Management of Pediatric Nighttime Fears and Nightmares

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Disclosures

- The presenter has nothing to disclose.

Objectives

- Review prevalence and etiology of nighttime fears and nightmares in a pediatric population
- Discuss diagnostic criteria and associated characteristics of pediatric nighttime fears and nightmares
- Discuss common treatment options to address pediatric nighttime fears and nightmares

Nighttime fears in children are common

- In community samples: 64-74 percent of children report some nighttime fears
  - Parents are not always aware

- Can start around age 3-5 yrs. as imagination develops
  - Difficulty distinguishing fantasy from reality

- Most children “grow out of” them (with basic parental assistance)
  - Transient/mild nighttime fears are a normal part of development
  - With some children, fears and need intervention

Gordon et al., 2007; Lewis et al., 2021; Meltzer & Crabtree, 2015; Muris et al., 2001

Etiology of nighttime fears

- Nighttime fears
  - Biology
    - Predisposed to anxiety/ temperament
    - Children with medical conditions
  - Environment
    - Conditioning, modeling
    - Parent factors
    - Trauma, negative life events

- Lewis et al., 2021

Negative effects associated with nighttime fears

- Child sleep disturbances
  - Possible disruptive sleep patterns, obtaining less sleep, waking up more frequently, poorer quality of sleep

- Caregiver sleep disturbances

- May serve as a marker for anxiety, vulnerability or associated with neurobehavioral, cognitive and academic difficulties

Kushnir & Sadeh, 2014; Kushnir & Sadeh, 2011; Lewis et al., 2021

Assessment

- Assessing fear of the dark
  - Likert-like ratings (may used faces for younger children)
  - Nighttime Fears Interview
  - Childhood Darkness Phobia Questionnaire (CDPQ)
  - What My Child Can Do in the Dark (WICDAN)

- Semi-structured general and/or anxiety-focused diagnostic interviews
  - Used less commonly
  - Anxiety Disorders Interview Schedule for Children (ADIS-C/P)

Lewis et al., 2021

Assessment

- Nighttime Coping Response Scale (NCRS) (ages 8-12)
  - 15 items measuring coping strategies related to self-control, social support seeking, and avoidance

- Assessing separation anxiety
  - Separation Anxiety Advoidance Inventory

- Direct Behavioral Assessment
  - Behavioral Avoidance Test for Dark Fears (ages 4-7)

- Actigrapahy

Lewis et al., 2021

Assessment

- Does your child worry more than other children her age?
- Is the anxiety only at bedtime or throughout the day?
- Are the fears/anxieties interfering with separation from parents, daycare/school attendance, and slash or social activities?
- Can your child be alone in their bedroom (or any room) during the day?

- Screen for a history of trauma. If nighttime fears are related, consider trauma therapy referral

Meltzer & Crabtree, 2015

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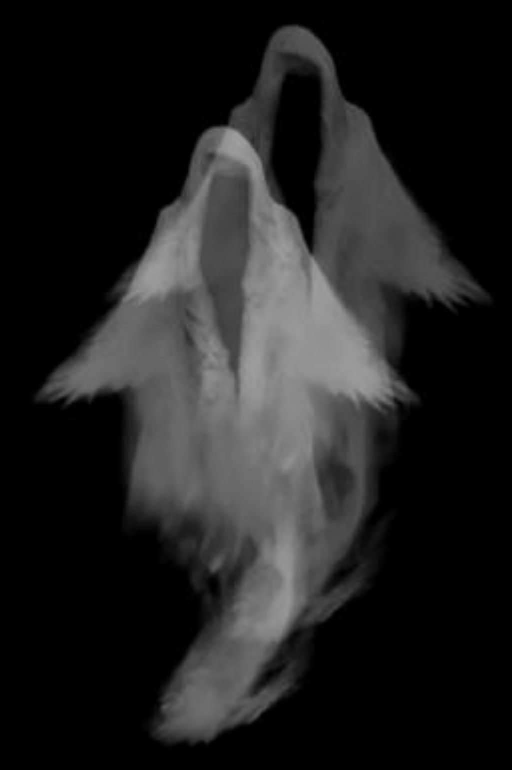
Diagnosis of nighttime fears

- There isn’t one.
- If diagnosed at all, most are given behavioral insomnia of childhood
- Some nighttime fears may qualify for a diagnose of a specific phobia
- Nighttime fears may be a subset/symptom of: generalized anxiety or trauma history

Top 5 nighttime fears of the 5 and under crowd*

- 5. Anything on YouTube
- 4. Spiders
- 3. Pennywise (or any clown, really…)
- 2. The closet or under the bed or out the window
- 1. I mean, am doing what I should be doing in life? Should I make a change? Sometimes I think I'd be happier just making blender drinks on a beach somewhere, ya know? No stress, sunshine…..



