Objectives

- Normal infant crying
- Some medical causes of crying
- The association between crying and abuse
- How to help caregivers cope with crying
- State and local initiatives and resources
Normal Crying

• Progressively increases after 2wks, peaks in second month of life
• Delayed about one month in premature infants
• Peaks in the late afternoon and evening
• May be prolonged and resistant to soothing
• Decreases by 4-5mos


Normal Crying

• Consistent among
  – Methods of recording
  – Caretaking styles
  – Cultural groups
  – Socioeconomic status

The Period of PURPLE Crying

THE LETTERS IN PURPLE STAND FOR

P: PEAK OF CRYING
U: UNEXPECTED
R: RESISTS SOOTHING
E: EXPECTED
L: LONG LASTING
P: PAIN-LIKE FACE
L: LONG LASTING
E: EVENING

THE WORD PERIOD MEANS THAT THE CRYING HAS A BEGINNING AND AN END
Concerns about Crying are Common

• 303 infants in CHW ED or Urgent Care with complaints of fussiness and crying (2015)

Medical Causes of Crying

Colic

• Wessel’s Criteria
  – At least 3hrs a day
  – At least 3 days per week
  – For at least 3 weeks
  – In a healthy infant
• Starts between 3 and 21 days of age, subsides by 3-4mos
• In evenings
• Flexed legs with “pained” look on face

Colic

• Cause is unknown
  – Gastrointestinal dysfunction (milk protein or lactose intolerance, immaturity of the gut)
  – Gastroesophageal reflux
  – Excessive gas
• Treatments for medical disorders are inconsistently effective, objective testing inconclusive
• May be within normal, more based on temperament or caregivers responses to crying, combination of factors
Gastrointestinal Dysfunction

- Constipation
- Gastroesophageal Reflux Disease
- Cow and/or soy milk protein allergy or intolerance
- Lactose intolerance is extremely rare
- More likely if crying is associated with
  - Vomiting
  - Poor growth
  - Blood in stools or emesis
  - Temporally related to feeds

Diagnostic Pitfalls

- Urinary tract infection
- Drug reactions
  - Prenatal: benzos, amphetamines, heroin, methadone, buprenorphine, other opioids, some antidepressants and anxiolytics
  - Postnatal: cocaine, amphetamines, opiates, fluoxetine, caffeine, pseudoephedrine
- Intracranial process
  - Neuro exam is a poor screen in infants

When to seek medical care

- Other symptoms of illness (fever, rash, etc)
- Ill appearing
- Sudden and/or persistent inconsolability
- Unexplained poor growth, developmental delay
- History of previous neurological symptoms or suspicious injuries
- Other suspicion for abuse
The effects of crying

- On the infant
  - Self-resolving
  - Most don’t have continued problems on re-evaluation at 2yrs of age
  - Premature cessation of breast-feeding
  - Excessive weight gain
  - When combined with family dysfunction are at higher risk for ongoing behavioral problems

- On the caregiver
  - Higher rates of depression
  - Strained family relationships
  - Guilt about inability to calm infant
  - Beliefs about the cause of the crying can have a lasting effect on how they interact with child and beliefs about the child’s health
Infant Distress and Child Maltreatment

- Infant Distress:
  - Description by parent describing infant as excessive crier, fussy, colicky, irritable
  - Feeding issues
    - Formula changes, intolerance
    - Use of OTC for distress
    - Prescriptions for GERD
  - Teething <6mos

- Retrospective study of 314 infants, some of whom were abused and some not abused.
  - 30% of abused infants had a previous sentinel injury
  - A history of infant distress was much more common in abused versus non-abused infants

A history of infant distress was much more common in abused versus non-abused infants

Infant crying is a trigger for abuse

- Parental reports
  - Survey of parents¹
    - By 1mo 2% had taken “detrimental action” to stop the crying, by 6mos 6% had smothered, slapped or shaken infant
  - Confession studies
    - Crying is the trigger in 67% of AHT²
    - 55% admitted to repeated episodes of shaking because the shaking stopped the crying³


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Normal Crying Curve: AHT Incidence

Why is Crying Frustrating?

- Not the fun experience parents expected
- Feelings of resentment toward the baby
- Social pressure to have a “good baby”
- Fear of being a bad parent
  – the parent personalizes the crying as poor parenting
- Fear that the crying will never end

The effects of crying

- “I got advice from everyone, friends, family, and the doctors… My mother in law told me it was because I fusssed over her too much. My confidence was so low about being a good mother that I was beginning to think that I was the cause. I felt so inadequate as a mother because my child cried every night and I could not make her feel better.”
- One evening after months of crying, I had had enough. I remember my mind drifting off to a horrible place… and visions of me screaming at the top of my lungs… grabbing Jadyn… shaking her.”

