

# *PARASOMNIAS & BEHAVIOURAL SLEEP PROBLEMS IN CHILDREN*

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# PARASOMNIAS

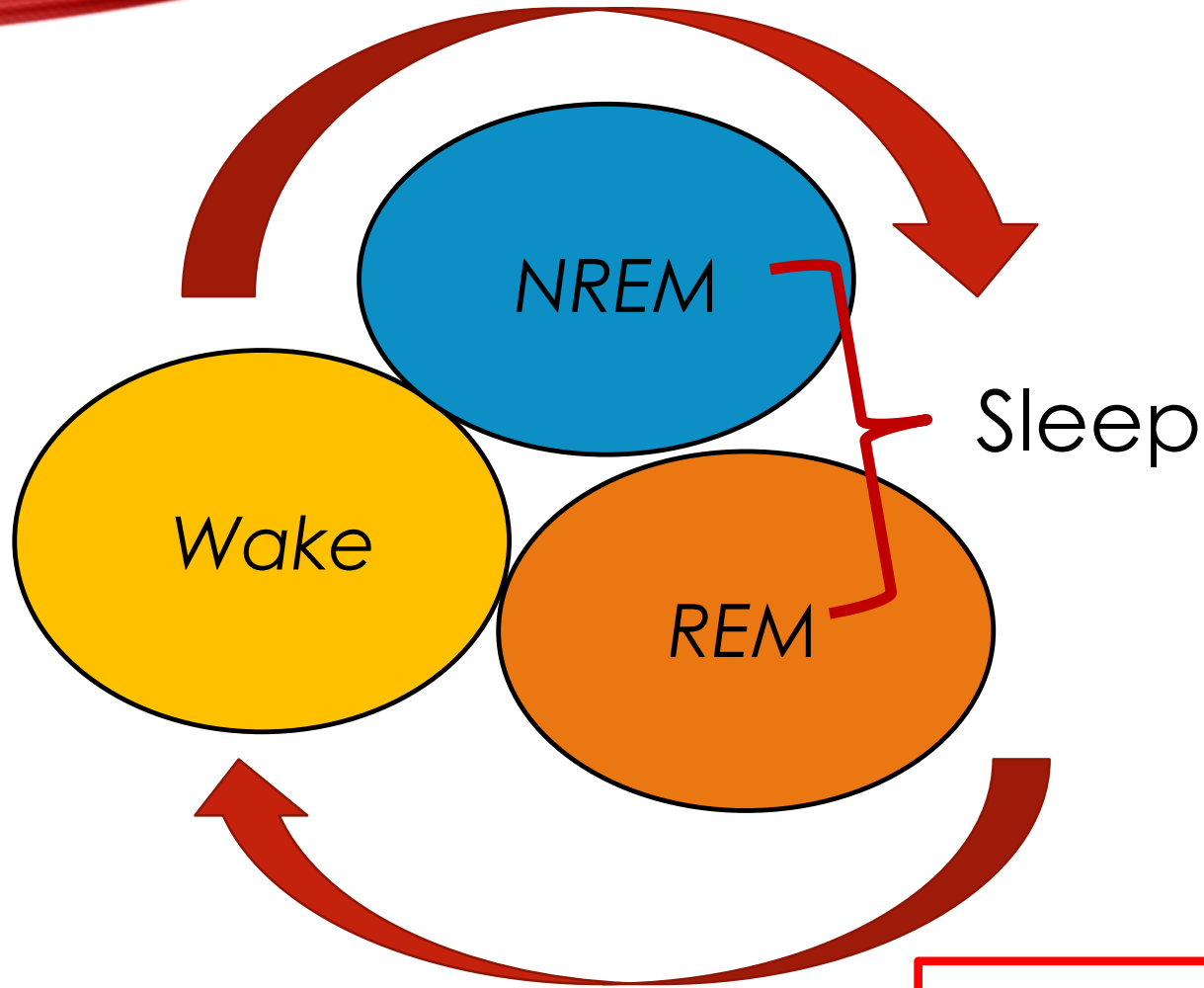
“Undesirable physical events or experiences that occur during entry into sleep, within sleep, or during arousal from sleep”