Nighttime fears in older children

- Content

	8-12	13-16
• Personal security	22%	13%
• Environmental threats	19%	18%
• Frightening dreams	15%	2%
• Imaginary creatures	8%	2%
• Family/friends security	4%	2%
• Insects/animals	4%	1%
• Worry about day's events	2%	3%
• No fears reported	21%	52%

Gordon et al., 2007

Treatment

Gold standard: cognitive behavior therapy (CBT), CBT-I (Insomnia)

- Specific components:
  - Cognitive strategies:
    - Cognitive restructuring
    - Bravery tools/cognitive self instruction (bravery imagery, positive self statements, fear tools)
    - Relaxation/mindfulness/distraction
  - Rewards/incentives
  - Exposure with response prevention
  - Bibliotherapy
  - Environmental management

Step 1: determining the specific fear(s)

- Are they based in reality or fantasy
  - If it's fear of the dark, explore – it's often a fear of something "getting them" in the dark
  - Real or pretend (fantasy) game: (determine what caregivers believe first)
    - Monsters=fantasy; spiders=real
      - Most "real" fears still can be moved to the fantasy column
      - sharks=real; sharks hurting us in the bed=fantasy
  - If the fear is actually possible (e.g. worried about break-ins, caregivers indicate high crime rate in neighborhood)
    - Help caregivers to focus on the safety measures in place
  - Any religious-based fears (spirits/devil, etc.), or culture-specific fears, talk with caregivers separately first

Step 2: Pick a strategy based on age/developmental level

- Some children's' fears decrease significantly once they learn that their fears are "pretend."
  - Caregivers can then play the real/pretend game with any new fears

- Other children don't believe you and don't care that you have been doing this for 18 years.
  - Provide tools to defeat the fears.
    - Monster spray, special flashlights, other "weapons"

Step 3: Provide other coping tools

- Emotive Imagery
  - Develop story about child the emulating a brave person, character
- Relaxation strategies
  - Diaphragmatic breathing, progressive muscle relaxation
- Transitional objects
  - Stuffed animal, toy, parents' article of clothing/object
  - Huggy Puppy Intervention
- Bravery imagery
  - Bravery statements
  - Brave heroes
- Environmental tools
  - Nightlight, projector light, sound machine, white noise, closet closed/opened

Huggy-Puppy Intervention (HPI)

- Huggy-Puppy Intervention (HPI)
  - Using a stuffed animal to shifting the child's attention from the internal distress of a nighttime fear to an external object
- Based on previous research involving children's reactions to war-related stress
  - HPI was used to decrease stress/PTSD symptoms in young children in a special shelter during a 2006 war between the Israeli defense forces and the Hezbollah (N=74).
  - 2nd study focused on Israeli children in several kindergarten classes in the affected areas, postwar. Study was more randomized, controlled
  - Children attached to the doll, stressed levels decreased

Kushnir and Sadeh, 2012

Huggy-Puppy Intervention (HPI)

- Child is provided a new stuffed animal
- Parent script (can be adapted for specific situation):
  - “This is my friend Huggy. Huggy is usually a very happy puppy. Right now, he looks sad and scared. Can you guess why? He is sad because he is far from home and can't see his friends. He likes to be hugged a lot but has no one to take care of him. Can you be his good buddy, take care of him, hug him a lot and take him to bed with you when you go to sleep?”
  - **OR**: This puppy helps kids not be afraid at night. If you feel afraid, you can tell this puppy and hug him, so you aren’t so scared.
- Parent encourages attachment to toy during the day

Kushnir and Sadeh, 2012

Why it’s effective

- Stressed children are highly likely
  - to use pretend play to project feelings and anxieties onto toy figures
  - to identify with those feelings and to regulate emotions while caring for the toy

- Attentional processes in anxiety and stress reactions
  - Anxiety disorders are associated with attentional biases
    - Focusing inwardly on fear-related sensations and thoughts
    - Reducing self-awareness can decrease anxiety

Step 4: Facing the bogey man!!!
(or evil clown, or slender man, or Bloody Mary, etc., etc.)

