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# Trauma & Sleep Disturbance Workshop



## **Part I: Understanding Sleep Disturbance and Trauma**

### **Welcome to our Trauma and Sleep Disturbance Workshop**

Today's workshop is approximately 2 hours in length. It will be an educational and interactive workshop. Handouts will be provided at the end of the workshop.

The goals of the workshop are:

### **Goals of the Trauma and Sleep Disturbance Workshop:**

- To explore how trauma impacts the mind and body.
- To gain a basic understanding of how sleep cycles work as well as the importance of adequate sleep.
- To better understand the relationship between trauma and sleep disturbance among survivors, focusing on the most common sleep problems: insomnia, nightmares, and sleep apnea.
- To gain skills in combating and reducing sleep disturbance.
- To gain information about available treatment options.

### **What is Trauma?**

We want to start by talking about trauma: what it is, how it manifests, and how it changes and disrupts our everyday lives.

The Substance Abuse and Mental Health Services Administration (SAMSHA) defines trauma as “an event or circumstance resulting in physical harm, emotional harm, and/or life-threatening harm.” This definition allows for a lot of variation. Trauma can be a one-time event, such as a car accident or a natural disaster, or it can be ongoing and chronic, such as repeated abuse or dealing with a severe illness. Trauma can be physical, interpersonal, emotional, and spiritual.

Regardless of the type of trauma one has experienced, it can have lasting impacts after the fact, even when the person is safe. Dealing with the aftermath affects all areas of life: our physical and mental well-being, work, and relationships may suffer as trauma takes its toll. Whether you have been working on your recovery for a while now or this workshop is your first step, I want to encourage you that you don't have to stay in a victim role without any control. You can be in control of your recovery, and you already show so much strength by surviving its impact each day.

### **Responses to Trauma:**

Everyone's trauma is unique, so their responses will also be unique. There is no right or wrong way to cope with trauma because the body's reactions are often beyond our conscious control. However, there are some common symptoms that tend to occur:

Initially, you may experience nausea and digestive issues, muscle tremors or shaking, increased heart rate, breathing, and blood pressure, extreme fatigue, and greater hyperarousal, meaning the fight/flight/freeze response is more easily activated. Immediate emotional reactions can include numbness, anxiety, sadness, and dissociation. You may also experience racing thoughts, memory problems, and difficulty concentrating.

Other trauma responses may be delayed and occur after some time has passed. Such reactions include persistent fatigue, sleep disturbances and nightmares, continued hyperarousal, fear of recurrence, intrusive flashbacks, anxiety, depression, and shame. You may also avoid anything that reminds you of the trauma, including emotions, sensations, activities, people, and places.

Your beliefs about the world may also change. Suddenly, the world doesn't seem as safe or trustworthy as it once was. This can impact your relationships with others and leave you feeling helpless.

### **Trauma & The Brain**

It is important to recognize, as we mentioned before, that trauma reactions are often unconscious and out of our control. There are three main brain regions implicated in the trauma response, and hopefully talking about these will help us better understand what our brain is doing when trauma occurs.

The amygdala is the brain region linked to our emotions and instincts, and it is activated during a traumatic event. In other words, we engage in the fight/flight/freeze responses, with each response manifesting in slightly different ways. When preparing to fight or flee, the sympathetic nervous system, which prepares the body for activity, kicks into high gear, resulting in sweating, shaking, nausea, and increased breathing and heart rate. The fight response may include a tightened jaw or fists, clenched teeth, a desire to kick or punch, and feelings of anger. The flight response may mean feelings of anxiety, shallow breathing, darting eyes, and fidgeting. In contrast, the freeze response activates the parasympathetic nervous system, which is responsible for slowing down body activity. Breathing and digestion slow, and immobilization is also common. While in freeze mode, one may experience coldness, numbness, stiffness in the body, and restricted breathing. The physiological changes associated with the fight/flight/freeze

responses happen instantaneously, and you may be unaware of them in the moment. Even after the trauma, the amygdala can be activated in response to a trigger, which contributes to the hyperarousal that plagues many survivors.

The prefrontal cortex is involved in emotion regulation and impulse control. This area actually shuts down during a traumatic event and gives way to the survival responses of the more primitive brain regions, like the amygdala. In other words, it is much harder to think logically when the body senses it is in danger.

Finally, the hippocampus plays an important role in memory function. When it comes to experiencing a traumatic event, the hippocampus may not have fully stored or processed the memories, which is why some survivors have fragmented memories or “memory traces.” In survivors, these memory traces are often stored in the five senses, which is why a certain sound or image may invoke fear or anxiety even if one can’t recall specific details of the trauma. It can also be difficult for survivors to differentiate between the past and present, which involves reliving the trauma through vivid memories.

Again, all of these mental processes come from the brain’s built-in survival mode. When the trauma was occurring, they were helpful ways for you to keep yourself safe. However, when the symptoms we’ve discussed persist for too long, it can make recovery and everyday life very difficult.

### **Trauma-related Stress Disorders**

Reactions to trauma exist on a spectrum. Many of the responses we just discussed are expected, natural reactions that dissipate over time. Acute Stress Disorder (ASD) refers to experiencing these symptoms from at least 3 days after the traumatic event to a month later. However, for some people, symptoms persist and worsen, leading to a diagnosis of Posttraumatic Stress Disorder (PTSD).