# PARASOMNIAS

- Parasomnias may occur during non-rapid eye movement sleep (NREM), rapid eye movement sleep (REM), or during transitions to and from sleep
- **The 'good'**
  - Sleep quality in general remains unaffected
- **The 'bad'**
  - The events do lead to significant worry for the caregivers

# PATHOPHYSIOLOGY



Modulated by:

- aminergic and cholinergic neurochemical bias
- central nervous system (CNS) activation
- endogenous vs exogenous input
- homeostatic drive
- circadian rhythmicity

Temporary unstable state of dissociation

# PATHOPHYSIOLOGY

- Genetic predisposition
- Dissociation between wake, NREM sleep and REM sleep
- (behaviours characteristic of one stage becoming superimposed on another)
  - During sleep onset: hypnic starts, sleep paralysis, rhythmic movements
  - During sleep: confusional arousals, sleep terrors, sleepwalking
- Subside in most children by 2<sup>nd</sup> decade
  - Progressive maturation of descending cortical inhibitory projections on brainstem and spinal cord



## NREM-related parasomnias

- Confusional arousals
- Sleepwalking
- Sleep terrors
- Sleep-related eating disorder

## REM-related parasomnias

- REM sleep behaviour disorder
- Recurrent isolated sleep paralysis
- Nightmare disorder

## Other parasomnias

- Exploding head syndrome
- Sleep related hallucinations
- Sleep enuresis
- Parasomnia due to a medical disorder
- Parasomnia due to a Medication or substance
- Parasomnia, unspecified

## Isolated symptoms and normal variants

- Sleepwalking

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# CONFUSIONAL AROUSALS

- Most common in toddlers
  - 17.3% in children 3-13yrs old (lifetime prevalence 18.5%)
- Onset typically within 2-3hours of sleep onset
- Sit up in bed, whimper, cry or moan
- “ No...” “ Go away...”
- Appear distressed
- Remain inconsolable
- Remains seated in bed

*-Stores G. Parasomnias of childhood and adolescence. Sleep Med Clin 2007;2:405-417*

*-Rosen GM, Mahowald MW. Disorders of arousal in children. In: Sheldon SH et al. Principles and practice of paediatric sleep medicine. Philadelphia:Elsevier Saunders; 2005.pp.293-304*



Pre-school children: 88%  
had at least one parasomnia

# PREVALENCE

Age, y	Parasomnias, n (%)					
	Somnambulism (n = 1035; B: 505/G: 530)	Sleep Terrors (n = 1043; B: 501/G: 542)	Somniloquy (n = 1041; B: 503/G: 538)	Enuresis (n = 1137; B: 551/G: 586)	Bruxism (n = 1062; B: 510/G: 552)	Rhythmic Movements (n = 1058; B: 507/G: 551)
2.5	34 (3.3)	208 (19.9)	505 (48.5)	NA	110 (10.4)	58 (5.5)
3.5	26 (2.5)	217 (20.8)	561 (53.9)	NA	180 (16.9)	29 (2.7)
4.0	42 (4.1)	181 (17.4)	606 (58.2)	NA	228 (21.5)	29 (2.7)
5.0	50 (4.8)	123 (11.8)	634 (60.9)	243 (21.4)	295 (27.8)	28 (2.6)
6.0	81 (7.8)	118 (11.3)	605 (58.1)	183 (16.1)	346 (32.6)	21 (2.0)
Overall	150 (14.5)	415 (39.8)	879 (84.4)	284 (25.0)	484 (45.6)	97 (9.2)
P	NS	<.001	<.001	<.001	<.001	<.004

