### Introduction

New mothers may experience significant sleep disruption due to the erratic sleep patterns characteristic of the newborn and infant period.

Even mild sleep deprivation or fragmentation is associated with impaired mood and cognitive functioning.

Families voice frustration with infant sleep, often holding unrealistic or lack of understanding of expected sleep patterns for daytime and nighttime.

Helping parents understand newborn and infant sleep with an emphasis on safety, environmental, behavioral and coping measures will maximize healthy sleep opportunities for both baby and mother.

### Program Goals

Improve infant and maternal sleep using a personalized education approach.

Provide reassurance and anticipatory guidance for normal newborn and infant sleep patterns.

With parents, identify appropriate environmental and behavioral approaches to improve infant sleep over time.

Enhance maternal / parental sleep opportunities through improved understanding of healthy sleep hygiene.



## Isis Parenting Sleep Support

Nancy Holtzman, RN BSN IBCLC CPN

Atlanta | Boston | Dallas IsisParenting.com

## Intervention: Phone Based Sleep Support

Parents self-selected to participate in the Sleep Support Program and initiated the consultation by request.



The phone-based consultation included one hour with the mother/parents and consultant, divided into initial (45 min) and follow up (15 min) calls.

Other family members or caregivers involved in baby's care were invited to participate.

Information about the sleep environment, expected newborn/infant sleep and feeding patterns, sleep safety and maternal sleep hygiene were reviewed.

Appropriate suggestions were designed into a Sleep Plan in accordance with parent situation and reasonable goals. A 15 minute follow up call occurred within 1-2 weeks.



## Age Distribution at Initiation (out of 498 consults)

Parent request for sleep support was highest at 4 to 8 months with majority at 6 months.



### Implementation

#### Intake and Screening

Once consult request was initiated, families completed a detailed intake form outlining baby's current sleep habits, patterns, routines, environmental factors, and any medical, clinical or feeding issues.

The intake form served as an initial screening tool: infants with snoring, sleep apnea, severe reflux or eczema or other clinical factors which affect sleep were referred to the pediatrician for treatment or clearance.

#### **Sleep Assessment and Parent Concerns**

Education was provided around realistic expectations for day and night sleep by age and stage.

Common education themes included: sleep associations, sleep location, environment, night feeding, nap initiation, length and timing, routines.

#### Behavioral and Environmental Adjustments

Safety review based on AAP Safe Sleep Recommendations, combined with compatible environmental adjustments.

Developmentally appropriate interventions ("Sleep Plan") developed with parents based on realistic goals.

#### Follow Up and Sleep Plan Adjustment

Answering questions, shifting interventions, anticipatory guidance for coming weeks or developmental stages.

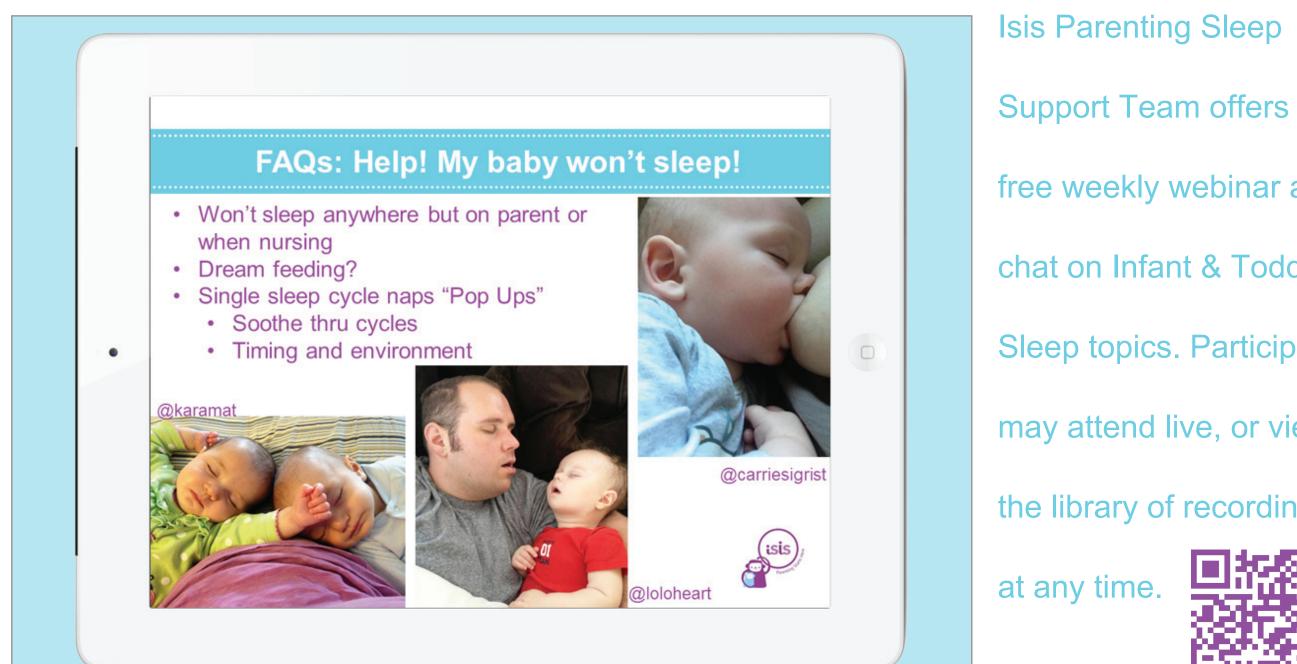
Example of common parent concerns: Swaddle transitions, rolling, sitting and other motor development sleep disruptions.