PTSD is diagnosed when symptoms have lasted beyond a month and are severe enough to disrupt daily life. Symptoms are grouped into 4 areas: re-experiencing, avoidance, arousal and reactivity, and cognition and mood. Common symptoms include many of the responses we previously mentioned: flashbacks, recurring memories or dreams, avoidance, hyperarousal, difficulty concentrating, difficulty falling or staying asleep, difficulty remembering the event, loss of interest in activities, and isolation.

Complex PTSD (C-PTSD) is a more intense version of PTSD. It results from what is called “complex trauma,” which is long-lasting and repeated trauma rather than a single, isolated event. For example, C-PTSD is common with childhood trauma and domestic violence that has spanned over years. C-PTSD includes the core symptoms of PTSD, as well as difficulty with emotional regulation, negative self-view, difficulty with relationships, and feeling detached from the trauma. It is important to mention that C-PTSD is currently not an accepted diagnosis; however, it is recognized by professionals who specialize in treating trauma. Therapists are working toward an official diagnosis for C-PTSD, as it is certainly distinct from PTSD and ASD.

It is important to know that both PTSD and C-PTSD can be treated and there are many ways to cope, which we will talk about later in the workshop.

### **Dissociation**

Dissociation is another normal and natural coping skill that the body uses to distance itself from a painful traumatic experience. Dissociation refers to the disconnect between one’s thoughts, feelings, behaviors, memories, perception, and sense of identity.

Dissociation in itself is not a bad thing. Even people who have not experienced trauma may dissociate, such as when getting lost in a book or movie and losing track of their surroundings. When someone is experiencing a traumatic event, dissociation is a survival tactic enacted by the body, so it is important not to feel ashamed or guilty for responding in this way.

However, it can be harmful when a survivor is now safe from the trauma but continues to dissociate, as avoiding processing the trauma can hinder recovery. Dissociation is considered a disorder when it interferes with a person’s daily life and relationships, and common symptoms include memory loss, feeling detached from one’s body, emotional detachment, and a lack of sense of self.

Some survivors may be diagnosed with Dissociative Identity Disorder (DID), in which a survivor experiences two or more distinct emotional identities. Depersonalization/Derealization disorder is another diagnosis. The depersonalization aspect involves feeling detached from one’s mind, self, or body, as if watching one’s life from the sidelines. Derealization refers to detachment from one’s environment and feeling like surrounding things and people aren’t real. Someone may also receive a diagnosis of dissociative amnesia in which they can’t remember personal information, often regarding an event or period of time.

Many survivors will have dissociative symptoms that interfere with daily life but do not meet the full criteria for one of the diagnoses just listed. In this case, they may be diagnosed with Dissociative Disorder Not Otherwise Specified (DDNOS).

### **Trauma & Sleep Disturbance**

Now that we have a basic understanding of trauma and how it impacts our minds and bodies, let's focus a little more on why we are here for this workshop: to talk about sleep disturbance. Sleep disturbance is a very common symptom of PTSD. Some studies indicate that the prevalence of nightmares among those suffering from PTSD can be as high as 72-88%. The estimated prevalence of insomnia ranges from 70-91%. The common types of sleep disorders that we will look at in greater detail are insomnia, nightmares and night terrors, and obstructive sleep apnea.

### **Sleep Cycles**

First, it may be helpful to talk about sleep cycles and how our brains and bodies function while we are asleep. Since trauma is stored in the brain and body, it would make sense that survivors experience major disruptions to their sleep while recovering from trauma. Trauma interferes with one's sleep architecture, which refers to how the body moves through sleep cycles. We are going to take a look at a normal sleep cycle that has not been affected by PTSD and compare this to the disrupted sleep of a trauma survivor.

Right after falling asleep, body temperature drops, brain activity decreases, and heart rate and breathing slow. During the night, the body goes through several sleep cycles, each lasting between 70-120 minutes and composed of several sleep stages. Of the 4 stages, the first 3 are non-REM (rapid eye movement), and the 4th stage is REM. Let's talk about each stage in a little more detail.

The first stage is referred to as N1, and it lasts about 1-5 minutes as the body dozes off and transitions to stage 2. N2 is next, and it is 10-60 minutes long. During this time, body and brain activity continue to slow, including a drop in body temperature, relaxed muscles, and slower breathing and heart rate. It is easiest to be woken up during N1 and N2. The third stage is (you guessed it) N3, but it is often called slow-wave sleep or deep sleep. In these 20-40 minutes, the muscles and body relax even more, and brain waves become very slow. Research has shown deep sleep to be important for the body's recovery as well as for effective thinking and memory.

In stage 4, or REM sleep, which lasts from 10-60 minutes, brain activity picks back up. Most of the body is in temporary paralysis, except for the respiratory system and the eyes (hence the name). Dreams can happen during any stage of the sleep cycle, but they are most intense during REM sleep. REM sleep is essential for memory processing and learning, and the body often spends more time in REM sleep as the night goes on.

It's important to note that ALL sleep stages work together to contribute to quality sleep, not just deep sleep (stage 3) and REM. The body usually goes through 4-6 cycles per night, and the composition and duration of each cycle change throughout the night. For example, N1 sleep decreases as the night goes on while REM stages get longer; deep sleep dominates the first half of the night, and REM sleep is more frequent during the second half.