# NREM parasomnias

**Table 1 A comparison of the arousal parasomnias**

Clinical feature	Confusional arousal	Sleep terror	Sleep walking
Age of onset (years)	2–10	2–10	5–10
Frequency	3–4 per week to 1–2 per month	3–4 per week to 1–2 per month	3–4 per week to 1–2 per month
Peak time of occurrence	First third of night sleep	First third of night sleep	First third of night sleep
Ictal behavior	Whimpering, some articulation, sitting up in bed, inconsolable	Screaming, agitation, flushed face, sweating, inconsolable	Walking about the room or house, may be quiet or agitated; unresponsive to verbal commands
Ictal polysomnogram	Slow wave sleep with rhythmic theta or delta activity	Slow wave sleep with rhythmic theta or delta activity	Slow wave sleep with rhythmic theta or delta activity
Duration (min)	10–30	10–20	10–20

**Table 2 Distinction between arousal parasomnias and nocturnal seizures**

Feature	Arousal parasomnias	Nocturnal seizures
Age of onset	Preschool age and childhood	Infancy, preschool age, childhood, and adolescence
Family history of similar events	May be positive	May or may not be positive
Time of occurrence	First third of night sleep (usually)	Randomly through the night
Most common sleep stage at occurrence	Slow wave sleep	Stages I or II of NREM sleep
Duration of event (min)	10–30	0.5–5
Multiple events on a single night	Less likely	More likely
Polysomnogram (EEG)	Rhythmic theta or delta activity	Normal/spikes or sharp waves over a focal or generalized distribution
Usual daytime behavior	Normal (unless complicated by sleep-related breathing disturbance or restless legs/periodic limb movement disorder)	May be irritable and sleepy; seizures may also occur during the day
Pharmacological therapy	Benzodiazepine at bedtime	Daytime and bedtime administration of oxcarbazepine/lamotrigine/levetiracetam/carbamazepine/phenytoin

Nocturnal frontal lobe seizures: mutations in *CHRNA2*, *CHRNA4*, *CHRNA2*

-Kotagal S Curr Opin Pediatr 2008, 20:659-665

# MANAGEMENT



- No treatment needed for majority
- Educate ; reassure
- Avoid triggers
  - Ensure adequate sleep
  - Screen for OSA, PLMD (consider PSG)

- Emphasize home safety
  - Door alarms
  - Locked grilles /windows
  - Do not attempt to wake the child
- Low dose benzodiazepines
  - SWS suppressants
  - Clonazepam 0.125-0.5mg at bedtime
- Anticipatory awakening
  - 15-30min prior to usual time of occurrence for 2-4wks
  - Alter the sleep state

-Tobin JD. *J Pediatr* 1991;122:426-427

-Johnson MC et al. *Infant Mental Health J* 1985;6:21-30

-JAMA *Pediatr.* 2015;169(7):704

-Frank NC et al. *J Pediatr Psychol* 1997;22:345-53

Attarian JZ. *Int J Neurosci* 2013;123:3

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## Isolated symptoms and normal variants

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## Nightmare disorder

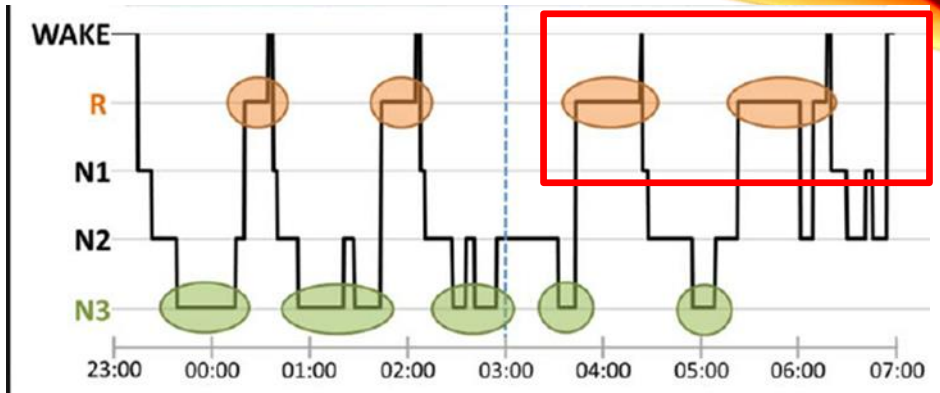
- “Bad dreams that awaken the dreamer”
- Recurrent episodes of awakening from sleep with recall of intensely disturbing dream mentation , usually involving fear or anxiety, but also anger, sadness, disgust, and other dysphoric emotions
- Depicted in a 1781 painting by Henry Fuseli, “The Nightmare”





