

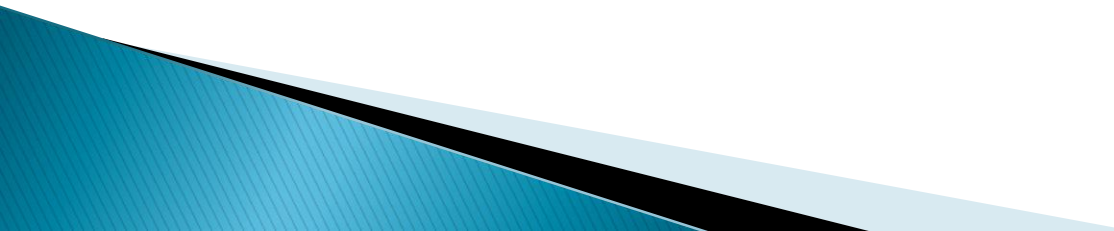
HOLISTIC HEALTH IMPACT OF VIOLENCE ON CHILD DEVELOPMENT

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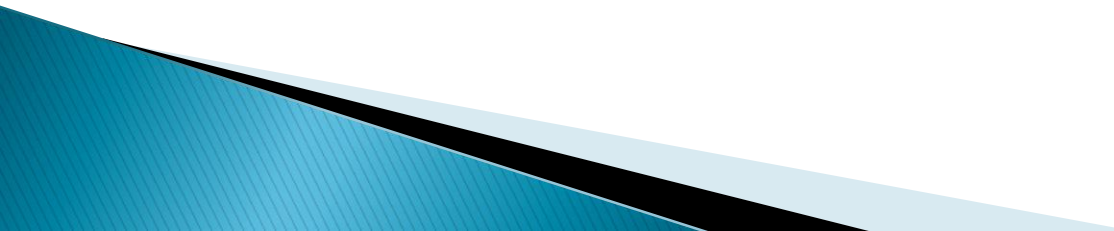
HEALTHY CHILDHOOD



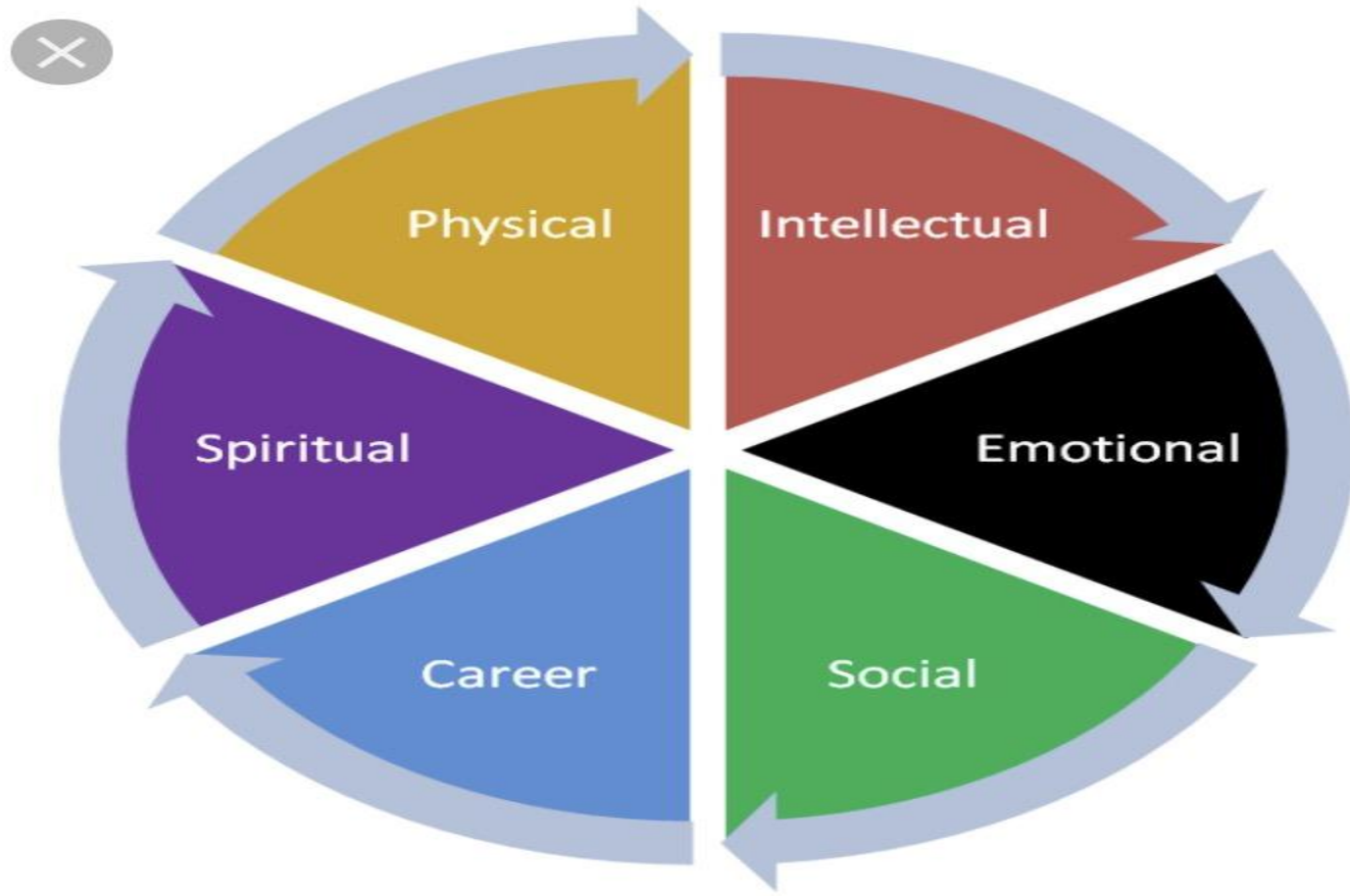
WHAT IS HEALTH?