### **Trauma Sleep**

Trauma and PTSD can impact the sleep cycle at various points. Based on what we know about REM sleep and its connection to dreams, I'm sure you guessed correctly that survivors experience disrupted REM sleep. Since this stage is involved in processing emotional memories, altered REM is involved in recurring nightmares and traumatic dreams. Additionally, survivors tend to experience more light sleep (stages 1 and 2) and less deep sleep (stage 3), making it more difficult to fall and stay asleep and often leading to daytime sleepiness.

### **Types of Sleep Disorders**

Now that we understand points in the sleep cycle where trauma may interfere, we will move on to talk about the most common sleep disorders among those suffering from PTSD.

### **Insomnia**

Insomnia involves difficulty falling asleep, staying asleep, or waking up too early and struggling to fall back asleep. Following a traumatic event, it is common to experience acute insomnia; however, chronic insomnia can occur with PTSD when the disturbance lasts for more than a month. According to the Sleep Foundation, it is estimated that as many as 9 in 10 people with PTSD also experience insomnia, so if this is something you struggle with, you are certainly not alone.

Aside from making bedtime stressful and frustrating, insomnia has adverse effects during the daytime, such as negatively impacting one's mood and causing sleepiness and a lack of energy.

This may trap people in a cycle because they begin to rely on unhealthy sleep habits, like napping during the day or substance abuse, which only worsen the insomnia symptoms.

As we know, surviving a traumatic event leaves the body more susceptible to hyperarousal, and it is this aspect of PTSD that is strongly linked to insomnia. In fact, research has shown that people with PTSD tend to have a faster heart rate while sleeping than healthy individuals. When the body is constantly scanning for danger, it can be difficult to relax, both physically and mentally. Insomnia can also manifest if a survivor's trauma involves having to be alert at night. This was a survival tactic that the body used during the trauma, but it is disruptive when the person is now safe and recovering. We will discuss nightmares next, but insomnia may result from anxiety and fear about experiencing a nightmare, and survivors may stay up later to avoid this possibility.

### **Tips for Coping with Insomnia:**

1. **Maintain a regular sleep schedule.** Try to go to sleep and wake up at the same time each day, even on weekends, if possible. Over time, this may make your body better prepared to sleep because it has learned and adjusted to the routine.
2. **Sleep where you feel safe.** It is difficult to fall asleep when your trauma has made you overly alert and constantly scanning for danger. Think about ways to make your sleeping environment feel safer, whatever that means for you. You might sleep with a pet, have a dim light on so you can see your surroundings, lock your doors and windows, or put a bell on your door. Hopefully, these adjustments can provide some peace of mind.
3. **Try some relaxation exercises before bed.** You may incorporate some relaxing activities or habits into your nightly routine. There are a variety of exercises to try, and we will brainstorm together later in the workshop. The point of these exercises is to turn off the body's stress response by calming the mind and the body so that we can fall asleep more easily.
4. **Don't force yourself to sleep.** If you can't sleep after 20 minutes, get up and try a relaxing activity to see if it makes you more tired. You don't want to associate the stress of trying to sleep with being in your bed, as this can perpetuate the cycle.
5. **Maintain good sleep hygiene.** Sleep hygiene is key to getting a good night's sleep. It comprises the daily and nightly habits that help you fall asleep as well as your bedroom environment. There are many pieces to sleep hygiene, and we will discuss these in the second part of the workshop.
6. **Take care of your hunger.** Some people may need a light snack before going to sleep if their hunger keeps them awake. You should consult with a doctor before doing this,



especially if you are recovering from an eating disorder and are following a specialized meal plan.

### **Nightmares and Night Terrors**

Nightmares involve re-experiencing the trauma at night. The content can be very vivid and distressing, making it difficult to fall back asleep; furthermore, the nightmares may repeat themselves over and over. Nightmares are also very common and are included in the diagnosis of PTSD, with an estimated prevalence of around 60% among this population. Many healthy people experience occasional nightmares, but for trauma survivors, they are considered a mental health condition because they interfere with everyday life.

Experts believe that dreams help us incorporate events and experiences into long-term memory, which is called memory consolidation. In the same vein, nightmares may be considered to have an adaptive function. They could be the brain's attempt at processing emotional memories that have been avoided or improperly integrated, and in this case, the emotional aspect is fear. Repeated traumatic dreams, however, represent a failure of this adaptive function because the survivor is stuck in a loop of re-experiencing.

Nightmares occur primarily during REM sleep when certain areas of the brain, most notably the amygdala, are more active. In healthy people, this is not a problem. On the other hand, people with PTSD whose amygdala is overly sensitive will be more susceptible to nightmares during this stage. Because REM sleep increases as the night progresses, nightmares are more likely to happen during the second half of sleep.

Trauma survivors may also experience night terrors, although these are much less common. With night terrors, the body becomes more aroused, including increased heart rate and breathing, tensed muscles, and sweating. The person shows behaviors of distress such as kicking, screaming, or flailing and is usually unresponsive to being awoken. They will also have trouble remembering the episode the next morning. Night terrors typically only last ten minutes, and it is suggested not to wake the sleeper. Instead, the person should be monitored in case of injury, and their bedroom should be kept safe if night terrors are frequent.

