SLEEP PROBLEMS—SLEEP ISSUES

- Sleep, or lack thereof, is the number one complaint to pediatricians followed by feeding.
- Wouldn’t surprise me if it is the number one complaint in child care.
CO-REGULATION

• Major task of the first year of life is co-regulation
• Co-regulation is highly dependent on the skills of the adult caregiver to be sensitive, responsive and a careful observer.
• Co-regulation is highly dependent on the adult caregiver to suspend their agenda when the cues from the infant suggest that infant is not in a receptive state.

CO-REGULATION: IT’S IN THE RELATIONSHIP
Papousek, Schieche, and Wurmser (Eds). Disorders of Behavioral and Emotional Regulation in the First Years of Life

CO-REGULATION
CO-REGULATION

THIS COMMUNICATION SYSTEM IS THE BASIS OF ATTACHMENT SECURITY
SLEEP IS……

• Homeostatic process—it will happen because the body seeks balance, more time between sleep periods that builds up creates sleep pressure. Sleep pressure always wins, the question is when it will win and at what cost?

DROWSY-SLEEP GATE IS OPENING

SLEEP GATE CUES

• Yawning
• Turning away from stimulation, less interested in interaction
• Eyes less focused, rubbing eyes, glazed eyes
• Heavy lidded, eyes opening and closing
• Fussing, less organized body movements
• Pulling hair or tugging at ears
• Decreased sucking (nursing infant) or sucking on fingers
RESPONDING TO SLEEP CUES

• Notice the sleep cues
  – Respect the sleep cues
  – Initiate sleep and protect sleep
  – Be a responsive co-regulator (major task in the first few years of life)

• Modern day interferences
  – Keep the baby awake until a certain time
  – Put the baby to sleep to work with a particular schedule
  – Sleeping at the “wrong time” (in the car on the way home from day care)

INFANT STATES
INFANT STATES

- States of conscious that give us clues about the internal world of the child and help us change our behavior in response to the states.

Quiet Alert
- They are listening closely to us, they show little motor activity. Their eyes are wide open, bright and shiny, and infants often look directly at their mothers' and fathers' faces and eyes. Duration of Quite Alert increases over the course of development
  - Is the optimal state for interaction, learning, and responding
  - Many of our engagement cues represent a Quiet Alert State
ACTIVE ALERT

• **Active Alert** -- There is frequent motor activity (restless), her eyes look about (disengaging). The baby's attention is drawn to many different parts of the room.

• This state appears before eating or when the baby is fussy.
  – Less optimal time to try to initiate focused engagement.
  – Series of Yellow Cues are evident

CRYING/ALARM/FEAR

• This state, which is one obvious way for infants to communicate, occurs when the baby is hungry, uncomfortable, scared. Signals a need for comfort and support
  – Is a Red Light cue
  – Intake of any kind is limited
DROWSY-SLEEP GATE IS OPEN

Sleep Gate Cues

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DROWSY- THE SLEEP GATE IS OPEN

• Sleep cues indicate the sleep gate is open; a responsive caregiver observes those cues and transitions the child to a sleep state by
  – Reduce all stimulating activities
  – Conduct a sleep routine
  – Turn down lights and reduce noise
  – Provide a transitional object (pacifier or lovey)
  – Place the infant in a sleep location drowsy
  – Limit interaction (very important that the caregiver does not simulate the child)
    - Repetition to soothe; variety to awaken
  – Baby’s will engage in settling behaviors (looking around, sucking)
  – If the baby is fussy provide low level support such as talking quietly or pat the baby briefly
TWO SLEEP STATES DEFINES SLEEP CYCLES

ACTIVE SLEEP - LIGHT SLEEP
RAPID EYE MOVEMENT “LIKE”

- May suck or smile or grimace
- Facial or eye movements
- May make fussing sounds or cry out
- Body movements
- Easier to wake up during active sleep
- Up to three months of age infants are entering sleep in active sleep.
- Over time % of time spent in active sleep decreases
  - newborns spend about 50% of their time in active sleep
  - by three months they are spending more time in quiet sleep
  - by 8 months 75% to 80% of sleep is quiet sleep

