Dark Therapy

Mood disorders are caused in part by a breakdown of the body's internal clock. There are ways to fix a broken biological clock, and these fixes can make a big difference in bipolar disorder.

For example, regular wake times and morning light can reduce depression. When it comes to mania, mixed states, and rapid cycling, total darkness at night leads to significant improvement.

A Famous Case

Mr. J went in and out of mania and depression for many years. His condition was so untreatable that he went to the National Institutes of Health for help in the 1990's. They treated him with a routine of total darkness for 14 hours every night (from 6 P.M. to 8 A.M.). With this *dark therapy*, he improved so rapidly that they eased the scheduled from 14 hours of darkness to 10 hours each night (10 P.M. to 8 A.M.). Amazingly, his mood improved even though his sleep didn't change much.

Dark Therapy the Easy Way

Traditional dark therapy requires total darkness. Even a distant street lamp, or a brief flick of the bathroom lights, can interfere with it. An easier approach is to use amber glasses at night. These block blue spectrum light, the wavelength that causes mental health problems when it's too intense in the evening.

There's a special receptor in the eye that detects blue light (called *melanopsin*), and the brain uses that signal to set the biological clock. Blue light is helpful in the morning, but too much of it at night is bad for the brain.

In a landmark 2016, people who wore these glasses from 6pm to 8am (except when in bed in the dark) had a significant improvement in mania within a week. The patients who improved did not actually sleep more, but their

sleep did become more regular. It's as if the glasses allowed their brains to get some of the benefits of sleep without actually sleeping.

The two models below were recommended by *Consumer Reports* and used in medical research:



- Uvex Ultraspec 2000, model S0360X (\$7 at Amazon). This one fits over regular glasses.
- Uvex Skyper, model 3S1933X (\$7-11 at Amazon).

Other options are available at lowbluelights.com, and all of their lenses have the right specs.

It's best, but not necessary, to keep the lights down low while wearing blue blockers. Don't drive with them on. The glasses are not comfortable to sleep with, so you'll need to create total darkness in the bedroom. Try black-out curtains, a windowless room, or a sleep mask:

moodtreatmentcenter.com/darkbedroom.pdf

If your symptoms are severe, start with a full 14 hours (6 P.M. to 8 A.M.) of darkness, and transition to 10 hours (10 P.M. to 8 A.M.) as you start to recover. When transitioning, adjust by 1 hour every two nights (e.g. darkness at 7 P.M. for two nights, then 8 P.M. for two nights, until you reach 10 P.M.). If lowering the time spent in darkness makes your symptoms worse, just back-track and increase your dark-exposure by an hour. For milder symptoms, you can start with 10 hours of darkness (wear the glasses 2 hours before bed and then sleep in a pitch dark room for 8 hours).

Do not use dark therapy during the day. Remember the idea is to set your clock, and daytime light helps with that.

moodtreatmentcenter.com (336) 722-7266

Other Health Benefits

Reducing blue light in the evening helps prevent obesity, cancer, diabetes, and heart and eye disease.

Other Ways to Lower Blue Light

What if you can't sleep without light? Try a low-blue night light at lowbluelights.com, or search on Amazon for "Amber night light" or "no blue light" and "night light." For example:

Maxxima MLN-16 Amber LED Night Light SCS Nite-Nite Light Bulb SCS Lighting Sleep-Ready Light

There are also apps for computers and electronic devices that can reduce blue light. These are good for health but won't replicate dark therapy. Read more at: moodtreatmentcenter.com/bluelight.pdf

Side effects

Blue light glasses can cause vivid dreams and headaches. They can improve depression if worn 2 hours before bedtime, but they can cause depression if put on too early (before 6 pm).

— Chris Aiken, MD, adapted from *Bipolar, Not So Much* (Aiken & Phelps, WW Norton, 2017)

The 2016 Study: Henriksen TE et al. Blue-blocking glasses as additive treatment for mania: a randomized placebo-controlled trial. *Bipolar Disord.* 2016;18:221-32.

Dark Therapy in 7 Steps

- **1. Evening.** At 6 PM, put on blue-light blocking glasses. Wear them until ready for bed, and keep the lights down as low as you're comfortable with. Don't take the glasses off unless you're in a pitch dark room. Pitch dark means you can't see your hand in front of your face.
- **3. Sleep.** Get your bedroom pitch dark: moodtreatmentcenter.com/darkbedroom.pdf. When ready for bed, lay down in the pitch dark room and take the glasses off.
- **4. Overnight.** If you get up at night and turn the lights on, make sure to wear the glasses. Otherwise remain in your pitch dark bedroom throughout the night, whether asleep or not.
- **5. Morning.** At 8 AM, turn on the lights, or use a dawn simulator to wake up: moodtreatmentcenter/dawnsimulator.pdf Don't wear the glasses during the day.
- **6. As you improve.** Once your symptoms improve, slowly put the glasses on later in evening, moving the start time up by 1 hour every two days until you're wearing them 2 hours before bed.
- **7. Prevention.** Once recovered, keep wearing the glasses 2 hours before bed and sleep in a pitch dark room. That will improve overall health (less cancer, weight gain, and diabetes) and prevents bipolar. It will also deepen your sleep quality so you'll feel better the next day.

Troubleshooting. If you can't get the room pitch dark, use a black sleep mask. If you can't tolerate pitch darkness, use a low-blue night light. If you're used to having the TV on in the bedroom, try music or podcasts instead (or search for the top sleep-inducing track: *Weightless* by Marconi Union). Don't expect this therapy to make you sleep. Dark Therapy gives your brain many of the healing properties of sleep even if you're wide awake all night.

Bottom Line. During Dark Therapy, you'll need to be in virtual darkness (with blue light blocking glasses) or pitch darkness for the entire evening.