# Nightmare disorder

- Full alertness upon awakening
- Intact recall
- Brief, but may have delayed return to sleep
- Second half of the night (early hours of the morning)
- Start between 3-6 yrs old; peaks between 6-10 yrs old
- 10% to 50% of children 3-5yrs old
  - occasional nightmares severe enough to disturb their parents
- Frequent nightmares are uncommon (1-5% of preadolescent children)
  - 2-8% of the general population
  - Related to anxiety-level
  - Trauma-related nightmares (PTSD)



-Lavie P. Sleep disturbances in the wake of traumatic events. N Engl J Med 2001;345:1825-32.

-Levin R, Fireman G. Nightmare prevalence, nightmare distress, and self-reported psychological disturbance. Sleep 2002;25:205-12.

# MANAGEMENT

- Reassurance
- Rescripting techniques
  - Create more pleasant endings
- Desensitisation techniques
  - Write/draw the content
- Hypnotherapy
  - 71% improved at 18mths , 67% spell-free after 5 yrs

-Sadeh A. Cognitive behavioral treatment for childhood sleep disorders. *Clin Psychol Rev* 2005;25:612-628

-Halliday G. *Clinical handbook of sleep disorders in children*. 1995 p149-175

-Hauri PJ *et al*. *J Clin Sleep Med* 2007;3:369-373.

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# SLEEP ENURESIS

## Diagnostic Criteria

### Primary Sleep Enuresis – Criteria A-D must be met

- A. The patient is older than five years.
- B. The patient exhibits recurrent involuntary voiding during sleep, occurring at least twice a week.
- C. The condition has been present for at least three months.
- D. The patient has never been consistently dry during sleep.

### Secondary Sleep Enuresis – Criteria A-D must be met

- A. The patient is older than five years.
- B. The patient exhibits recurrent involuntary voiding during sleep, occurring at least twice a week.
- C. The condition has been present for at least three months.
- D. The patient has previously been consistently dry during sleep for at least six months.

# SLEEP ENURESIS

- Affects 4-15% of school children
- Prepubertal group : boys 2-3x more common
- Strong genetic predisposition (primary group)
- Acquired factors (secondary group)
  - UTI, OSA, diabetes, psychological disturbances
- Etiology is complex:
  - large nocturnal urine volume production
  - nocturnal bladder overactivity
  - difficulty arousing from sleep

-Sheldon SH. *Child Adolesc Psychiatr Clin North Am* 1996; 5:661-672

-Kotagal S *Curr Opin Pediatr* 2008, 20:659-665

-AASM, ICSD-3, 2014

# MANAGEMENT

- No treatment needed before 6 yrs old
- Depends on frequency and severity
- Daytime bladder training
- Alarm systems ('conditioning')
  - Success in 65-80%
  - Relapse rate 10-15%
- Medications
  - Imipramine
  - Oxybutinin } Reduce parasympathetic tone of the detrusor
  - Desmopressin } Promote fluid retention

*-Kotagal S Curr Opin Pediatr 2008, 20:659-665*  
*-Kamperis K et al. J Urol 2008;179:817-818*



# BEHAVIOURAL SLEEP PROBLEMS IN CHILDREN



# BEHAVIOURAL SLEEP PROBLEMS

Very  
common

Poor sleep is associated with poorer behaviour, learning, socio-emotional functioning and quality of life (both child & parents)

Problems getting to sleep, problems of waking in the night, or a combination of both

# CASE EXAMPLES



## Baby M

- 10 months old
- Nursed to sleep by his mother nightly
- Wakes 4-5x in the night, long periods of crying each time
- His mother has to nurse and cuddle him back to sleep each time