### **Tips for Coping with Nightmares:**

1. **Utilize relaxation exercises.** When you wake up from a nightmare, your fight/flight/freeze response is activated, and it can be helpful to use some self-soothing techniques in that moment. We will brainstorm some ideas together.
2. **Have something in the room to use for grounding.** When you wake up suddenly from a nightmare, you may need to remind yourself that you are in the present and you are safe. Having an object in your room to focus on can serve as this reminder. Maybe you put a poster on the wall that you can look at to feel calm, or a stress ball near your bed that you can reach over and touch. You could even keep a glass of cold water near your bed to help calm your body when you wake up.
3. **Give yourself affirmations.** Oftentimes, someone who experiences nightmares will feel anxious about going to sleep in anticipation of having one during the night. It's easy to get trapped in the "what if" thoughts, so try to replace these with comforting affirmations. For example, you may tell yourself: "I am safe now" or "I have the ability to call 911" to remind yourself that you have control, even when the nightmares feel scary and real.
4. **Change the ending.** If you tend to have a repetitive nightmare, you can write it out with a different ending. Perhaps in this new version, you escape the dangerous situation or overcome your fear. Read the rewritten dream over and over so that your brain can shift toward the alternative ending, or at least reduce the fear associated with the original nightmare.
5. **Turn on the light.** This small change to your sleeping environment may help you deal with the mystery of what's in the dark. Having a light that you can turn on near your bed or even a nightlight while you sleep may be useful if you awaken from a nightmare and need to familiarize yourself with your surroundings.
6. **Interrupt the nightmare.** If you find yourself awakening from a nightmare and falling back asleep just to have it pick up again, you can use some techniques to interrupt this. For example, you may get out of bed and wash your face with cold water or get a drink of water before returning to bed.

### **Obstructive Sleep Apnea (OSA)**

Obstructive sleep apnea is one more common sleep disorder among people suffering from PTSD. Obstructive sleep apnea involves temporary pauses in breathing during the night, often signified by loud snoring, choking, or gasping for breath. This pattern disrupts sleep because the person must keep waking up to restart breathing.

PTSD does not necessarily cause OSA; it could be that sleep deprivation resulting from OSA exacerbates existing PTSD symptoms. Nonetheless, research has shown that OSA is more prevalent among people suffering from PTSD, and the more severe the PTSD symptoms, the more likely someone is to be at high risk for OSA. The chronic stress and arousal that come with surviving trauma may be related to this sleep disorder, although the exact relationship between PTSD and OSA is unclear. Other risk factors for OSA include obesity, alcohol or opioid use, smoking, and older age.

If you suspect you may be suffering from OSA, speak to a medical professional. You will typically be referred for a sleep study to decide if further treatment is necessary.

### **Childhood Trauma and Sleep Disturbance**

Though survivors of all ages can experience sleep disturbance following trauma, it is important to look at childhood trauma more in-depth. Oftentimes, childhood trauma can increase the severity of sleep disturbance experienced in adulthood. If untreated, sleep problems that begin when the child's brain is still developing can worsen over time.

ACE stands for Adverse Childhood Experience, which is a potentially traumatic experience occurring in the first 17 years of life. Some examples of ACEs include abuse, neglect, and household challenges such as substance misuse and domestic violence. In one study, adult participants who reported experiencing at least five ACEs were twice as likely as those who reported none to feel tired during the day and have trouble falling and staying asleep. It is important to acknowledge this relationship because children who experience more ACEs are at risk for a host of mental and physical health problems in adulthood. Sleep disturbance resulting from trauma may contribute to this level of risk, as poor sleep is also linked to chronic diseases and maladaptive health behaviors. See the ACEs handout at the end of this workshop for more information.

### **Health Risks of Sleep Disorders**

Sleep is essential for all kinds of bodily functions and systems, including our brains, metabolism, immune system, hormones, and cardiovascular system, to name a few. It follows, then, that poor sleep can disrupt or interfere with a lot of these basic functions.

Some short-term consequences of sleep deprivation include heightened stress response, somatic problems (such as headaches and abdominal pain), emotional distress and mood disorders, and interference with cognition and memory. It's important to note, however, that some of these relationships are bidirectional. For example, depression could lead to more disrupted sleep, but disrupted sleep can also worsen depression symptoms. It is hard to separate the cause and effect, but nonetheless, research has found links between these health outcomes and poor sleep, so it's important to be aware of and prevent them.

The long-term health consequences of sleep deprivation include higher risks for hypertension, cardiovascular disease, weight-related issues, and type 2 diabetes. This is why it's important to identify and treat sleep disorders as early as possible to avoid these kinds of outcomes - there ARE treatment options available, which we will discuss further in the next part of this workshop.

### **Alcohol and Sleep**

With sleep disorders or sleep disruption, it is also common to experience daytime sleepiness, which can interfere with work, relationships, and overall quality of life. This may turn people toward maladaptive coping strategies, and one common one we will focus on is alcohol use.

Alcohol is a depressant, meaning that it slows down brain activity. For someone who is hyperaroused and struggles to fall asleep at night, using alcohol to relax before bed may seem like an attractive idea. People often do feel sleepy at first, but it is important to dispel this myth; sleep quality becomes worse throughout the night.

