What we will learn today

- Maltreated children face challenges to their development
- National and Illinois data show that disproportionate percentages lag developmentally
- Promising services exist to assist child development
- Not all children who need them receive these services, but the obstacles can be identified

Children’s brain development

- Most brain development occurs after birth, especially
  - Emotions
  - Language
  - Abstract thinking
- Astonishing rate of development
  - Healthy toddler may create as many as 2 millions synapses (connection between neurons) per second
  - 1,000 trillion synapses by age 3

Sensitive periods

- Period in a child’s development in which the brain is especially tuned for development of a certain function
- Obstacles to development during a sensitive period may impair long-term functioning
- For example, infants are genetically programmed to form attachments to caregivers, but may develop lifelong attachment problems if caregivers are unresponsive
- Brain’s plasticity may allow later development overcoming problems during sensitive period
Some ways maltreatment affects the brain

<table>
<thead>
<tr>
<th>Type of Maltreatment</th>
<th>Effects</th>
</tr>
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<tbody>
<tr>
<td>Shaking baby</td>
<td>- Tear blood vessels</td>
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<tr>
<td></td>
<td>- Destroys brain tissue</td>
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<tr>
<td></td>
<td>- Sensory impairments</td>
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<td></td>
<td>- Cognitive, learning, and behavioral disabilities.</td>
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<tr>
<td>Traumatic maltreatment (physical abuse, exposure to violence)</td>
<td>- Alters brain's ability to use serotonin to feel well and stable</td>
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<tr>
<td></td>
<td>- Persistent fear, which interferes with brain development</td>
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<tr>
<td></td>
<td>- Hyperarousal</td>
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<tr>
<td></td>
<td>- Dissociation</td>
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<tr>
<td>Neglect</td>
<td>- Malnutrition stunts brain growth</td>
</tr>
<tr>
<td></td>
<td>- Lack of stimulation leads to underdevelopment of neural pathways</td>
</tr>
<tr>
<td></td>
<td>- Babies not talked to have difficulties with language development</td>
</tr>
<tr>
<td></td>
<td>- Severe neglect leads to smaller brain size</td>
</tr>
<tr>
<td></td>
<td>- Impaired attachments leading to excessive dependency, social isolation and difficulty regulating emotion</td>
</tr>
</tbody>
</table>

Other factors associated with child maltreatment that affect development

- Poverty
- Food insecurity
- Caregiver substance abuse
- Caregiver depression and other MH problems
- Caregiver health problems
- Domestic violence
- Neighborhood violence
- Lack of social support

Early Intervention

- Broad term for an array of different interventions to promote the development of young children
- Eligible children
  - Disabilities
  - Established delays
  - At risk
- Substantial involvement and partnership with family
- May be center-based, home-based or mixed
- Research shows intensive EI associated with better school and life outcomes

Some early intervention services

<table>
<thead>
<tr>
<th>Medical services</th>
<th>Assistive technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing services</td>
<td>Nutrition services</td>
</tr>
<tr>
<td>Physical therapy</td>
<td>Transportation</td>
</tr>
<tr>
<td>Vision services</td>
<td>Speech-language pathology</td>
</tr>
<tr>
<td>Audiology</td>
<td>Occupational therapy</td>
</tr>
<tr>
<td>Special instruction</td>
<td>Social work services</td>
</tr>
<tr>
<td>Family training</td>
<td>Psychological services Service coordination</td>
</tr>
</tbody>
</table>
Individualized Family Services Plan (IFSP)

- Required plan for each family served through IDEA—similar to an Individualized Education Plan (IEP)
- Includes assessment of child
- States goals and services planned to achieve those goals
- Followed by an IEP once a child turns 3

Federal legislation

<table>
<thead>
<tr>
<th>Law</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keeping Children and Families Safe Act, 2003</td>
<td>Required all state child welfare agencies to put policies and procedures in place to refer child maltreatment victims to early intervention programs</td>
</tr>
<tr>
<td>Individual with Disabilities Education Act, 2004</td>
<td>Reiterate commitment to early intervention for child victims in context of overall commitment to children with disabilities</td>
</tr>
<tr>
<td>Child and Family Services Improvement Act, 2011</td>
<td>Requires states to report activities to improve services to address developmental needs of children in child welfare</td>
</tr>
</tbody>
</table>

Allen, et al., 2012

More on Individual with Disabilities Education Act, 2004, Part C

- Federal law mandating statewide multidisciplinary service system to address needs of infants and toddler with developmental delays or at risk of developmental delays
- Every state has adopted it – powerful financial incentives
- Lead agency in each state (public health, education etc.)
- Lead agency must implement a child find system to locate children in need, especially children in foster care
- Referral must be made within 2 days of identification
- States have option of serving children at risk who have not yet demonstrated delays
- Interagency Coordinating Council overseeing Part C in each state