## Little S

- 4 years old
- Started nursery this year
- “Late sleeper”
- Watches cartoons till 2300hr
- Falls asleep on sofa
- Has to wake up at 7am
- Bad temper tantrums; bites other children



# Behavioural Insomnia of Childhood (BIC)

- Common
  - Among the most frequent complaints parents present to paediatricians
  - 20-30% in infancy and early childhood

*-Mindell JA et al. Behavioural treatment of bedtime problems and night wakings in infants and young children. Sleep 2006;29:1263-76*

*-Sadeh A, et al. Sleep and sleep ecology in the first 3 years: a web based study. J Sleep Res 2009;18:60-73*

*-Zuckerman B et al. Sleep problems in early childhood: continuities, predictive factors, and behavioral correlates. Pediatrics 1987;80:664-71*

*-Kataria S et al. Persistence of sleep disturbances in preschool children. Behav Pediatr 1987;110:642-6.*



# BEHAVIOURAL INSOMNIA OF CHILDHOOD (BIC)



Bedtime struggles

**Limit setting  
type**

Night wakings

**Sleep onset  
association**

# BEDTIME PROBLEMS (LIMIT-SETTING TYPE BIC)

- 10-30% of toddlers, preschoolers
- Avoidance of bedtime, 'stalling' behaviour
- Multiple requests at bedtime
- Parallels the emerging independence of toddlers--- can persist into preschoolers and school aged children
- Testing limits, testing boundaries
- Inadequate enforcement of bedtime limits by the parent/caregiver

*-Mindell JA et al. Behavioural treatment of bedtime problems and night wakings in infants and young children. Sleep 2006;29:1263-76*

*-Sadeh A, et al. Sleep and sleep ecology in the first 3 years: a web based study. J Sleep Res 2009;18:60-73*



# BEHAVIOURAL INSOMNIA OF CHILDHOOD (LIMIT-SETTING TYPE)

Results in:

- Delayed/ Irregular bedtimes
  - Falling asleep only when exhausted
  - Falling asleep in front of the TV
- Inadequate total sleep
- Daytime behaviour problems
- Nightwakings
- Family tensions





# BEHAVIOURAL INSOMNIA OF CHILDHOOD (BIC)



Bedtime struggles

Limit setting  
type

Night wakings

Sleep onset  
association

# **BEHAVIOURAL INSOMNIA OF CHILDHOOD (SLEEP - ONSET ASSOCIATION TYPE)**

- **Sleep associations:**

- conditions that are habitually present at the time of sleep onset, and the child has learned to fall asleep in its presence
- these same conditions are then required for the child to fall back asleep following night-time arousals

# BEHAVIOURAL INSOMNIA OF CHILDHOOD (SLEEP- ONSET ASSOCIATION TYPE)

## Prevalence:

- 6-12 months olds: 25-50% (even up to 70%)
- 1 year olds: 30%
- 1-3 year olds ( even up to school age) : 15-20%

## Risk factors:

- Co-sleeping, breastfeeding, acquisition of milestones, illness, parental anxiety, difficult temperament



# BEHAVIOURAL INSOMNIA OF CHILDHOOD

(SLEEP ONSET  
ASSOCIATION  
TYPE)



Problematic/inappropriate : require parental intervention, inability to self soothe



Rocking, swinging, nursing, continuously patting a child's back, parent holding on to a pacifier without letting it fall out of the child's mouth



Primary cause of frequent nightwakings

may occur as often as every 90-120 minutes

## BEHAVIOURAL INSOMNIA OF CHILDHOOD (SLEEP ONSET ASSOCIATION TYPE)



- Results in:
  - Disrupted sleep
  - Delayed sleep onset
    - parents rocking child to sleep find it hard to put the child down in crib without waking the child
    - child would wake and whole sequence starts again
  - Daytime irritability



- Associations involving parent/caregiver: problematic
  - Parental presence required
    - Rocking, lying down with child, nursing, feeding
  - One of the most common predictors of frequent night wakings
- Physiological arousals (part of normal sleep architecture) become obvious to parents
- Often co-exist with bedtime problems
- Exclude medical causes: eczema, reflux, OSA etc.

