Parental Readiness for Infant Safe Sleep Interventions
Disclosure

• Learning Objectives
  – The learner will be able to identify factors that support parental readiness for executing safe sleep interventions.
  – The learner will be able to discuss implications for nursing practice to support readiness for safe sleep behaviors.

• I do not have conflicts to disclose.

• Employer: Indiana University Health (Indianapolis, Indiana USA)
Significance

• Infant safe sleep practices and reduction of Sudden Unexplained Infant Deaths (SUID) is an international public health priority.

• Sudden Infant Death Syndrome leading cause of death in children between one month and one year of age, occurs without warning and is associated with an episode of sleep (American Academy of Pediatrics, 2016).

• 3,500 SUID events occur each year in the United States (Centers of Disease Control and Prevention, 2016).
Significance

2015 Indiana Central Region
Causes of Infant Mortality (ISDH, 2015)

- Perinatal Risks
- Congenital Malformations
- Other
- Assaults/Accidents
- SUIDS
Significance

• Marion County Health Department (ISDH, 2015)
  – Sudden Infant Death Syndrome included in 2014 top five causes of infant death

• IU Health Methodist Maternity Center 2015 Data
  – 66% Medicaid payer mix
  – 58.47% unwed mothers
Literature Review

• Reviewed evidence-based literature and research studies from previous 10 years
• Identified several SIDS risk behaviors
• Risks Associated with Infant Death
  — Maternal behaviors (maternal tobacco use, improper sleep surface, improper sleep position)
  — Sleep behaviors (bed sharing)
  — Individual readiness to perform safe sleep behaviors
Literature Review

• Parental Behaviors (maternal tobacco use, improper sleep surface, improper sleep position)
  – Rechtman, Colvin, Blair and Moon (2014): Sofas are an extremely dangerous sleeping surface for infants and associated with infant death

• Sleep Behaviors (bed sharing)
  – Schnitzer, Covington and Dykstra (2012): 3,136 infant deaths with 64% of the infants co-bedding at the time of death

• Individual Readiness to Perform Safe Sleep Behaviors
  – Parent preference as a barrier to safe sleep; parents report feeling safer with infant bed sharing (Fowler, Evans, Etchegaray, Ottenbacher and Arnold, 2013)
Literature Review

• Gap in Literature
  
  – Researching parental readiness to execute safe sleep behaviors
  
  – Knight, Webster, Kemp and Comino (2013) surveyed 159 mothers on their readiness to provide safe sleep environments
# Safe Sleep Bundle

<table>
<thead>
<tr>
<th>Bundle Component</th>
<th>Focus of Item</th>
<th>Date Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant Sleep Sack Distribution</td>
<td>Use of sleep sack for all well newborns after discharge from hospital</td>
<td>January 1, 2015</td>
</tr>
<tr>
<td>“Sleep Baby Safe and Snug” book</td>
<td>Book that describes safe sleep guidelines for parents to read to infant</td>
<td>April 1, 2015</td>
</tr>
<tr>
<td>Safe Sleep Content from Eunice Kennedy Shriver Foundation</td>
<td>Safe sleep educational content from Eunice Kennedy Shriver Foundation</td>
<td>April 1, 2015</td>
</tr>
</tbody>
</table>
Conceptual Framework

• Theory of Planned Behavior Three Constructs (Ajzen, 2009)
  – Behavioral Beliefs: beliefs about a likely consequence of a behavior
  – Normative Beliefs: beliefs about the normative expectations of others
  – Control Beliefs: beliefs about the presence of factors that may expedite or hinder performance of a behavior
Infant Safe Sleep Conceptual Model

**Behavioral Beliefs**
- Safety for Infant
- Improved Health for Infant
- Time and Energy Spent on Safe Sleep

**Normative Beliefs**
- Infant's Grandparents
- Significant Other
- Family Friends

**Control Beliefs**
- Necessary Supplies for Safe Sleep
- Obtaining Safe Sleep Education
- Limiting Caregivers

**Behavior**
- Execution of infant safe sleep guidelines after hospital discharge
Methods

• Research Design and Setting
  — Prospective descriptive study from January 1 - May 1, 2016
  — Conducted at Indiana University Health Methodist Hospital in Mother-Baby unit

• Inclusion Criteria
  — Mothers must be 18 years of age or older; not incarcerated; gave birth to a well newborn admitted to the Well Newborn Nursery (not admitted to and/or discharged from the Neonatal Intensive Care Unit)
Methods

• Instrument: Theory of Planned Behavior Survey
  — Pilot study (n=35) conducted in August 2015 to determine TPB constructs for infant safe sleep
  — 23 item survey instrument
  • Opinions of infant safe sleep behavioral beliefs, normative beliefs, control beliefs and infant safe sleep perceived behavioral control
  • All items listed in the survey are direct results of the pilot study and aligned with the Theory of Planned Behavior constructs.
  — Answers recorded with a 7 point Likert scale
Results: Demographics

Maternal Age

- 18-24 years
- 25-34 years
- 35-44 years

Highest Education

- None
- Some high
- High school
- Some college
- Trade
- Associate
- Bachelor degree
- Master degree
- Professional
- Doctorate

Riley Hospital for Children
Indiana University Health
## Results

Table 2. Correlation for Theory of Planned Behavior Survey Sections One, Two and Three

<table>
<thead>
<tr>
<th>Section One</th>
<th>Spearman Rho Correlation</th>
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<tbody>
<tr>
<td>Behavioral Belief</td>
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<tr>
<td>Infant Safety/ Attitude for Safety</td>
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<tr>
<td>Infant Improved Health/ Attitude for Improved</td>
<td>.448**</td>
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<tr>
<td>Health</td>
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<td>Time and Energy Spent/ Attitude Towards</td>
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*Note.**p < 0.01

<table>
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<tr>
<th>Section Two</th>
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<td>Normative Belief</td>
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<td>Safe Sleep: Infant’s Grandparents/ Influence</td>
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<tr>
<td>of Grandparents</td>
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<td>Safe Sleep: Significant Other/ Influence of</td>
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<td>Safe Sleep: Family and Friends/ Influence of</td>
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*Note.**p < 0.01

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<thead>
<tr>
<th>Section Three</th>
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<td>Control Belief</td>
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<td>Learning Safe Sleep Education/ Education</td>
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<tr>
<td>will Enable</td>
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<tr>
<td>Limiting Caregivers/ Limiting Caregivers</td>
<td>.472**</td>
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<tr>
<td>will Enable</td>
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</table>

*Note.**p < 0.01
Significant Relationships

- **Behavioral Belief and Attitude Towards Belief**
  - Safe sleep and safety of the infant
  - Safe sleep and improved health for the infant

- **Normative Belief and Perceived Social Pressure**
  - Maternal significant other and perceived influence for safe sleep behaviors

- **Control Belief and Individual’s Perception of Their Ability to Execute the Behavior**
  - Limiting infant’s caregivers and ability to safe sleep guidelines
Recommendations

• Recommendations for Readiness
  
  — Emphasize the positive impact executing safe sleep guidelines have on infant health and safety
  
  — Include key individuals (i.e. mother’s significant other) in educational delivery and decision making
  
  — Provide methods to communicate infant safe sleep guidelines to multiple caregivers or ways to reduce the number of caregivers the infant will have in the first year of life
References


Questions?

Thank you!