How often do children involved with protective services lag in development?
National Survey of Child and Adolescent Well-Being (NSCAW)

- National probability study of 4939 children in maltreatment investigations in 2008-2009 in 81 communities in 36 states
- 818 Illinois children
- Random sampling of communities and cases makes NSCAW representative of all children in maltreatment investigations
- Multiple sources of data
  - Interviews with caregivers and caseworkers
  - Standardized measures of child development completed by caregivers

Early Childhood Screening and Assessment Measures in NSCAW

<table>
<thead>
<tr>
<th>Instrument</th>
<th>What it measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayley Infant Neurodevelopmental Screener</td>
<td>Neurological functioning, sensation and perception, fine and gross motor skills, verbal skills, memory/learning, thinking/reasoning</td>
</tr>
<tr>
<td>Battelle Developmental Inventory &amp; Screener</td>
<td>Attention and memory, perception and concepts, reasoning and early academic skills</td>
</tr>
<tr>
<td>Preschool Language Scale</td>
<td>Expressive and receptive language</td>
</tr>
<tr>
<td>Vineland Screener</td>
<td>Adaptive living skills (e.g., basic eating and drinking, toilet training, basic hygiene, basic safety)</td>
</tr>
<tr>
<td>Brief Infant Toddler Social and Emotional Assessment</td>
<td>Social and emotional functioning</td>
</tr>
</tbody>
</table>

One example:
Bayley Infant Neurodevelopmental Screener
- 10-15 minute screener for age 3 to 24 months
- Assesses brain functioning, cognitive development and developmental achievements
- 10-13 questions for each 3-6 month age range

Bayley items

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Examples of Items</th>
</tr>
</thead>
</table>
| 3-4 months| Holds head erect and steady for 15 seconds
|          | Fingers hands in play                                 |
| 5-6 months| Looks for fallen spoon                                 |
|          | Vocalizes one vowel sound                              |
| 7-10 months| Use early stepping movements                          |
|          | Responds to verbal requests                            |
| 11-15 months| Walks alone                                           |
|          | Uses gestures to make wants known                      |
| 16-20 months| Names three objects                                    |
|          | Imitates two word sentences                            |
| 21-24 months| Points to three of doll’s body parts                   |
|          | Speaks intelligibly                                    |
Videos of administration of Bayley Scale

http://www.youtube.com/watch?v=kpx4AgO-Oxw&feature=related

http://www.youtube.com/watch?v=76SRamqYnOA&feature=related

Identifying children with Developmental Need

• Method used in NSCAW to identify children in need across measures
• Similar to federal eligibility guidelines
• Developmental need (one or more of below)
  – having a diagnosed mental or medical condition that has a high probability of resulting in developmental delay (e.g., Down syndrome)
  – two standard deviations below the mean in at least one developmental area
  – 1.5 standard deviations below the mean in two areas.

% of Children with Developmental Problems/Need across Measures

How often do children with developmental need receive services?

• Several recent publications suggest that early intervention services have proved difficult to implement effectively despite federal legislation
• Data suggest that many young children with developmental need do not receive developmental services
• One factor appears to be whether children are placed outside the home – greater proportion of children in out-of-home care receive developmental services, though a gap remains
How often do children with developmental need receive services? Illinois data for 0 to 3 year olds

- Tested for developmental disability
- Told by professional child has disability
- Individualized Family Service Plan

According to Caregivers

- Foster care
- Kinship care
- In-home with CWS
- In-home without CWS

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Illinois not included

Illinois data on service delivery for 0 to 3 year olds with developmental need (cont).

- Special arrangements in school or daycare
- Physical, occupational or speech therapy on a regular basis

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Illinois not included
Several other studies show shortfall in developmental services for child maltreatment victims, e.g.

- Casanueva, Cross & Ringeisen, 2008
- Rosenberg, et al., 2007
- Stahmer et al., 2006
- Ward et al., 2009

Obstacles at several steps in the process

1. Identification
2. Referral to Early Intervention
3. Delivering Effective Early Intervention

Sources: Allen et al., 2012; McDonald, 2006; Mills, 2006; Moxley, et al. 2012; Robinson & Rosenberg, 2004; Rosenberg, et al., 2007

Caregivers and caseworkers don’t always recognize problems

When NSCAW scores indicated that children had problems:

- Caregivers identified developmental delays in 35% of cases
- Caseworkers identified developmental and behavioral problems in 23% of cases