## NIGHT WAKINGS (*SLEEP-ONSET ASSOCIATION TYPE BIC*)

# Behavioural Insomnia of Childhood (BIC)

If left untreated....

- Consequences:

- Emotional
- Cognitive
- Behavioural
- Academic
- Metabolic
- Parents!



*Lam et al, 2003*

*Mindell and Owens, 2009*

*Fallone et al, 2002*

# TREATMENT OF BIC -PHARMACOLOGY VS BEHAVIOURAL

- No FDA approved medication for paediatric insomnia
- Paucity of data on the use of medication

**TABLE 6.** Physicians Reporting at Least 1 Nonprescription Medication Recommendation for Children's Sleep in the Past 6 Months\*

Medication	Respondents (%)				
	Age Groups (Years)				
	0-2	3-5	6-12	≥13	Any Age
Antihistamine	48.6	58.2	46.5	34.1	67.9
Combination sleep/ pain reliever	15.7	16.9	17.2	20.4	29.2
Melatonin	1.7	7.7	15.4	13.9	24.9
Herbal preparations	13.5	12.7	13.3	15.6	22.2

\* Data missing from 9 to 28 respondents, depending on the age group.

-Simonoff EA et al. Controlled trial of trimeprazine tartrate for night waking. *Arch Dis Child* 1987;62:253-7

-France KG et al. A multiple baseline, double blind evaluation of effects of trimeprazine on infant sleep disturbance. *Exp Clin Psychopharmacol* 1999;7:502-13

-Richman N, A double blind drug trial of treatment in young children with waking problems. *J Child Psychol Psychiatry* 1985;26:591-8.

-Owens JA et al. Medication use in the treatment of pediatric insomnia: Results of a survey of community based pediatricians. *Pediatrics* 2003;111: 628-35

# TREATMENT OF BIC -PHARMACOLOGY VS BEHAVIOURAL

- Safety and side effects
- No long term positive effects on sleep
  
- Growing evidence on behavioural strategies
  - More effective
  - Better acceptance
  - Avoid adverse effects of medications
  - Benefits extend to daytime

*-Owens JA et al. Use of pharmacotherapy for insomnia in child psychiatry practice: a national survey. Sleep Med 2010;11(7):692-700*

*-Ramchandani P et al. A systematic review of treatments for settling problems and night waking in young children. BMJ 2000;320(7229):209-213*

*-Mindell JA et al. Behavioral treatment of bedtime problems and night waking in infants and young children. Sleep 2006; 29(10): 1263-76*

# INTERVENTION

## -KEY ELEMENTS

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1. Consistent sleep schedule with age-appropriate bedtime
    - Set consistent bedtime between 7:00 and 8:30 p.m.
    - Maintain bedtime 7 nights per week
    - Use bedtime fading to advance bedtime if needed
  2. Consistent bedtime routine
    - Provide verbal cues or warnings prior to transition to bedtime routine
    - Implement standardized routine, 20–30 min in duration, with 2–3 activities
    - Move routine toward the child's sleeping environment
    - Use bedtime chart used to maintain standardization
  3. Teach child to fall asleep independently
    - Select approach based on child's temperament and parent's tolerance  
(standard extinction, graduated extinction, or fading of parental presence)
-



# INTERVENTIONS

## - SLEEP HYGIENE

- Positive sleep habits:
  - Consistent sleep schedule
    - School and non-school days
    - Adequate sleep hours
  - Regular bedtime routine
    - Bedtime routine alone improved SOL, night wakings, sleep continuity, mood
  - Conducive conditions to fall asleep
    - Avoiding sleeping while feeding, avoidance of electronics close to bedtime
  
- Direct benefit to improvement in sleep?

