

Sedative-Hypnotic Medications: Nothing to be Relaxed About

Written by Geoff Kane, MD, MPH Friday, 01 February 2013 00:00



Sedative-hypnotic medications are not good choices for individuals with addiction. Even those with vulnerability to addiction due to, for example, a family history of alcohol dependence, run a higher risk of developing problems. Nevertheless, some medical practitioners are quick to prescribe these drugs when patients complain of anxiety or insomnia. The prescribers aim to be helpful, but too often these prescriptions end up harming the patient and possibly others.

Though some authors classify sedating antidepressants and antihistamines as sedative-hypnotics, this discussion restricts the category to medications that act in the brain by augmenting the effects of [gamma-aminobutyric acid](#) (GABA). GABA is a chemical messenger that inhibits the activity of brain cells. Boosting GABA both calms the brain and increases [dopamine](#) in the [nucleus accumbens](#). That increase of dopamine is the neurobiological event most identified with the experience of pleasure and reward. The intensity of the pleasure might be subtle or dramatic, but either way, reward makes the person likely to repeat the experience (taking the medication) that triggered the dopamine boost. Prolonged use of a sedative-hypnotic medication may cause tolerance (the person needs more to obtain the same effect) and withdrawal (the person becomes ill if he or she suddenly stops the medication). These pharmacologic actions mean that sedative-hypnotic medications qualify as addictive chemical substances.

Never assume that a medication is safe for you just because a doctor prescribed it. If you are in addiction recovery, actively addicted, or have a [family history of alcoholism](#) it may be all too easy for you to become dependent on a sedative-hypnotic—or for its effects to prime you for a return to your drug of choice. Some individuals in addiction treatment trace the beginning of their addiction, or the beginning of a relapse, back to their use of a benzodiazepine. If you accept the recommendation here to avoid sedative-hypnotics even if you have a willing prescriber, it should go without saying that it is unwise to try one just because a friend or drug dealer thinks it's a good idea.

Medications are not the only remedies for life's problems, though addictive thinking might believe they are. Explore [relaxation](#) and other non-pharmacologic treatments if you are

Sedative-Hypnotic Medications: Nothing to be Relaxed About

Written by Geoff Kane, MD, MPH Friday, 01 February 2013 00:00

troubled by anxiety; [sleep hygiene](#) if you are troubled by insomnia.

The main objective of this particular Update, however, is not to help you relax or sleep; it's to help you avoid dangerous medication choices—all the sedative-hypnotics. But please don't let the following information distract you from recovery. For example, some people with addiction admit they read sources such as the Physicians' Desk Reference, a compendium on prescription medications, like someone else would read a gourmet cookbook. Copies have been known to go missing from treatment units. A man in his forties once sat in a group discussion on the hazards of medications wearing a T-shirt emblazoned "Massachusetts College of Pharmacy."

Sedative-hypnotics are a diverse group. They include not only alcohol but also medications seldom used today, such as chloral hydrate, meprobamate (Miltown, Equanil), and paraldehyde. Sedative-hypnotics also include medications in the chemical family [barbiturates](#), which are prescribed less now that we have alternatives not as likely to cause respiratory depression. Phenobarbital (Luminal, Solfoton), however, is still sometimes employed as an anticonvulsant or to detoxify patients from other sedative-hypnotics such as benzodiazepines or alcohol. Another barbiturate, butalbital, is widely distributed in headache tablets that also contain caffeine and either acetaminophen or aspirin (Fiorinal, Fioricet, Esgic, and others). Variations omit caffeine or add codeine. When the urine of a patient admitted for addiction treatment tests positive for a barbiturate, the most common reason is the presence of butalbital. While prescribers advise patients to take these headache pills sparingly, individuals with addiction may take twenty tablets a day.

The majority of the sedative-hypnotics are in the chemical family [benzodiazepines](#). Chlordiazepoxide (Librium) and diazepam (Valium) came first. All benzodiazepines have the same mechanism of action even though they vary in potency, speed of onset, duration of action, and clinical application. Benzodiazepines are the most common agent used to detoxify individuals from alcohol and other sedative-hypnotics. Additional benzodiazepines include: alprazolam (Xanax), clonazepam (Klonopin), clorazepate (Tranxene), estazolam (ProSom, Eurodin), flunitrazepam (Rohypnol), flurazepam (Dalmane), lorazepam (Ativan), midazolam (Versed), oxazepam (Serax), temazepam (Restoril), and triazolam (Halcyon).

The sedative-hypnotic category also encompasses medications some call [the Z drugs](#), which feature "z" in their generic names: zolpidem (Ambien), zopiclone (Zimovane, Imovane), zaleplon

Sedative-Hypnotic Medications: Nothing to be Relaxed About

Written by Geoff Kane, MD, MPH Friday, 01 February 2013 00:00

(Sonata), and eszopiclone (Lunesta). The chemical structures of the Z-drugs differ from those of the benzodiazepines, but they act at the same receptor sites in the brain and increase the activity of GABA. Prescribers advise patients who are having trouble sleeping to use zolpidem for brief periods and to take no more than 5 or 10 milligrams per night; however, individuals with addiction may take 80 to 100 or more milligrams per day for months at a time.

Carisoprodol (Soma) is a sedative-hypnotic prescribed primarily as a muscle relaxant. The liver transforms a significant portion of carisoprodol to meprobamate, which was introduced in the 1950s and was “mother’s little helper” until it was superseded by the benzodiazepines a decade later. Problem: carisoprodol has serious potential for abuse and addiction but American prescribers have been largely unaware of that. Like all sedative-hypnotics, carisoprodol acts like alcohol in the brain. Like benzodiazepines, it has caused overdose deaths and withdrawal seizures. Several European countries are removing meprobamate and carisoprodol from the market because they consider their risks to outweigh their benefits. In the United States, however, where benzodiazepines have long been regulated as controlled substances, carisoprodol only became classified as a controlled substance in January 2012.

Some individuals know about carisoprodol’s addictive properties and manipulate unsuspecting prescribers to get it. Others discover it by accident. A man in his fifties entered the hospital for treatment of alcohol dependence. In the past he was given carisoprodol for a muscle problem and he continued to take it. He reported with a smile that he really liked it the first time he took it because it reminded him of alcohol. So, just as with alcohol, he took more and more. It required several days for him to accept his need to give up this prescribed medication.

Besides reward, [rebound](#) can make it difficult for someone to stop a sedative-hypnotic. The pharmacologic rebound effect is when symptoms repeatedly relieved by a medication come back, perhaps stronger than they were originally, when the medication is stopped. Rebound is especially noticeable with short-acting agents, such as alprazolam and lorazepam. Because of rebound, treating anxiety or insomnia with a sedative-hypnotic can be like stopping a swinging pendulum by tapping it with a baseball bat. It works at first; the tap stops the pendulum. But it adds energy to the system—so the pendulum swings higher and comes down harder the next time.

Play it safe. If you are troubled by anxiety, insomnia, or muscle spasm, be open-minded about treatments that don’t use medications at all. If you do try medication, have your prescriber help

Sedative-Hypnotic Medications: Nothing to be Relaxed About

Written by Geoff Kane, MD, MPH Friday, 01 February 2013 00:00

you select from options that are not potentially addictive. If you believe nothing will help except one of the substances identified here, be aware that, in general, the harder a patient pushes for a potentially addictive medication, the more likely the push is motivated by addiction and not medical need.

For more information on prescription drug problems, click [here](#).

The NCADD Addiction Medicine Update provides NCADD Affiliates and the public with authoritative information and commentary on specific medical and scientific topics pertaining to addiction and recovery.