Sources: Berkoff, et al., 2006; Robinson, et al., 2007

Obstacles to screening

- Some communities lacks systematic developmental screening protocols
- Caseworkers and primary care providers may use ineffective informal screening methods and/or may not adequately be trained to use screening measures
- Many children are never referred for screening, particularly in in-home cases
Obstacles to referral

- Confusion in CWS about referral processes (e.g., thinking it only applies to children in out-of-home care)
- Inadequate data systems to track cases
- Families in CWS tend to move and children in out-of-home placements move between placements
  - Results of screening can get lost
  - Lack of residence can affect eligibility for services
  - Moves can disrupt EI services

Obstacles to delivering EI services

- Strong relationship between child welfare and EI agencies is needed
  - CWS and EI agencies need to be alert to and open to referrals – fears of child welfare cases overwhelming EI have not been realized but remain a concern
  - Differences in organizational culture (voluntary vs. mandated services) affect success of referrals
  - Ongoing communication between CWS and EI is needed, but lack of relationship, inaccessibility and confidentiality concerns hamper communication
  - One study found, in one area office, resistance to additional work from unions representing child welfare workers

Obstacles to delivering EI services (cont.)

- EI professionals often lack training in risk factors for child welfare families, which differ from risk factors of other families EI serves – majority of families served by EI are white, middle class
- Many EI programs are not strong in the type of EI services needed
  - EI usually provides services for established medical conditions or developmental delays (e.g., physical therapy)
  - Child welfare cases more likely to need services for emotional, relationship and family issues as well as broader developmental specialists
  - Child welfare cases often need work on parent-child interaction, not a strength of many EI programs—parent instruction can be seen as incompatible with collaborative relationship with parents

Obstacles to delivering EI services (cont.)

Many families involved with child welfare have difficulty engaging with EI and EI programs have difficulty coping with that
- Child may have been removed from parent whose permission is needed
- Time involved in missed appointments & need for extra outreach reduces EI billable hours
- Particular problem for caregivers suffering from trauma and addiction
- EI programs often have multiple service providers, which can be overwhelming
- 80% of child welfare cases referred to EI have service plans but they were less likely to be completed than for other cases
Illinois DCFS’ efforts to improve screening

- Since 1998, Early Childhood Placement Services Program provides developmental screenings to children 0-5 entering state custody
  - Bruhn et al.’s (2008) study shows high rate of assessment and referral to EI in Cook County
- Since October 2010, Early Childhood Intact Family Services program providing developmental screenings in open, in-home cases
  - 4 Illinois regions each have 2 screeners
  - Can re-screen children
  - Linkages with EI programs and preschools
  - Training and consultation to caseworkers

Early childhood education

- Preschool, Head Start and other education for children age 3-5
- Considerable research shows improved outcomes for children enrolled in early childhood education
  - Less likely to repeat grades or need special ed
  - More likely to avoid juvenile and graduate from high school and college

Illinois DCFS Procedure 314.70

- “All children for whom the Department is legally responsible shall be enrolled in an early childhood education program”
- “Caseworkers should strongly encourage the enrollment of children of wards and children in intact families aged 3-5 in early childhood education programs”

Progress on ECE in Illinois

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Development Council</td>
<td>2002</td>
<td>Advise training and qualifications of early childhood workforce in Illinois</td>
</tr>
<tr>
<td>Illinois Early Learning Council</td>
<td>2003</td>
<td>Statewide initiative to identify gaps and plan a more coherent system</td>
</tr>
<tr>
<td>Gateway to Opportunity</td>
<td>2007</td>
<td>Statewide professional training initiative for children’s service professionals</td>
</tr>
<tr>
<td>Illinois Early Childhood Asset Map</td>
<td>2005</td>
<td>State mapping combining demographic data and early childhood program data</td>
</tr>
<tr>
<td>Preschool for All</td>
<td>2006</td>
<td>Illinois first state to initiate universal preschool program</td>
</tr>
<tr>
<td>Quality Counts-Quality Rating System</td>
<td>2007</td>
<td>State system for managing early childhood education quality</td>
</tr>
</tbody>
</table>

Source: Fowler, et al., 2008
Conclusions

- Child maltreatment victims high rate of developmental delay
  - 3.6 to 12 times greater risk than average child
- Interventions have been developed to address developmental delay but may need adapting to child welfare population
- Major obstacles to screening, referral and effective early intervention services for child maltreatment victims
- Substantial child welfare-EI system development needed
  - Protocol and interagency agreement development?
  - Cross-training?
  - Embedded specialists?
- Early childhood education an important intervention with some success but needs to be provided more broadly
  - Is it enough for children with developmental delays?

References (cont.)


References (cont.)


References (cont.)


Resources through the Publications link at cfrc.illinois.edu

Reports


Research Briefs


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