnia:
 - Decrease burden associated with insomnia
 - might prevent mental disorders!



Treatment

- Cognitive-behavioral therapy
 - Information
 - General
 - Sleep hygiene
 - relaxation
 - Behavioral techniques
 - Sleep restriction
 - Stimulus control
 - Cognitive techniques
 - Worry, fear, dysfunctional thoughts about sleep
- Treatment unavailable → (web-based) self-help

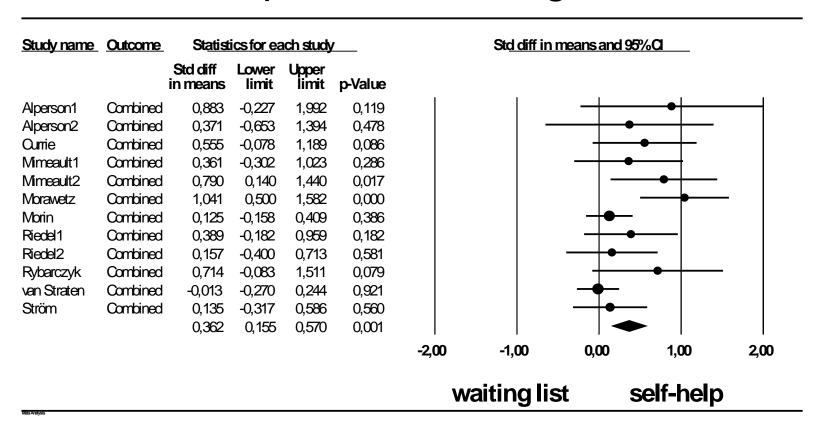


Meta-analyses

- Search in several databases + references
- RCTs: self-help interventions in insomnia
- 10 studies including 1000 patients
 - 6 studies (9 comparisons): SH vs WL
 - 1 studie: SH vs face-to-face treatment
 - 3 studies: SH vs WL + SH vs face-to-face treatment



Self-help versus waiting list



Effects on sleep estimates (combined)



Self-help versus waiting list

	Pooled effect	heterogeneity
Sleep efficiency	0.42*	65%
Sleep onset latency	0.29*	0%
Total Sleep time	0.02	19%
Wake after sleep onset	0.44*	64%
Sleep Quality	0.33*	52%
Combined	0.36*	45%



And...

- Pooled effect size for depression 0.51*
- Pooled effect size for anxiety 0.28*
- Subgroupanalyses: no significant effects
 - With or without support
 - Book or other format
 - With or without co-morbidity with other mental health problems
- Long term effects: stable over time



Self-help versus face-to-face treatment

Study name Outcome		Statistics for each study				Std diff in means and 95% Cl			<u>:</u>	
		Std diff in means	Lower limit	Upper limit	p-Value					
Bastien1	Combined	-0,250	-0,991	0,491	0,508		<u> </u>		-	
Bastien2	Combined	l -0,165	-0,885	0,554	0,653		-		-	
Currie	Combined	I -0,180	-0,803	0,444	0,573		1-		-	
Morawetz	Blank	0,210	-0,486	0,906	0,554					
Rybarczyk	Combined	I -0,378	-1,162	0,407	0,345		+	┱┼	-	
		-0,141	-0,457	0,175	0,381					
						-2,00	-1,00	0,00	1,00	2,00
						f	tf therapie	•	selfhelp	

Meta Analysis

Effects on sleep estimates (combined)



Self-help vs face-to-face treatment

	Pooled effect	heterogeneity
Sleep efficiency	-0.31	22%
Sleep Onset Latency	-0.37*	0%
Total Sleep Time	-0.03	51%
Wake After Sleep Onset	0.02	45%
Sleep Quality	-0.50	0%
combined	-0.14	0%

Conclusions self-help for insomnia

- Sleep improves
- The effects are moderate
- Anxiety and depression improve
- Effects remain stable over time

 Self-help fits well as a first step in a stepped care model for insomnia



Van Straten A, Cuijpers P. Self-help therapy for insomnia: a meta-analysis. Sleep Medicine Reviews 2009;13:61-71.

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