*Mindell JA et al. A nightly bedtime routine: impact on sleep problems in young children and maternal mood. Sleep 2009; 32:599-606*

# INTERVENTIONS

## - EXTINCTION

- Putting the child to bed at a fixed time and ignoring the cries until a specified wake time
- Well-validated
- Consistency is key
- Stressful; prolonged crying periods
- Extinction 'burst'

*-Rickert VI et al. Reducing nocturnal awakening and crying episodes in infants and young children: A comparison between scheduled awakenings and systematic ignoring. Pediatrics 1988;81:203-12*

*-Seymour FW et al. Reducing sleep disruptions in young children: evaluation of therapist-guided and written information approaches: a brief report. J Child Psychol Psychiatry 1989;30:913-18*

# INTERVENTIONS

## -GRADUATED EXTINCTION

- Negative behaviour ignored only for a specified duration
- Parent/ caregiver can check in on the child, give brief reassurances/ limited attention till child falls asleep
- Goals:
  - Increase independence of child
  - Develop self-soothing skills
  - Reduce negative behaviours, increase positive sleep associations

# INTERVENTIONS

## -GRADUATED EXTINCTION

Successful approaches:

- Gradually moving the parent a little further from the child each night
  - eventually till the parent is out of the room
- Checking in on the child at fixed intervals (3-5 minutes)
- Checking in on progressively longer intervals (3 min, 5 min, 10 min)

*-Sadeh A. Assessment of intervention for infant night waking: Parental reports and activity-based home monitoring. J Consult Clin Psychol 1994;62:63-8.*

*-Blunden S. Behavioural treatments to encourage solo sleeping in preschool children: an alternative to controlled crying. J Child Health care 2011;15:107-17.*

# INTERVENTIONS

## -GRADUATED EXTINCTION

- Factors to consider:
  - Child's temperament
  - Safety
  - Parents' comfort level and acceptability
- Gentler approach
- Better accepted
- Bedtime pass

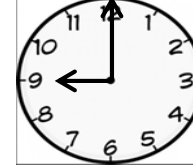
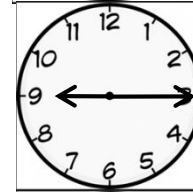
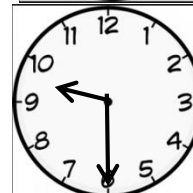
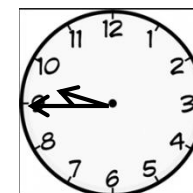
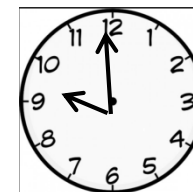


# INTERVENTIONS

## - POSITIVE ROUTINES WITH FADED

## BEDTIME

- Short, enjoyable bedtime routine at a time close to the child's current bedtime (often later than desired)
- Association between:
  - positive bedtime routine <--> falling asleep quickly
- Gradually bedtime is moved forward by 15 minutes
- Wake time is set at the same time daily, child not allowed to sleep otherwise
- *Modified: Faded bedtime with response cost*
  - removed from bed if doesn't fall asleep within a certain time



*-Milan ZP et al. A rapid alternative to extinction for elimination of bedtime tantrum behaviour. Child Behav Ther 1981;3:13-25*

# INTERVENTIONS

## -SCHEDULED AWAKENINGS

- For night wakings that are consistent and at predictable times
- Track timings of wakings
- Wake the child 15-20 minutes before a usual waking
- The interval between scheduled wakings is then gradually increased
  
- Used less frequently
- Harder to implement

*- Rickert VI et al. Reducing nocturnal awakening and crying episodes in infants and young children: A comparison between scheduled awakenings and systematic ignoring. Pediatrics 1988;81:203-12*

# INTERVENTION

## Parental education/prevention

- Helping children develop self-soothing skills
- Reinforcing positive sleep hygiene practices

## Internet interventions

- Internet based information to parents about how their child's sleep compared to a normative sample of same-aged children
- Customised, behaviourally based advice on how to improve the child's sleep

*-Mindell JA et al. Efficacy of an internet –based intervention for infant and toddler sleep disturbances. Sleep 2011;34:451-8*

# INTERVENTIONS

- How effective are they?
  - Across 52 studies, 94% had clinically significant effects (82% reported improvement for 3-6 months)