# First Year of Infant Sleep Consolidation

Maternal/parental sleep concerns during the first year:

Maternal/parental sleep concerns	during	g the
Only sleeps when held	Month *	Week Day  1 2 3 1 4 5 6 7
Days and nights confused		2 10 11 12 13 14 15 16 17 3 18
Can't sleep when the baby sleeps	1	19 20 21 22 23 24 4 25 26 27 28 29
Light sleep state = "gas"		5 32 33 34 35 36 37 38 6 39 40 41
Sleep location - bed-sharing/co-sleeping		42 43 44 45 7 46 47 48 49 50 51 51 52
Too much/not enough daytime sleep	2	9 60 61 62 63 64
Lack of sleep consolidation at night		65 66 67 68 69 70 71 72 73 74 75
Unrealistic expectations of sleep patterns	3	77 77 78 79 80 81 81 82 83 84 84 85 86
Bedtime routines & "dream fees"		13 88 89 90 91 92 93 94 95 96 96 97 97 98
Managing "pop up naps"	4	15 16 109 110 111 112 113 114
Sleep location transitions	7	175 116 117 118 119 120 121 122 128 123 124 125 126 126 126 126 126 126 126 126 126 126
Establishing regular naps and nap routines		127 128 129 130 131 132 133 134 135 20 137
Childcare and care giver guidance	5	139 140 141 142 21 143 144 145 146 147 148
Pacifier concerns		22 150 152 153 153 154 155 156 157 23 158 159 160
Establishing sleep associations	6	163 163 164 165 165 167 168 169 170 25 172 173
Introducing a lovey or transitional item		174 175 176 176 177 177 178 26 179 180 181 182 183 184 185
Swaddle transitions		27 186 187 188 189 190 191 192 28 193 194 195 196 197
"Teething" and sleep	7	29 290 200 200 200 200 200 200 200 200 2
Rolling at night, sleeping on tummy		31 213 214 215 216 217 218 219 220 220 221 222 223 224
Trading down sleep associations	8	225 226 227 228 229 229 231 251 252 233 244 255
Nap transitions (from 3 naps to 2 naps)		239 237 238 239 240 241 241 242 243 244 245 245 246 247
Sitting & standing in crib	9	36 249 249 250 251 251 252 253 254 256 257 258 259 259
Gently reducing night feedings	9	260 261 262 38 263 264 265 266 267 268 269 39 270 271
Nightmares and "terrors" - crying while asleep		271 272 273 274 275 276 277 277 278 279 280 281 281
Early morning wake-up	10	283 284 285 286 287 288 289 290 290 291 292 293 293 294
Teething		295 298 43 299 46 391 332 332 332 332 333 333 333 333 335
New onset night waking	11	47 396 390 390 390 390 390 390 390 390 390 390
Colds, congestions, ear infections, illness		337 338 339 340 341 342 343 343 344 345 346 50 347 348
Travel, vacations and sleep		349 350 351 352 363 363 355 356 356 357 358 359 360
Nap transitions (from 2 naps to 1 nap)	12	52 361 362 363 364



Support Team offers a

free weekly webinar and

chat on Infant & Toddler

Sleep topics. Participants

may attend live, or view

the library of recordings



### Evaluation & Results

Phone based, highly personalized sleep support was positively received.

88% of participants rated consultation improved or much improved their understanding of:

- Newborn and infant sleep patterns and realistic expectations
- Environmental adjustments to improve sleep
- Developmentally appropriate and effective behavioral approaches to targeted sleep concerns

82% believed this resulted in improved sleep for baby and for mother.

Approximately 30% of participants requested additional follow up calls to continue program or for future new concerns.

Approximately 60% of current Sleep Support Program consult requests are prior clients with new infants, or friend or relative referrals.

# Future Study

Maternal perception of improved infant sleep and impact on: postpartum mood disorder, breastfeeding duration, maternal sleep consolidation, safe infant sleep environments, workplace performance. Types of behavioral and environmental modifications and their impact on sleep length. Reduction of SIDS/SUID risk factors.

### Acknowledgements

Isis Parenting Sleep Team Co Leaders

Meghan Casano, RN BSN MA Erin Flynn-Evans, PhD ALM RPSGT Teresa Marie Stewart, MS MPH