The Impact of Early Adversity on the Developing Brain: Prevention and Treatment

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Three Key Core Concepts in Early Development:

From the Harvard Center on the Developing Child

1. Early experiences build brain architecture.
2. Serve and return interaction shapes brain circuitry.
3. Toxic stress derails healthy development.

The Case for Early Intervention:

- Brain plasticity decreases over time.
- Preventive intervention is more efficient and produces higher returns than later remediation.

Toxic stress effects (i.e. the bad news) and brain plasticity (i.e. the good news):

Studies conducted by the Stress Neurobiology and Prevention Laboratory at the University of Oregon and the Oregon Social Learning Center

Diurnal Cortisol

- Disrupted caregiving, particularly neglect, is associated with an atypical pattern of cortisol activity.
- Foster children who received an intensive family based intervention (MTFC) showed cortisol activity comparable to non-maltreated children.

Electrophysiological Response to Corrective Feedback

- Foster children show less response to corrective feedback than typical controls.
- Foster children who underwent intensive family based intervention (MTFC) showed typical response to corrective feedback.

Some toxic stress effects can be overcome with systematic and well-timed family based intervention.

Notes:

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ONLINE RESOURCES

Adverse Childhood Experiences Study

http://www.cdc.gov/ace/

http://pages.uoregon.edu/snaplab/SNAP/Welcome.html

Three Core Concepts in Early Development

http://developingchild.harvard.edu/

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