Graduated exposure to feared situations

- Based on shaping and classical conditioning theories

1. Determine starting point for child and parent for the exposure protocol (E.g. in the room with parent, parent in hall, parent in living room, etc.)
2. Expose child to feared stimulus (in bedroom at night) without an escape option and pair it with a neutral or positive stimuli
3. Child learns that the feared stimulus is not harmful
4. Confidence is built, child becomes more confident, less fearful
5. Presence of parent is faded over time as confidence builds
6. Consider a reward program if age-appropriate
7. Consider bedtime pass if age-appropriate
    - Child can leave room 1-2 times for hug, kiss, then must surrender pass
    - Phase out use of pass over time

Exposure Therapy 101

Children are gradually exposed early in treatment to things and situations they fear, and parents receive training as 'exposure coaches.' Instead of avoiding situations, the child begins to learn new ways to behave.

◀ Don't Overreact
If your child is complaining or distressed about an upcoming situation—say it's a math test—tell him you understand how upsetting it is but you are going to be very proud of him for trying.

Save the Praise ▶
Praise the child only after she actually takes a step toward dealing with her fear, such as germs. ('You did a great job of riding the bus on the field trip.')

One Step at a Time
Encourage your child to take small steps toward a goal, such as visiting the airport in advance of a scheduled flight.

Encourage Decision-Making
Let your child make some choices on his own, such as whether to walk past a dog or visit a house where there is a dog.

Grin and Bear It
Engage your child in situations that might involve her fears, such as conversing with strangers—even if you think she might become upset or make a scene.

Postitive Reinforcement
Communicate that you are confident your child can accomplish the goal, such as separating from the family for a camping trip. Tell her it will get easier every time she does something new.

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Preschool/school age nighttime fears: parent tips:

- Take nighttime fears seriously
- Tap your inner child to “sell” the intervention
- Reassure, but don’t reinforce, fears
  - Delicate balance for parents
- Add positive reinforcement when age appropriate
  - Sticker charts, **small** prizes/privileges
  - Prizes usually don’t work
    - without fear management
    - AND/OR if child is able to escape the fear

Contraindications:

- Children who have experienced trauma
- Severe separation anxiety
- Attachment disorder
- Generalized anxiety

May need to address trauma/daytime anxiety first

NIGHTMARES

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Nightmares in children are common

- Nightmares: Highly dysphoric dreams involving intense negative emotions which primarily present during late night rapid eye movement (REM) sleep
- Up to 75% of young children will have occasional nightmares, most do not need professional treatment
- About 3-5% experience more frequent nightmares (1 or more a week)
  - Adults: 1 in 20, much higher in psychiatric population

American Academy of Sleep Medicine (2014); Rek et al. (2017)

Clinical features

- Dream Content is scary and vivid, usually with negative themes that result in fragmented sleep
- Themes can include: helplessness, accidents, being chased, health related concerns and death , interpersonal conflicts, scary fantasy images
- Heightened sense of awareness , increased sympathetic tone: palpitations, increased blood pressure, increase heart rate, sweating, and anxiety upon awakening
- Usually occur during REM sleep which is more predominant in the last third of the night
  - exception: if nightmares are associated with PTSD , then may occur in N1/N2 and REM sleep

Zak & Karippot (2021).

Nightmare disorder

- To quality for a diagnose of nightmare disorder: (ICSD-3)
  - Must have frequent nightmares that often include imagery of threats to their safety and security
  - when they awaken they feel very alert and often remain frightened
  - have daytime difficulties (one or more: mood disturbances, sleep resistance, cognitive impairment, negative impact on caregiver or family functioning)
  - often will resist going to bed or staying in bed as a result of feeling fearful of reexperiencing nightmares
  - Not explained solely by medication or coexisting mental or medical disorders

  - Diagnostic and Statistical Manual, 4th Edition (DSM-IV):
    - not explained by presence pf PTSD
    - acute (less than 1 month), subacute (1–6 months), persistent (more than 6 months)
    - frequency: mild (less than one episode a week), moderate (multiple time a week), severe (nightly).

