Roadmap to Breastfeeding Success:
Teaching Child Development to Extend Breastfeeding Duration

Objectives

- Describe Dr. T. Berry Brazelton’s “Touchpoints” Theory and how it relates to supporting breastfeeding duration.
- Describe four developmental events from birth to one year that impact breastfeeding.
- Describe two parent education resources that could promote breastfeeding duration.

1. Background:
   a. Benefits - To baby, mother and community well documented (USDHHS, 2011)
   b. International goals, rates of breastfeeding, and costs of not breastfeeding
      i. WHO goal for breastfeeding: Exclusive breastfeeding until 6 months and continued breastfeeding until 2 years (WHO, n.d.)
      ii. Rates of breastfeeding: US: 49% breastfeeding; at 6 months only 13.3% are exclusive (CDC, 2012); Developing countries: 39% exclusive breastfeeding (UNICEF, n.d.)
   c. Issues impacting breastfeeding
      i. Demographic, social, psychological and biologic issues well documented (Tharner et al., 2012, Thulier et al., 2009; Labbok et al., 2013; Stuebe, A. & Bonuck, 2011)
      ii. Baby misunderstanding normal behavior or mother’s belief that the baby is not satisfied often over-looked variable (Gatti, 2008; Neifert & Bunik, 2013; Nugent, 2013)
   d. How normal child development impacts breastfeeding:
      i. Dr. T. Berry Brazelton’s Touchpoints theory (Brazelton & Sparrow, 2006): before a new developmental event “Disorganization” occurs in baby’s eating, sleeping and general behavior; Touchpoints are predictable
      ii. Infant Feeding Study II correlates to Touchpoints (Li et al., 2008) – At all ages mothers identify “My baby not satisfied” as a reason to stop breastfeeding
      iii. Influence of temperament (Niegel et al., 2008)
         1. Drs. Thomas and Chess and later Dr. W. B. Carey identified characteristics of the “difficult” baby: very active, less predictable,
has frequent state changes, exhibits little state regulation (Thomas et al., 1970; Carey, 1998)

2. Mothers who believe it will “spoil her baby” have less breastfeeding duration (Mathews et al., 2014)

2. System/Learning Theory issues
   a. Breastfeeding support likely to be ineffective if professionals wait for mother to initiate help (Renfrew et al., 2012)
   b. Need for proactive ongoing support (Skouteris et al., 2014)
   c. Need to provide education reflecting visual, auditory and social learners (Learning Styles, n.d.)
   d. Value of use of digital technology for teaching (Giglia & Binns, 2014; Paradis et al., 2011)

3. The Roadmap’s First Steps along the Way
   a. Prenatal Steps along the Way
      i. How birth choices impact breastfeeding (Bergman, 2013)
      ii. Teach about slippery slope to abandoning breastfeeding
      iii. WHO 10 steps: Breastfeed first hour; only breast milk; no pacifiers
      iv. Establish breastfeeding goals
      v. Identify personal and professional connections; establish breastfeeding goals
      vi. Educate about infant behavior (Nugent et al., 2007)
         1. Promote “Zone” (State) Regulation:
            a. Regulate her autonomic nervous system’s heart rate, breathing, and temperature; Motor control; Move effectively between states; Engage Socially
            b. Evidence of difficulty: moving quickly from alert to crying when handled; moving suddenly from awake to asleep while feeding; becoming easily over-stimulated by only minimal touch or sound.
         2. Family-friendly language to describe states --The Resting Zone: all the sleeping states; The Ready Zone: the alert state, when a baby is ready to eat or to interact; The Rebooting Zone: the fussing or crying state (Tedder, 2008)
         3. Physiologic stress response in Babies
            a. Neurons to Neighborhoods: stress increases cortisol which damages developing brain; lowers transitions to stress later in life; parent attentiveness decreases negative impact (Shonkoff, 2000)
            b. “SOSs: Signs of Over-Stimulation”: Changes in Body (movement, color and breathing) and Changes in Behavior (“Spacing Out” – going from alert to drowsy state; “Switching Off” – gaze aversion; “Shutting Down” – going from alert to sleep state)
   b. Birth Steps along the Way (Wilson & Peters, 2011)
      i. Helping parent name behaviors increases parent confidence
1. Impact on father to understand baby’s behavior (Erkstorm et al., 2003)
2. Mother and baby enface synchronize heart rate and decrease stress (Feldman et al., 2011)
   ii. Value of Skin-to-skin care: maintains temperature; improves suck patterns (Bergman, 2014); better after cesarean birth and better for low birth weight babies (Brady et al., 2014); mothers more likely to exclusively breastfeed. (Brown et al., 2014)
   iii. Supplementation for medical reasons does not impact breastfeeding duration (Chantry et al., 2013) if only a temporary medical intervention and has a plan to resume breastfeeding (Pound et al., 2014). Empower parents to ask about options other than formula.
   iv. Review of reading a baby’s body language: “going to sleep” vs “Shutting Down” (Karl, 2004). “Shutting Down”: eyes squeezing shut, tension around mouth, blanching of forehead skin
   v. If a fragile baby needs to be awakened to eat, awaken baby from Active rather than from Deep sleep
   vi. Avoid skipping nighttime feedings: # feeds determined by storage capacity (Morbacher, 2011); overfilling of breast increases “Feedback Inhibitor of Lactation” & decrease milk