In fact, self-medicating with alcohol is related to all three sleep disorders we've discussed. Using alcohol before bed makes sleep lighter, so it's easier to awaken, which can lead to daytime fatigue. It also increases REM sleep, which means a greater likelihood of experiencing nightmares. Alcohol use is even related to sleep apnea. Alcohol relaxes the throat muscles, which can create resistance when breathing, contributing to the irregular breathing patterns that characterize OSA. Additionally, it is important to be aware that using alcohol every night to fall asleep can build up your tolerance, meaning that you need to consume more alcohol over time to

experience the same effect. In order to avoid any of these negative outcomes, it is recommended to stop drinking alcohol at least four hours before going to sleep.

## **Part II: Treatment and Coping Skills**

Now that we understand how sleep and trauma are closely related, as well as the various health risks of common sleep disorders, we will look at ways to face and treat these issues.

### **Brainstorming Exercise: Relaxation Techniques**

When struggling to sleep or when facing nightmares, our first reaction may be to panic, which only worsens the anxiety surrounding sleep. Having a list of relaxing activities to turn to can help alleviate some of this so you can act in the moment and reduce your body's stress response.

Take 5 minutes to jot down any relaxation techniques you can think of. These can be activities you do before bed to help relax your mind and body, or they can be self-soothing techniques that you use in moments of high arousal and stress. Then, we will come together and share our lists. The beauty of this exercise is that we can explore a variety of exercises, some of which you may not have considered before.

### **More Relaxation Techniques:**

- 1. Progressive muscle relaxation.** (Walk through). This is an exercise that involves tightening your muscle groups and then allowing them to relax, resulting in relieved tension. There are 16 muscle groups you will focus on: hands, wrists and forearms, biceps, shoulders, forehead, around the eyes and nose, cheeks and jaw, around the mouth, back of the neck, front of the neck, chest, back, stomach, hips and buttocks, thighs, and lower legs. This may sound like a lot, but you can write out a list or make an audio recording of yourself with about 45 seconds in between each group to follow along. Contract the muscle group for 5 seconds, then release. Relax for 10-20 seconds and then move on to the next group. You may try this activity while lying in your bed to help yourself relax enough to sleep.
- 2. Body scan.** This is a form of meditation that involves focused attention to different parts of the body. First, take some deep breaths to get the body into a relaxed state. Then, begin with your feet and try to see if you notice any sensations there (ex: tingling, warmth,

coolness, tension, etc.). Acknowledge any discomfort and try to see the tension leaving your body through your breath. Move on to your calf muscles and then eventually to the other parts of your body from your toes to your forehead, repeating this process each time. It is important to point out that trauma is stored in the body and becoming aware of this during the body scan may be surprising. It may be necessary to discuss this with your therapist.

3. **Breathing exercises.** There are many variations of breathing exercises you can try to slow your body when feeling stressed or anxious. Here are a few examples, but you may need to try a few to find one that works best for you:
  1. **Box breathing.** Take a five-second slow inhale, hold your breath for five seconds, exhale slowly for five seconds, and then breathe at your natural rhythm for five seconds before repeating. You can imagine yourself drawing out the square in your mind.
  2. **Diaphragmatic breathing.** (Walk through). Diaphragmatic breathing, or belly breathing, engages your diaphragm to deepen breathing, whereas shallow breaths involve using more of your chest. You can practice diaphragmatic breathing either lying on your back or sitting up straight. Close your eyes and place one hand on your stomach and the other on your chest. Then, breathe as you normally would, paying special attention to the rise and fall of your stomach. Your belly should rise and expand as you inhale and fall as you exhale, and your chest shouldn't move too much. It may be helpful to imagine your stomach inflating like a balloon as you inhale through your nose, and exhale through your mouth as if you are blowing out a candle. This may require some practice, especially if you notice that your natural breathing tends to be more shallow (using more chest movement). This exercise can be done for as long as you need to feel relaxed, although it is generally better to do it in short periods of time rather than in one extended breathing episode.
  3. **4-7-8 breathing.** Place the tip of your tongue on the roof of your mouth, and leave it here throughout the whole exercise. Inhale through your nose for four seconds, then hold your breath for seven seconds. It is okay if you need to hold your breath for less time or work up to this. Then, exhale through your mouth for eight seconds.
4. **Guided, trauma-informed meditation.** Mindful meditation involves accepting your experiences in the present moment. This includes letting your thoughts, feelings, and physical sensations, both pleasant and unpleasant, pass by without judgment. This can be

a way to recognize that you are safe from your past trauma and feel present in the moment. You might use an app or follow along with a Youtube video to practice mindfulness before bed. However, it is also important to recognize your limits; mindful meditation may be triggering for some, so it is okay to take breaks or talk with your therapist first before giving it a try.

5. **Read.** Reading is a good activity to make your mind and eyes tired. Just try to avoid reading anything that could be potentially triggering or stir up your emotions before going to sleep.
6. **Listen to soothing music or white noise.** Whether you keep a white noise machine by your bed while you sleep or find a playlist of soothing music, this can be a really great relaxation strategy. You may even take the time to create a playlist of your own that brings you comfort in times of high stress or anxiety.
7. **Take a warm bath.** Research shows that taking warm baths can decrease stress hormones like cortisol, thus reducing the fight/flight response. While taking a warm bath, pay attention to how the temperature feels to further ground yourself.
8. **Write a to-do list.** If you find yourself feeling overwhelmed by all that you want to accomplish right before going to bed, you may try writing it down first. That way, you can put those thoughts to rest and not have to worry about forgetting them in the morning.
9. **Do something creative.** A lot of the best relaxation techniques will require little cognitive stimulation and/or exposure to stressors. You may try knitting or crocheting, painting or coloring, or even putting together a puzzle before bed.
10. **Give yourself a hug.** Giving yourself a hug is a good way to remind yourself that you are safe and, in the present, and it engages your sense of physical touch, which can bring a lot of comfort. This is a quick technique that requires nothing more than yourself, and it may be a way to self-soothe after waking up from a nightmare.
11. **5-4-3-2-1 grounding.** This is a common exercise used for grounding that utilizes all five senses. You will go through and notice: five things you can see, four things you can touch, three things you can hear, two things you can smell, and one thing you can taste. The exercise is even more powerful if you speak these things out loud while going through it.