American Academy of Sleep Medicine (2014); American Psychiatric Association (2013)

Factors possibly associated with nightmares/nightmare disorder

- History of anxiety
  - Per parent report, up to 80% of 6-18 yr. olds with an anxiety disorder experience nightmares
- Trauma history/PTSD history
- Increased stress
- Difficulty differentiating between fantasy and reality
- Dissociation
  - feel disconnected from yourself and the world around you
    - Can be common response to trauma
- Family hx
- Medication (E.g., dopamine agonists (methylphenidate, antidepressants)

Rek at al., 2017; Reynolds & Alfano, 2016

Differential diagnosis

- Dysphoric dreams
  - Lack of awakening from sleep
- REM sleep behavior disorder
  - Nightmares associated with motor activity/vocalization
- Nocturnal panic attack
  - awaken from sleep with a sense of impending doom, sometimes associated with tachycardia and hyperventilation
  - not usually associated with recall of a dysphoric dream, physical hyperarousal generally greater than associated with nightmares
- Nighttime fears
- Hypnopompic /hypnagogic hallucinations
  - most clearly associated with narcolepsy
  - usually visual but can involve other senses

Meltzer & Crabtree, 2015; Zak & Karippot (2021).

Nightmares are not sleep terrors

- Nightmares
  - Latter part of night
  - REM stage
  - Distress after event
  - Recall of event
  - Onset during early school age

- STD/SW
  - First 3 hours of sleep
  - NREM stage
  - Distress during event
  - No recall of event
  - Onset during early school age – often resolve by age 10-12 years
  - Generally benign

Assessment

- Nightmares:
  - Onset, frequency, intensity
  - Level of concern
    - Nightmare Distress Questionnaire-Modified (self report)
  - Bedtime resistance/fears
  - Daytime functioning impairment

- Trauma
  - Screen for trauma history, refer to specialist as needed
    - Trauma Related Nightmare Survey–Modified Version (TRNS-M) (self report)

- Stress

Assessment

- Generlaized anxiety
  - Semi-structured general and/or anxiety-focused diagnostic interviews
    - Anxiety Disorders Interview Schedule for Children (ADIS-C/P) (there are many others)

- Assessing fear of the dark
  - Likert-like ratings (may used faces for younger children)
  - Nighttime Fears Interview (Muris, waiting ofr article)
  - Childhood Darkness Phobia Questionnaire
  - What My Child Can Do in the Dark (WICDAN)

Treatments: Medication

- Prazosin
  - alpha-1 adrenergic receptor antagonist
  - mixed results
- Nitrazepam, Triazolam
  - benzodiazepine hypnotics
  - negative side effects include morning sedation and difficulty concentrating in the morning
  - studies focused on adults

Hudson et al., 2021; Morgenthaler et al., 2018; Raskin et al., 2018;

Non-pharmaceutical treatments for nightmares:

- Imagery Rehearsal Therapy
- Cognitive behavioral therapy
- Exposure
- Relaxation
- Rescripting therapy
- Hypnosis
- Lucid dreaming therapy
- Progressive deep muscle relaxation
- Sleep dynamic therapy
- Self-exposure therapy
- Systematic desensitization
- Testimony method

Morgenthaler et al., 2018

Step 1: Addressing nightmare beliefs

- Children often believe one or more of the following statements:
  - Dreams and nightmares can predict future events.
  - When I wake up, what I was dreaming might be in my room.
  - I will get stuck/die in my dream.
- Cognitive restructuring to address cognitive distortions
  - May be all that's needed
    - Very effective with children that believe doctors ☺

Step 2: Provide bravery tools to empower/build confidence

- Bravery imagery
  - Think of someone/thing that is brave, pretend you are them when you are scared

- Bravery statements:
  - "I know nightmares can't hurt me and that I am safe."

- Transitional objects
  - Ordinary stuffed animals, object of parent
  - Therapeutic objects
    - Huggy Puppy
    - Dream Changer
    - Dream catchers

The Dream Changer

- Small, light-emitting device that helps child “change” the content of their dreams
- Randomized controlled trial: N=56 children 3-10 yrs.
- Intervention group:
    - 3.4 nightmares per week at baseline, 1.6 at post-treatment
    - Changes were stable 3 months post
- Control group: no significant change

Bourboulis, S., Gradisar, M., & Kahn, M. (2022).