QUIET SLEEP - DEEP SLEEP
NON-RAPID EYE MOVEMENT TYPE

- Lies very still
- May startle or twitch
- No facial or eye movements
- May have sucking movements
- Harder to arouse during this state
- Around 4th month infants enter sleep in this sleep state.
- Over time the % of time spent in quiet sleep increases
- Growth hormones are secreted during this sleep state
- Considered a ‘deep’ and ‘restful’ sleep state

SLEEP 0 – 3 MONTHS OF AGE

Average longest self-regulated sleep(without cuing caregiver) 5-8 hours
Sleep period (duration of sleep without waking) 2-4 hours
Sleep Cycle (50 -60 minutes) ~ 2 cycles

Enters sleep in active sleep state (REM like sleep)

Has on average 2-4 sleep cycles.
Each cycle is about 60 minutes and consists of one active sleep and quite sleep

Arousal
Babies may make noise or move about at the end of a sleep cycle, it may be that they are transitioning into active sleep if they have only been sleeping for one hour
SLEEP 4+ MONTHS OF AGE

Average longest self-regulated sleep (without cuing caregiver) about 9 - 10 hours
Longest sleep period (duration of sleep without waking) 6 hours
Enters sleep in quite sleep state (non-REM like sleep) and is harder to wake up.
Sleep routines and the use of environmental cues should begin and be continued.

Sleep Cycle (50 - 60 minutes) ~ 6 cycles
Has on average 5-6 sleep cycles.
Each cycle is about 60 minutes and consists of one active sleep and quite sleep.

Sleep wake regulation takes time
STATE ORGANIZATION IS DEVELOPMENTAL

NEWBORNS:
Initially newborns are mainly in a sleep state, during the first week of life they only spend about 10% of their life in Quiet Alert.

FIRST THREE MONTHS (4th TRIMESTER)
As infants mature their sleep becomes more consolidated, their Quite Alert periods are extended, Active Alert (fussy) and Crying peak around 6 to 8 weeks and begins to decrease thereafter.

ONE YEAR:
Sleep patterns have consolidated significantly, Quite Alert states are the predominant awake state, Active Alert states often indicate onset of hunger, need for sleep, change in activity, arousal, or general discomfort.

BABY CUES
DISPLACEMENT CUES

– Sleep Displacement: Hand-Behind-Head, Hand-to-Ear, Yawn, Stretch
– Eating Displacement: Hand-to-Mouth (Sucking Digits), Tongue Show, Lip-Bite
– Self-Touch (Preening): Skin Tending (Scratch, Pick At, Adjust), Self-Clasping, Joining Hands
– Breathing: Cough, Clear Throat, and Sniff

Hand-to-head

“I’m taking a bit of a break” or “I’m unsure.”

To help me you can...
• Slow down, give me a minute to figure things out
• Wait, watch, and follow my lead
OBSERVATION

ASSERTIVE CUES

- Assertive cues are those that show the will or intent of the child, they can indicate desire or engagement (reaching toward caregiver) or negative or disengagement (pushing away from caregiver).

  - **Red Light** cues explicitly express ‘dislike’ and include Tray Pound, Push Away, Walk Away and Shaking Head ‘No’
  - **Yellow Light** cues are asserting child’s aversion to an activity or interaction, for example, a Frown or Ugg face
  - **Green Light** cues are asserting child’s like or enjoyment of an activity
Back arching

“This is too much for me” or “I really need a break.”

To help me you can...
• Stop or change what we are doing
• Give me a minute to see if I calm down
• Soothe me if necessary
• If I’m eating, understand that I may be telling you I’m full

Smiling infant

“I am feeling good inside.”

To respond to me you can...
• Delight in me
• Share in this moment with me
• Smile back and recognize that I am enjoying this time
WHAT DID WE SEE?

• Assertive “yes” assertive “no”
• Reaching toward caregiver
• Look away
• Push away
• Walk away
• Pull away
• Turn away
REGULATING STIMULATION INPUT

- Some cues appear to be used to slow the pace of the interaction or reduce incoming stimulation
- Show active attempts at regulation

"I'm trying to slow things down" or "I'm trying to shut things out."