**12. Visualize a safe space.** (Walk through). Having a “safe space” that you can imagine and enter in your mind can be a very helpful technique to relax, especially when you awake from a nightmare and need to calm yourself down. Take some time to visualize your personal “safe space” and think about what that means for you. It may be on the beach: imagine the crashing waves and what the water and sky look like. It may be with a pet: imagine what stroking your pet feels like and the positive emotions that come along with it. Close your eyes for a few minutes and create this space in your mind, then write it down so that you can utilize it when feeling triggered or anxious.

### **What is Sleep hygiene?**

We mentioned earlier that good sleep hygiene is important for high-quality sleep, and it also increases the effectiveness of the relaxation techniques we’ve discussed. So, what exactly is sleep hygiene?

Sleep hygiene refers to the daily routines and habits that enable you to fall asleep at night, as well as characteristics of your sleeping environment. There are many ways to improve sleep hygiene, and they often involve small changes that can go a long way.

### **Tips for Improving Sleep Hygiene:**

- 1. Reserve your bed for sleep only.** If your bed becomes a space for too many activities, such as scrolling through your phone or working remotely, it may interfere with your sleep. It’s important to set boundaries so that your brain associates your bed with sleep only.
- 2. Avoid caffeine or alcohol before bed.** As we discussed earlier, although alcohol is a depressant and can make you sleepy at first, its effects wear off at night and can actually disrupt sleep even more. Caffeine is a stimulant, so consuming too much in the evening can make your body too alert to fall asleep.
- 3. Get regular exercise.** Exercising regularly can help with the hyperarousal you may experience when trying to fall asleep at night. It is important to note, however, that you should avoid intense, vigorous exercise too close to bed because it raises your heart rate and body temperature and makes it more difficult to wind down. Opt for light to moderate activity at least one hour before going to sleep. You may need to speak with a medical professional before building exercise into your daily routine.



4. **Turn off screens.** Aim to put your electronics away at least 30-60 minutes before bed. Blue light may decrease melatonin production, a hormone that is known to encourage sleep.
5. **Pay attention to your bedding.** If you are physically uncomfortable at night, it will certainly be harder to sleep. If possible, you may choose to invest in a good mattress or pillow or use a weighted blanket, which can be helpful for anxiety.
6. **Optimize comfort.** There are several smaller changes you can make to your environment to ensure that it is comfortable for sleep. When it comes to temperature, you should aim for the cooler side, but tweak it until you find a temperature that suits you. If you sleep better in the dark, you might consider heavy curtains or an eye mask. On the other hand, if you feel more anxious in the dark, you might use a nightlight to help illuminate your surroundings. A white noise machine can help drown out interruptions, and calming scents, such as lavender, may also make your space more comfortable. Sleep hygiene often involves small adjustments, so don't be afraid to play around with some of these things to see if they work for you.

Sleep hygiene will look different for everyone. With this in mind, it's important to be patient and open-minded as you try out different habits and make changes to your environment. However, sleep hygiene is not always a magic fix; as we are about to discuss, further treatments may be necessary to restore your sleep quality to a healthier state.

### **Keep a Sleep Log**

You might also consider keeping a sleep log. This is especially useful when meeting with a doctor, therapist, psychiatrist, etc. to determine a course of action. You can track things like nightmare frequency, hours of sleep per night, and whether your sleep was broken or continuous. Since the most accurate sleep log will be filled out every day, you may want to keep the log and a pen near your bed so you remember to update it regularly. Refer to the handouts at the end of this workshop for a sleep log template as well as a sleep diary template, which is slightly more detailed.

## **Trauma Treatments**

While it is necessary and helpful to develop coping skills on your own, like some of the ones we've touched on, trauma survivors often require professional treatment in their recovery. The American Psychological Association (APA) recommends several treatments for PTSD.

**Cognitive Behavioral Therapy (CBT).** CBT examines the relationships between thoughts, feelings, and behaviors and addresses maladaptive patterns in these areas. The therapist will often help their patient recognize unhelpful ways of thinking, such as catastrophizing or extreme negative thoughts, so they can reach a more balanced mentality. By working to change these patterns, the patient gains a better understanding of their trauma as well as their ability to cope with its effects. CBT can be done individually or in a group.

**Cognitive Processing Therapy (CPT).** CPT is a form of CBT that focuses on examining and changing one's beliefs about their trauma. This often involves writing about and processing the trauma in order to identify unhelpful patterns of thinking. The patient will develop coping strategies and learn to use them outside of sessions, including assignments they may be responsible for completing on their own. CPT is similar to CBT, but the emphasis is on the "cognitive" part. This type of treatment can be done in groups, individually, or as a combination.