The Dream Catcher

- Hung above/near a crib or bed
- “Catches” any negative dreams in the net/web while letting positive dreams go through the center hole
- May want to refer to the “web” as a “net” because of, well, spiders

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The Dream Crusher

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Step 3: Manage symptoms after the nightmare

- When waking up from a nightmare:
  - Increased heart rate, shallow breathing, still may feel like they are in the dream

- Relaxation strategies
  - Slow, deep breathing is one of the easiest

- Grounding

- Use bravery tools

Step 4: Other coping tools

Imagery Rehearsal Therapy

- **form of cognitive behavioral therapy**

- **WRITE DOWN** the narrative or the central elements of the bad dream
- **REWRITE** the dream on another piece of paper CHANGING the story so that it results in a positive ending.
  - For children: option to draw a new ending instead of writing it out.
- Just before falling asleep (or maybe during the day), **INDUCE THE INTENTION TO RE-DREAM.**
- **TRY NOT TO WORRY ABOUT YOUR NIGHTMARES**.

How does IRT work

- IRT treats nightmares as a specific issue that a child/family can address.
- IRT also teaches that nightmares actually serve a “helpful” purpose. For example, nightmares might help the child to emotionally process a traumatic event. But over time, these bad dreams hurt more than they help.
- IRT might teach a child to view nightmares as habits or learned behaviors — ones that you can alter and adjust so they no longer disturb them.
- Another core belief of IRT is that working with dreams during the day can influence a child’s nighttime dreams, and as an extension of that, the nightmares.

Washington, 2021

Acceptance and Commitment Therapy (ACT)

- Inner emotions/deeper feelings are appropriate responses to certain situations
- But…..they should not prevent moving forward
- Accept some hardships/commit to making changes
  - Mindfulness – try not to judge your response

- With nightmares:
  - May not be able to eliminate them
  - Since they can’t hurt me, can I live with them?
    - Any way to use them as a positive?
      - Inform artistic projects

Patient/family resources

What to Do When You Dread Your Bed: A Kid's Guide to Overcoming Problems With Sleep (What to Do Guides for Kids) Paperback –
by Dawn Huebner (ages 6-12)

I Believe There's A Monster Under My Bed Paperback – Large Print, by Shelby L Paul (ages 6-8)

What Was I Scared Of?: A Glow-in-the Dark Encounter (Classic Seuss) Hardcover by Dr. Seuss (ages 5-9 years)

Follow Me To Good Dreams Hardcover by Shea Birnie (Author), Kayla Omsberg (Illustrator) (ages 3-6)

Who Is The Brave One Now: Kids Bedtime Story Books to Help Overcome Fear and Fall Asleep In The Dark Kindle Edition
by Ronald Destra (Author), Juanita Destra (ages 6-11)

Everything You Need to Know About NIGHTMARES! and How to Defeat Them: The Nightmares! Handbook Hardcover – Deckle Edge, by Jason Segel (Author), Kirsten Miller (Author), Karl Kwasny (Illustrator) (ages 8-12)

And here is a list of books for younger children who are struggling with nightmares. Follow the link below or type in google: pop sugar books about nightmares.

https://www.popsugar.com/family/Books-About-Nightmares-Kids-21768399?stream_view=1#photo-21768420

In the sleep lab

- Keep monster spray on hand

- Have a dream catcher

- Be proactive
  - Tour of lab before actual study
  - Watch sleep study prep video
  - Encourage parents to bring comfort/bravery objects

- Interestingly, some kids with nighttime fears/nightmares actually feel safer in the Lab
  - Reverse first night effect
  - Take opportunity to tell them they are safe everywhere, not just in the sleep lab

Summary

Both nighttime fears and nightmares are a normal part of childhood and should not be pathologized on their own.

That said, there is a subset of kids that need help with these issues and if not treated they can:

- exasperate and/or create other sleep related issues
- influence other mental health care concerns
- negative effect quality of life not only for the child but for the family slash caregivers

There are many treatment options for both nighttime fears and nightmares but not a one-size-fits-all so a thorough assessment is key

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