To help me you can...
- Allow me to take a break
- Consider that I might need to stop what we are doing
- Try making things less bright or noisy

Eyes clinched
Big turn away

“This is too much for me; wait, and when I’m ready I’ll look back” or “If I’m eating, it may mean I’m full or need more time to chew.”

To help me you can…
- Stop, change, or slow the pace of what we are doing
- Give me a minute to see if I look back
- If possible, give me some options of other things to do
- If I’m eating, understand that I may need a break or might be feeling full

DISCHARGE OF ENERGY, DISTRESS, OR BEHAVIORAL DYSREGULATION

- Some cues are a discharge of energy and/or indicate a state of dysregulation in the child
Crying toddler

“I need your help and comfort” or “I'm really upset and need help with these big feelings.”

To help me you can…

• Comfort me and label my feelings
• Help me understand and manage my feelings
• If I'm crying because you set a limit, acknowledge that I'm upset while you stick to your limit

CUES THAT LET US KNOW THEY ARE READY TO INTERACT AND LEARN.
Facing gaze

“I’m ready to interact” or “I’m ready to learn.”

To respond to me you can...
- Notice my readiness to connect with you
- Share in this moment with me
- Talk to me
- Smile at me

Turning head to caregiver

“I’m listening” or “I’m ready.”

To respond to me you can...
- Notice my readiness to connect with you
- Talk to me
- Smile at me
RESPONDING TO BIG CUES.....

- Acknowledge the feeling state (the message is “I understand you”; maintaining a connection)
- Label (like we would do with anything we want a child to learn…what is this?)
- Regulate/Cope (because this is the goal to be able to self-regulate, it starts with ‘other’ regulation)
“I’m hungry”
cues

“I’m ready to eat!”

To help me you can…
• Understand when I turn toward you, reach for you, put my hands in my mouth, make sucking sounds, and start to fuss that it probably means I’m hungry
• Feed me if I’m hungry
• Talk to me about what it feels like to be hungry (e.g. empty, growling tummy)

Hand-to-mouth
(hunger)

“I might be hungry!”

To help me you can…
• Understand that sometimes when I put my hand in my mouth, fuss, and wiggle my feet, I might be saying “I’m hungry”
• If I seem to be hungry, offer me some food
• Talk to me about what it feels like to be hungry (e.g. empty, growling tummy)
“I’m full” cues
(breast or bottle feeding)

“I’m getting full; I might be done eating.”

To help me you can...

• Let me set the pace, I may be ready to stop even though there may be some milk left
• Trust that when I relax my arms and legs, slow down sucking, am happy, or fall asleep that I am telling you my tummy is full
• Talk to me about what it feels like to be full (tummy feels full or good)

“I’m full” cues
(highchair)

“To help me you can...

• Let me take a break
• Let me set the pace
• Trust that when I do a halt hand, do a big turn away, or try to climb out of the highchair, I am saying that my tummy is full
• Talk to me about what it feels like to be full (e.g. tummy feels full or good)
SLEEP CUES ARE DISENGAGEMENT CUES

• Defining the problem
  – Environmental (child’s sleep clock does not match the sleep clock of the center)
    • Waking up or going to sleep; duration
    • Or environment not suitable for this particular child (easily woken)—not habituating
  – Child care worker pressure
    • Too much interference—If the caregiver says “she only sleeps for five minutes” I would wonder a few things; 1) is the caregiver interrupting her sleep process or settling techniques (some kids take several minutes to settle and it may include fussing); 2) is the child sleeping for 20 or so minutes and then appears awake!
WORKING WITH CAREGIVERS

DEFINING THE PROBLEM:

• Asking open ended questions will be your best tool to support sleep in child care.
  – CG: Can you help us with sleep, lately the kids just don’t follow our schedule
    • First clue is that the caregiver has specific expectations; What is your schedule? What are the routines?
    • Multiple children; How many children are having difficulty? What is the challenge?
    • New issue; How long has this been an issue? Has there been any recent changes?
  – CG: Can you help us with Joie, he just doesn’t sleep when the other kids do and nothing we do helps.
    • First clue is this is a child specific issue; Tell me about Joie? How long has he been coming to this room?
    • Schedule not like the others; Is there any time during the day that you see he is tired? Are there times he seems “wired” and out of sorts?
    • What is his schedule at home; What time does he arrive here, do you know if he wakes up and comes to class straight away or is it possible he is napping in the car? When does he leave? What is his nap schedule at home?
TROUBLE SHOOTING

Keeping an infant awake to get them on the toddler class schedule rather than letting the infant follow their own sleep pattern. Use open ended question to really understand if they are pressured to do this or they want to do this, often it’s a pressure type situation. Then follow with open ended questions regarding what they want to do or need to happen. Reinforce that there are biological controls on sleep and that following cues is connected to being a sensitive caregiver; if this is policy for the center I would take this up with the administrator.

Frustrations because an infant is having difficulty sleeping in care because he/she co-sleeps with the parent, or only sleeps in the swing at home. Infant has habituated to something outside of care, they will eventually habituate to the center. Wait for the sleep gate then rely on the biological controls to help caregiver, if needed try very low level interactive support decreasing slowly (minimal intervention needed: hand on chest or soft words, very low stimulation, ongoing for several minutes if possible as the child enters sleep continue to reduce intervention).

Parents wanting teachers to "sleep train" their infant. The center may need to set a policy for the teachers to support them in responding the child’s sleep needs. If the teacher is comfortable enough to talk about their need to be a responsive co-regulator then that might be enough.

Teachers frustrated because a new infant only sleeps ten minutes then wakes up and wont go back to sleep. First a new infant is probably that the infant has not habituated to the staff and room, doesn’t feel comfortable. If the infant is “waking up” you have to wonder what that means, full blown crying or just settling behavior, or transitioning between active sleep or a part of active sleep. I would also wonder if the infant is put to sleep before their sleep gate is open (using very soothing techniques) or if they enter active sleep or quite sleep in the arms of a caregiver and the transition wakes the child.

Infants being put in cribs on schedules. Again reinforcing the biological controls (sleep need, sleep pressure, and biological rhythm) and the important role of caregivers to be sensitive co-regulators that is responding to individual child cues and needs.

CONTINUED.....

• Infant demonstrates irritability, teacher recognizes infant has only slept a minimal amount of time, decides infant needs to sleep, puts infant in crib and allows to cry alone until finally the infant falls asleep whimpering.
  – Very hard to put a distressed child to sleep, irritability might also be a sign of another need. IF it is sleep the child needs to enter into a more relaxed state and will need “co-regulation” from the caregiver to get there.
• - an infant teacher says "We don't rock babies to sleep... it takes too much time and effort". Meanwhile, there are several exhausted babies crying in their cribs.
  – Full blown crying is a cue that the baby needs an adult to help them. If it’s older children, not rocking a infant 4-12 months of age is not a problem, a potential technique is to lay the child in the crib sleepy but awake (if needed providing minimal support – hand on chest or sitting near crib.
  – Watch for the sleep gate. When the sleep gate is open it will be much easier to get the child to sleep. However, if there are babies crying in their cribs then the system for getting them relaxed into a sleep state is not working. For the infants, hearing other infants crying may cause distress and a distressed baby won’t feel safe enough to sleep – they are essentially waiting for the child to be too exhausted to fight sleep pressure.
• - Very young babies, under 3 months old, who are swaddled at home and have difficulty sleeping in child care. Startle reflex is still pronounced. They will only sleep in a teacher's arms.
  – Try waiting until Quiet Sleep before placing the child into the crib, babies under 3 months enter active sleep first
• - I have observed that many older infants who have difficulty sleeping in cribs do much better when put to sleep on a mat on the floor (maintaining all the safe sleep rules like no blankets and back-to-sleep). Why is this? Some teachers are reluctant to try this and one center won't allow it. If parents are OK with this sleep environment, how do I encourage teachers to try it?
  – It’s very hard to change practice! Most likely there are lots of reasons – one being that the child could get up and wonder around, policy of the school, expectations of parents.....Exploring with open ended questions