   c. The Two-Week-Old and Crying
   i. Watch for two-week growth spurt—expect milk intake to increase from about 16 ounces to about 24 ounces per day.
   ii. Breastfeeding is well established at two weeks of age: returned to his birth weight by 10-14 days; continues to gain 5-7 oz per week; six stools and several wet diapers a day, and if mother is comfortable
   iii. Excessive crying associated with child abuse and neglect (Simonnet, et al. 2014); correlates with increased behavioral and emotional issues as young children (Papousek, 2008)
   iv. Mothers who cannot handle crying have increased postpartum depression and less breastfeeding (Radesky, 2013), change to formula (Kaley et al., 2012) or add solids prematurely to decrease crying (Wasser et al., 2011)
   v. Identify SOS before baby to Rebooting Zone
   vi. Increase in crying at 2 weeks postpartum, peaks at 6 weeks, and decreases over 12 weeks (Brazelton & Sparrow, 2006)
   vii. Potential benefits of swaddling: does not negatively impact breastfeeding and that (Van Sleuwen et al., 2007); more likely to be put back to sleep (Oden, 2012); reduces post procedural pain (Meek & Huertas, 2012)
   viii. Safe Swaddling: external rotation hip, monitor temp, not tight, supine (Horne, 2014; International Hip Dysplasia Institute, n.d.)
   ix. Swaddling increases self-regulation (Brazelton, 2011)
   x. Controversy about pacifiers: Cochrane 2012 states that pacifiers did not affect the prevalence or duration of exclusive and partial breastfeeding up to 4 months (Jaafar et al., 2012); AAP states pacifier may decrease SIDS (AAP, 2011)
d. One-Month Step along the Way
   i. Distinguish Active/Light vs. Still/Deep sleep (Wiessinger et al., 2014; Kendall-Tackett, 2014; Middlemiss & Kendall-Tackett, 2014)
   ii. Active/Light sleep – moving, eyes open, mouthing, vocalizing, movement (60% time); Still/Deep sleep – still, deep/regular breathing (40% time)
   iii. Infant has 40-minute Active/Light and Still/Deep cycles [adults 90 minute cycles] (Sears, 2013); Babies enter Active/Light sleep before Still/Deep sleep; will group cycles to sleep longer at night (Sears, 2013)
   iv. Change from 90:10 whey/casein ratio to 50:50 – decreases frequency of stooling (Riodan & Wambach, 2009); breasts do not feel empty and full (Bonyata, 2011)

e. Working and Breastfeeding
   i. Full-time working is associated with decreased breastfeeding duration (USDHHS, 2011); Providing breast milk: less missed work, improved job retention (Eldelman & Schanler, 2012)
   ii. Business Case for Breastfeeding (USBC, n.d.)

f. Four-Month Step along the Way – Increased distractibility
   i. Rolling over may trigger behavior changes
   ii. Increase in baby’s cognitive ability may also increase his distractibility during feeding (Brazelton & Sparrow, 2006)
   iii. Reasons to recommend delaying solids until six months (Walker, 2014; Sears, n.d.): Breast milk prevents inflammatory process; Baby’s intestines are still “open” until 6 mo.

g. Six-Month Step along the Way – Getting a tooth
   i. Evidence to begin solids: Tongue Thrust gone, mature swallowing, puts everything into mouth, sits, imitates others
   ii. In correct position, baby cannot bite. Monitor latch.
   iii. Benefits of breastfeeding for dental development (Lida et al., 2007; Duryea, n.d.); breast milk impedes bacterial growth, milk no pooling
   iv. Use WHO growth charts to monitor baby’s growth (Eldelman & Schanler, 2012; WHO, n.d.)

h. Nine-Month Step along the Way
   i. Separation/Stranger Anxiety and Object permanence develop and cause nighttime awakenings (Brazelton & Sparrow, 2006)
   ii. If previously sleeping 6-8 hours, does not need nighttime calories

i. Twelve-Month Step along the Way
   i. More nighttime awakening when child begins to walk (Brazelton & Sparrow, 2006)
   ii. Practice going from standing to lying during daytime

4. Resources: to enhance knowledge of child development, birth to one year
   a. Lactation
      i. WHO handouts (WHO – Breastfeeding, n.d.)
      ii. “Bfed” (Beard, 2014)
      iii. Best Beginnings (Best Beginnings, n.d.)
      iv. Text4Baby (Text4Baby, 2012)
b. Child Development
   i. Zero to Three (Zero to Three, n.d.)
   ii. Plunket (Plunket, n.d.)
   iii. Wonder Weeks (Wonder Weeks, n.d.)
   iv. Touchpoints Center (Brazelton Touchpoints Center, n.d.)

c. Child Development and Lactation:
   i. HUG Your Baby Resources and E-Newsletters (Tedder, 2014)
   ii. Human Lactation Center at UC Davis (Heinig et al., 2009)

Bibliography


© Jan Tedder 2021