**Cognitive Therapy (CT).** CT is also based on CBT. This treatment is aimed at reframing one's pessimistic memories and evaluations of trauma. The therapist helps the patient identify specific memories and triggers that exacerbate their PTSD symptoms. Instead of holding onto these pessimistic evaluations, the patient integrates a new understanding of the traumatic event. This can be achieved in several ways, such as writing about the trauma memory or performing a visualization exercise with the new evaluation. As with CBT and CPT, the patient will also address negative coping strategies and learn to replace them with healthier ones.

**Prolonged Exposure.** As we already know, avoidance behaviors are included in the diagnosis of PTSD. Prolonged exposure encourages survivors to slowly approach trauma-related memories, situations, and feelings rather than avoid them. The therapist will begin by seeking to understand the patient's trauma and teach them coping exercises to confront anxiety, ensuring that they feel safe and supported. The exposure portion can be imaginal, where the patient describes the event, or in the form of assignments outside of therapy. Eventually, the patient will learn that they are safe, and trauma-related stimuli do not need to be avoided.

**Eye Movement Desensitization and Reprocessing (EMDR).** In EMDR, the patient processes the traumatic memory while experiencing bilateral stimulation (ex: tracking the therapist's finger

with their eyes), which helps decrease the intense emotions that may arise. We mentioned that sometimes when the body is in fight-flight-freeze mode, memories aren't stored properly. The purpose of EMDR is to help integrate the traumatic memories without causing extreme distress. EMDR is done individually once or twice per week, usually in 6-12 sessions, and is delivered relatively quickly.

### **Joining a Support Group**

In addition to these treatments, you may consider joining a support group with other trauma survivors. Support groups provide a safe place to process the effects of trauma, break shame and stigma, and connect with others who've had similar experiences but bring diverse perspectives and advice.

### **Sleep Disorder Treatments**

Resolving and recovering from one's trauma doesn't necessarily mean that sleep will improve with it. That's why it's important to target sleep disturbance on its own, as well. Individual treatment plans may include treating PTSD and the sleep disorder alongside one another. Typically, the three main sleep disorders (insomnia, nightmares, and sleep apnea) are first treated without prescribing medication.

#### **For Insomnia:**

Cognitive Behavioral Therapy for Insomnia (CBT-I) involves a few different pieces, including psychoeducation about sleep, relaxation training, behavioral interventions, and cognitive therapy.

#### **For Nightmares:**

Image Rehearsal Therapy (IRT) is a form of cognitive therapy in which the patient records their nightmare, rewrites it with a better ending, and then rehearses it in their imagination before going to sleep. This exercise is typically done with help from a therapist. There is also some evidence that exposure therapy can reduce the occurrence of nightmares by desensitizing the survivor to the emotional content and memories.

#### **For Sleep Apnea:**

The common treatment used for sleep apnea is a CPAP device, which stands for Continuous Positive Airway Pressure. There is some support that this has helped reduce PTSD symptoms in patients, particularly nightmares. It involves sleeping with a mask attached to a hose that connects to a CPAP machine next to the bed. This helps keep the person's airways open so that their breathing is more regular throughout the night. However, it is important to note that this

device may be triggering or cause anxiety for some survivors. In some cases, a weight loss intervention may also be necessary, as OSA is related to being overweight. A medical professional should be consulted before beginning any sort of weight loss program.

### **Pharmacological Interventions**

The opinion among most clinicians is that medication should be temporary and in addition to psychological treatment rather than in place of it. There is currently one medication recognized for treating nightmares and PTSD, called Prazosin. Besides Prazosin, doctors may prescribe other medications accordingly. If you've tried everything else but nothing is working, you should consult with your doctor to decide if medication is necessary. If so, remember that everyone responds to medication differently, so it may take some time to figure out what is best for you.

### **When Should I Seek Help?**

The answer to this question will be different for everyone. It is completely normal for all people, even those who have not experienced a traumatic event, to have difficult nights of sleep on occasion. However, when these issues are happening regularly and interfere with other areas of life (relationships, work, emotions, etc.) and/or when you find yourself turning to maladaptive coping strategies, such as drugs and alcohol, it is important to speak with a therapist or a doctor to get a professional opinion and decide if further treatment is necessary.

## **Conclusion**

Thank you for joining today's Trauma and Sleep Disturbance workshop.

Trauma and sleep issues go hand in hand, and this is extremely common among trauma survivors. Poor sleep is linked to health problems and difficulty functioning throughout the day, which can worsen PTSD symptoms and make it more difficult to cope. Luckily, the common trauma-related sleep disorders are treatable, and you have the ability to heal and take steps toward feeling better.

I hope you feel encouraged by all the work you have put into your recovery this far, whether this workshop is the first step, or you've been on this journey for a little while now. I hope that you felt validated and heard today and that you were able to take some information away from this

workshop. Thank you for showing up, listening well, and being open about your thoughts and experiences.

Be sure to look at all the resources included in the handouts at the end of this workshop, and remember to take good care of yourselves and be patient with your progress as you continue in your recovery.

## **Helpful Apps**

### **Insomnia Coach**

[https://www.ptsd.va.gov/appvid/mobile/insomnia\\_coach.asp](https://www.ptsd.va.gov/appvid/mobile/insomnia_coach.asp)

Insomnia coach is a free mobile app created to help people manage insomnia. It is based on Cognitive Behavioral Therapy for insomnia (CBT-i). It features a guided, weekly training plan to help track and improve sleep, a sleep coach that provides tips and personal feedback, an interactive sleep diary, and various other tools for improving sleep. Insomnia Coach can be used as a stand-alone self-care tool, but it may be helpful to consult with a doctor before using this app or pair it with professional mental health care.