Risk factors for abuse

- Recurrent presentation to medical for crying or expressing significant frustration
- Prematurity (less than 36 weeks’ gestation or history of prolonged neonatal hospital stay)
- Chronic Illness – FTT
- Children with Special Needs
- Multiples (twins, triplets etc.)
- Families with DV
- Families with AODA issues
- Families with Mental Health Issues
- Poor understanding of normal development
- Poor social supports

References
Post Partum Depression

- “The baby blues”
  - 80% of new mothers
  - Starts 3-4 days after delivery, lasts up to 2wks
  - Normal
- Postpartum depression
  - From to 10-16% of new mothers
  - Onset within the first few months of delivery
  - It’s treatable


How to help caregivers cope with crying

Evidence-based strategies to decrease crying in infancy

- Carrying and feeding on demand in the first few months of life
- Room sharing in first 3mos
- Prompt attempts to soothe before the crying becomes inconsolable (in first few months)
- Consistent routine


Comfort measures

- Period of Purple Crying
- Happiest Baby on the Block
- AAP Resources
- Common themes:
  - Swaddling
  - Decreased stimulation
  - Pacifier, rocking, noise and vibration
  - Warm bath
**Drug exposures**

- No significant or reproducible effect
  - Simethicone
  - Gripe water
  - Fiber enriched formula
  - Lactase enzyme
- Dangerous
  - Sedating medications (Benadryl, cough meds, opiates)
  - Topical anesthetics for teething

**Education for caregivers**

- Sometimes there is nothing you can do
- Crying peaks in the second month, then improves
- Infants have trouble stopping themselves once they start
- You can’t spoil a very young infant
- Most cry-fuss problems are not predictive of ongoing behavior problems

**REALLY IMPORTANT MESSAGES**

- Put the baby in a safe place and walk away if frustrated
- Never shake, squeeze, smother, hit, or roughly handle an infant
- Don’t use medications to calm an infant
- Have a plan to handle the crying- find a support person
- Share the education and tips for coping with all who care for the infant
The Period of PURPLE Crying®

A New Way To Understand Your Baby’s Crying

The Period of PURPLE Crying program is an evidence-based shaken baby syndrome/abusive head trauma prevention program available since 2007.

The program has two aims:
1. To support parents and caregivers in their understanding of early increased infant crying
2. To reduce the incidence of SBS/AHT

Why PURPLE

- Designed and approved by pediatricians, public health nurses, child development experts and parents.
- Evidenced-Based: The program is based on 25 years of scientific research on Infant crying
- Positive approach

Three Dose Model

- Dose 1: Provision of materials, video, and 1 on 1 education
- Dose 2: Reinforcement messaging
- Dose 3: Community campaign
Click for Babies: Dose 3

**CLICK for Babies**

“CLICK” your solicit needs together for this grassroots campaign to help prevent shaken baby syndrome throughout Wisconsin.

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Infant Safety Education in the NICU

- Survey of mothers with infants at CHW NICU
  - Knowledge and beliefs regarding infant crying
  - Confidence in coping with crying and providing the education to others
  - Distributed at admission, at discharge, and 4mos post discharge

Infant Safety Education in the NICU

- Significant increase in knowledge (p<0.0001) and confidence (p<0.0001) between pre- and follow-up survey
- 77% shared the information with others
- 62% remembered a situation in which the education was helpful
- Few received information about coping with crying (35%) and AHT (27%) from a healthcare provider after discharge

Supporting Families with Fussy Infants in Pediatric Primary Care

- Survey sent to 21 primary care offices.
  - 80% use in-office counseling regarding infant soothing when parents have crying concerns
  - Only 5% are talking about abusive head trauma
  - 94% felt it was important to have resources and tools to support caregivers
Overview

- Collaboration between Children’s Community Services and Children’s Hospital
- Funding from The Child Abuse and Neglect Prevention Board to implement Period of PURPLE Crying
- Program implementation areas include:
  - Children’s Medical Group
  - Children’s Urgent Care
  - Emergency Room
  - NICU
  - Areas within Community Services and Fox Valley Hospital
- Implementation began at the end of 2016

For more information and access to parent education

www.dontshake.org
www.purplecrying.info

Child Help Hotline: 1-800-4-a-child

State Resources

- Parent education materials available through the Child Abuse and Neglect Prevention Board

  https://preventionboard.wi.gov

Parent Education is a Piece of the Solution

- Must reach the intended audience
- Must address risk factors
- Self-regulation
Other promising interventions for infants

- Home visiting
  - Patient Protection and Affordable Care Act of 2010
  - Systematic review evidence in reduction of maltreatment
    - Child FIRST
    - Early Head Start: Home Visiting
    - Early Start (New Zealand)
    - Healthy Families America
    - Nurse Family Partnership

Home Visiting Programs in Wisconsin

- Healthy Families America
- Nurse Family Partnerships
- Early Head Start

- Wisconsin Family Foundations
  Comprehensive Home Visiting Program
  https://www.dhs.wisconsin.gov/mch/homevisits.htm

Triple P- Positive Parenting Program

- Associated with reductions in county-wide rates for
  - Substantiated child maltreatment
  - Out of home placement
  - Hospital treated child maltreatment injuries


Triplep.net
**Triple P - Positive Parenting Program**

- The Parenting Network
  - Kenosha, Milwaukee, Ozaukee, Racine, Washington, Waukesha
  - Additional programs
    - Education and support for parents (including dads)
    - Confidential phone counseling
    - Referrals to home visiting programs and community resources
  - theparentingnetwork.org

**Child Abuse & Neglect Prevention Board**

For information about local parenting education and resources:
preventionboard.wi.gov

**Family Resource Centers**

Community focused prevention programs throughout Wisconsin
preventionboard.wi.gov

**Other innovative programs**

- Fussy Baby Clinics
- Fussy Baby Network (Chicago)
  - Home visiting with infant-parent specialists
  - Medical and behavioral assessment
  - "Warm" line
  - Support group for mothers experiencing postpartum depression
  - Support to implement programs in local area
Conclusions

- Education about crying is an important piece of prevention
- Should be a part of anticipatory guidance
- Important to recognize families at risk for maltreatment and be prepared to provide additional resources

Resources

Thank you!