**Table 4—Frequency and Percent of Studies Reporting Durability of Sleep Improvements**

	< 6 months	6-12 months	>12 months	No follow-up
Extinction Methods (n=34)	20 (59%)	8 (23%)	3 (9%)	3 (9%)
Standardized Bedtime Routine (n=14)	11 (79%)	1 (7%)	1 (7%)	1 (7%)
Positive Routines (n=2)	1 (50%)	1 (50%)		
Scheduled Awakenings (n=4)	3 (75%)			1 (25%)
Bedtime Fading/ Response Cost (n=1)				1 (100%)
Positive Reinforcement (n=15)	10 (66.7%)	3 (20%)		2 (13.3%)
Education (n=15)	9 (60%)	1 (7%)	1 (7%)	4 (26%)
General Behavioral Treatment (n=4)	2 (50%)	1 (25%)		1 (25%)
Other (n=12)	5 (41.6%)	5 (41.6%)		2 (16.7%)
<b>Total (n=101)</b>	<b>61 (60%)</b>	<b>20 (20%)</b>	<b>5 (5%)</b>	<b>15 (15%)</b>

-Mindell JA et al. Behavioural treatment of bedtime problems and night wakings in infants and young children. *Sleep* 2006;29:1263-76

-Morgenthaler TI. Practice parameters for behavioural treatment of bedtime problems and night wakings in infants and young children. *Sleep* 2006;29(10):1277-81

-Vriend J et al, Clinical management of BUC. *Psych Re and behav manag* 2011;4 69-79

# CASE EXAMPLE 1

*\*Exclude  
medical cause*



## Baby M

- 10 months old
- Nursed to sleep by his mother nightly
- Wakes 4-5x in the night, unconsolable each time
- His mother has to nurse and cuddle him back to sleep each time

Incorporate regular bedtime routine

Avoid nursing till fully asleep  
Encourage self soothing

Tackle the bedtime issue first,  
watchful waiting for the night wakings

Be patient!  
May take days to weeks

May get worse with acquisition  
of new milestone



## CASE EXAMPLE 2



*Set appropriate intended bedtime*

*Establishment of bedtime routine (not involving screen time); star charts*

*Graduated extinction; addressing of bedtime fears*

***It took 2 weeks!***  
*Sleeping from 9pm to 7 am at both grandma's home and her own home*  
*Happy child and doing well in school*

### Little S

- 4 years old
- Started nursery this year
- "Late sleeper"
- Watches cartoons till 2300hr
- Falls asleep on sofa
- Has to wake up at 7am
- Bad temper tantrums; bites other children



# OBSTACLES TO TREATMENT OF BIC

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1. Inconsistent parental limit-setting
    - Give positive reinforcement for targeted behavior
    - Ignore unwanted and negative behaviors
    - Give child control over situation through forced choices
    - Use commands instead of questions
  2. Parental disagreement about how to handle bedtime problems
    - Include both parents in design of treatment plan to ensure buy-in and success
    - Encourage parents to support one another
  3. Other children in the home
    - Put a fan, humidifier, or white noise machine in bedrooms of the patient and siblings
    - Use reward system for all children in the home, targeting sleep or other specific daytime behaviors
    - If the child shares a room with a sibling, consider moving the sibling to another room for the duration of treatment
  4. Child does not stay in crib or bed
    - Use crib tent to keep child safely in cribs until the age of 3 years when possible
    - Place baby gate in bedroom doorway for toddlers to keep them in their room
  5. Treatment difficult due to time and energy required
    - Education about how the long-term benefits outweigh the short-term time and energy commitment
    - Regular phone support with trained professionals may increase adherence by providing minor modifications to treatment plan
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# SUMMARY- BEHAVIOURAL SLEEP PROBLEMS

Bedtime struggles and night wakings are highly prevalent in infants, toddlers, and preschoolers

Results in insufficient sleep, negative effects on child and family

Compared to medications, strong evidence to support behavioural interventions

Parents need to come forth!

Every patient and family is different :  
*individualised treatment plan!*





*THANK YOU !*