### **CBT-i Coach**

[https://www.ptsd.va.gov/appvid/mobile/cbticoach\\_app\\_public.asp](https://www.ptsd.va.gov/appvid/mobile/cbticoach_app_public.asp)

CBT-i Coach is a free mobile app designed for people who are engaged in Cognitive Behavioral Therapy for Insomnia. It includes educational resources about sleep and CBT-i, tips for improving sleep, a sleep diary feature, and relaxation exercises. While CBT-i coach can be used on its own, it is not intended to replace therapy or clinical treatment.

### **PE Coach**

[https://www.ptsd.va.gov/appvid/mobile/pecoach\\_app\\_public.asp](https://www.ptsd.va.gov/appvid/mobile/pecoach_app_public.asp)

PE Coach is a free mobile app for people who are receiving Prolonged Exposure therapy. It includes education about PE therapy, homework reminders, features to track assignments and PTSD symptoms, and guidance for breathing training. This app should only be used alongside PE therapy with a clinician.

### **CPT Coach**

[https://www.ptsd.va.gov/appvid/mobile/cptcoach\\_app\\_public.asp](https://www.ptsd.va.gov/appvid/mobile/cptcoach_app_public.asp)

CPT Coach is a free mobile app designed for patients engaged in Cognitive Processing Therapy. It features education about CPT, a place to track PTSD symptoms, homework assignments and worksheets, and reminders for therapy appointments. This app should be used while in treatment with a therapist trained in CPT.

**PTSD Coach**

[https://www.ptsd.va.gov/appvid/mobile/ptsdcoach\\_app.asp](https://www.ptsd.va.gov/appvid/mobile/ptsdcoach_app.asp)

PTSD Coach is a free mobile app that offers educational resources and tools for managing PTSD symptoms. There are tools for screening and tracking symptoms, tips for coping with stress, and direct links to further support.

**Mindfulness Coach**

[https://www.ptsd.va.gov/appvid/mobile/mindfulcoach\\_app.asp](https://www.ptsd.va.gov/appvid/mobile/mindfulcoach_app.asp)

Mindfulness Coach is a free mobile app to aid in practicing mindful meditation. The app offers education about the benefits of mindfulness, mindfulness exercises to try on your own, a place to track your progress, and strategies to help face any challenges to mindfulness practice.

**Breathe2Relax**

<https://apps.apple.com/us/app/breathe2relax/id425720246>

<https://play.google.com/store/apps/details?id=org.t2health.breathe2relax&hl=en>

Breathe2Relax is a free mobile app available for Apple and Android. It teaches diaphragmatic breathing through guided, customizable practice sessions. Breathe2Relax can be used either as a stand-alone self-care app or along with professional mental health treatment.

**Headspace**

Headspace is a mobile app focusing on mindful meditation. Users can begin with a 14-day free trial before purchasing a subscription. The app offers a variety of meditation exercises, sleep sounds, and inspirational videos as well as ways to track your progress.

**Calm**

Calm is a mobile app for mindful meditation. The free trial version offers access to timed meditation sessions, calming scenes and music, and various other mindfulness tools. Users can purchase a subscription and receive unlimited access to meditation and sleep resources. There is also a place to track your progress.





### **Mindful Meditation and Relaxation Links**

10 Minute Guided Meditation for PTSD (No Music, Voice Only)

10 minutes

[https://youtu.be/hKS1SG\\_PZD0](https://youtu.be/hKS1SG_PZD0)

10-Minute Meditation For Sleep

10 minutes

<https://youtu.be/aEqIQvczMJQ>

GUIDED MEDITATION for Healing Anxiety, PTSD, Panic & Stress

18 minutes

<https://youtu.be/YzRUEmqDJd8>

Guided Sleep Meditation & Deep Relaxation

20 minutes

<https://youtu.be/rvaqPPjtxng>

PTSD Visualization: for trauma relief & healing (Spoken Meditation)

38 minutes

<https://youtu.be/H8e4sATalz8>

Healing Trauma Recovery - Guided Meditation for Relaxation, PTSD, Anxiety and Sleep

48 minutes

<https://youtu.be/e-RxDFgJook>

Beautiful Relaxing Music for Stress Relief - Relax, Sleep, Meditate, Study (High Above)

3 hours, 12 minutes

<https://youtu.be/LXK3sphcbAQ>

Dream with Rain & Thunder Sounds for Sleeping - Help Study, PTSD, Insomnia & Tinnitus  
9 hours  
<https://youtu.be/XtDwPLk8EgI>

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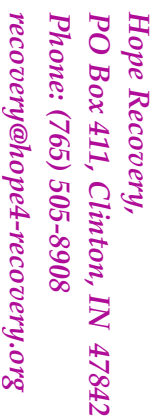
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For Mood, rate 1 as the most depressed, and 10 as manic. Rate each \* question at the end of each day with the scale of 0 to 10 (0 being no symptoms, and 10 being the worst). Answer each # questions at the end of each day with the N for No, or if Yes, the 1 to 10 scale.

[illegible]



