

Appendix 1 Recommended behavioural therapies for insomnia, according to the American Psychiatric Association

Therapy	Description	Level of evidence
Stimulus control	The main objective is to reassociate the bed and bedroom with the rapid onset of sleep. Instructions: Go to bed only when sleepy; use the bed and bedroom only for sleep and sex; go to another room when unable to fall asleep or return to sleep in 15 to 20 minutes, read or engage in other quiet activities, and return to bed only when sleepy again; get up at the same time everyday regardless of the duration of sleep, avoid daytime naps.	Empirically supported treatment Level I-1
Progressive muscle relaxation	This is a deep-relaxation technique based on the idea that mental relaxation will naturally follow physical relaxation. Instructions: Tense one muscle group at a time, then release tension; repeat with each muscle group in a specific order; the patient attempts more muscle tension as (s)he becomes familiar with the technique. May also be combined with imagery training, meditation.	Empirically supported treatment Level I-1
Paradoxical intention	-“Performance anxiety” can prevent proper sleep. Instructions: Persuade the patient to engage in the most feared behaviour, i.e. staying awake. As the patient stops trying to fall asleep, the performance anxiety related to attempting to fall asleep is reduced.	Empirically supported treatment Level I-1
Sleep restriction	The objective is to reduce time in bed to lower the chance of fragmented and poor-quality sleep. Creates a mild state of sleep deprivation, promotes more rapid sleep onset and more efficient sleep. Instructions: Reduce amount of time spent in bed to increase the percentage of time spent asleep, improving the patient’s sleep efficiency. Increase the time allowed in bed by 15 to 30 minutes per week as sleep efficiency improves; until the patient is sleeping at least 90% of the time in bed. It is best to adjust bedtime and maintain a constant rising time to maintain a regular sleep-wake rhythm.	Empirically supported treatment Level I-1
Biofeedback	Therapeutic technique that teaches patients how to facilitate increased slow brain wave activity, thus facilitate falling asleep, by using electroencephalograph (EEG) monitoring. Eventually the patient can apply this skill without the use of the EEG.	Probably efficacious treatment Level I-1
Multifaceted cognitive behavioural therapy	The goal is to replace dysfunctional beliefs and attitudes about sleep with more adaptive substitutes. Treatment targets: Review and replace unrealistic sleep expectations (“I must get eight hours of sleep per night”); misconceptions regarding causes of insomnia (“My insomnia is due to a chemical imbalance”); amplification of consequences of insomnia (“I can do nothing after a bad night’s sleep”); performance anxiety due to excessive attempts at controlling the sleep process (see paradoxical intention).	Empirically supported treatment Level I-1

Adapted from: (1) Benca RM. Diagnosis and treatment of chronic insomnia: a review. *Psychiatr Serv* 2005; (2) 56(3):332-343), Silber MH. Chronic Insomnia. *The New England Journal of Medicine* 2005; (3) 353[8]: 803-810, and Morin CM, Bootzin RR, Buysse DJ, Edinger JD, Espie CA, Lichstein KL. Psychological and Behavioural Treatment of Insomnia: Update of the Recent Evidence (1998-2004). *Sleep* 2006; 29(11): 1398-1414.