- ▶ According to WHO health is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”.
 - ▶ Health may be defined as the ability to adapt and manage physical, mental and social challenges throughout life.
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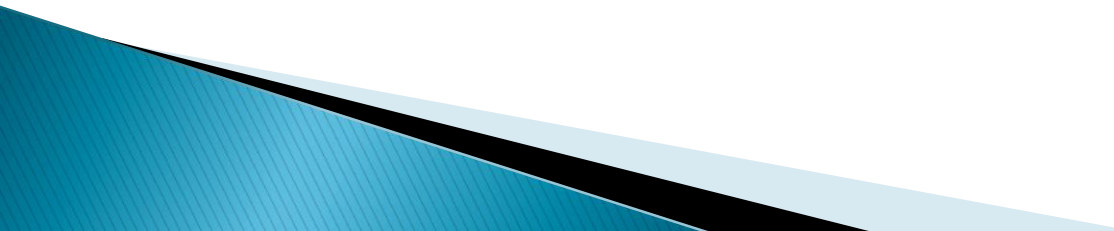
WHAT IS HOLISTIC HEALTH?

- ▶ Holistic health can be defined as an approach to life.
 - ▶ It considers the whole person and his/her interaction with the environment.
 - ▶ It emphasises the connection of body, mind and spirit.
 - ▶ Each component of holistic health enhances, supports and affects the others.
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COMPONENTS OF HOLISTIC HEALTH



WHY IS IT IMPORTANT?

- ▶ When the body, mind and spirit of a child are fed and nourished properly, then the child will thrive well.
 - ▶ Education, health, social status, access to stimulating and conducive early learning environments, adequate nutrition, clean water and a secured and nurturing parent–child relationship contribute immensely to a child's overall brain development.
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THE BRAIN AND ITS DEVELOPMENT



THE BRAIN IS THE ONLY ORGAN NOT FULLY DEVELOPED AT BIRTH.

90% OF CRITICAL BRAIN DEVELOPMENT HAPPENS IN THE FIRST FIVE YEARS OF LIFE.

First 2000 DAYS
Early Investment A LIFETIME OF RESULTS

There are only 2,000 days from the time a child is born to when that child begins kindergarten. Learn more at www.first2000days.org

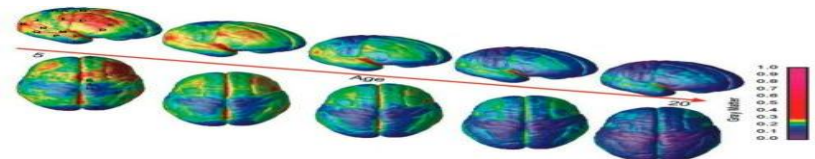
BRAIN DEV-FACTORS INFLUENCING

- ▶ The brain starts developing a few weeks after conception from the neural tube, the neurons and glia are formed and start migrating to form the cerebral cortex which is complete by the end of second trimester. Later the cells differentiate to form axons and dendrites, synapses or the connections between neurons develop that later undergoes myelination.
- ▶ In utero the brain development is mostly influenced by genes and neurotoxins if any.
- ▶ After birth it's the various experiences that influence brain growth and maturation by way of a process called pruning.

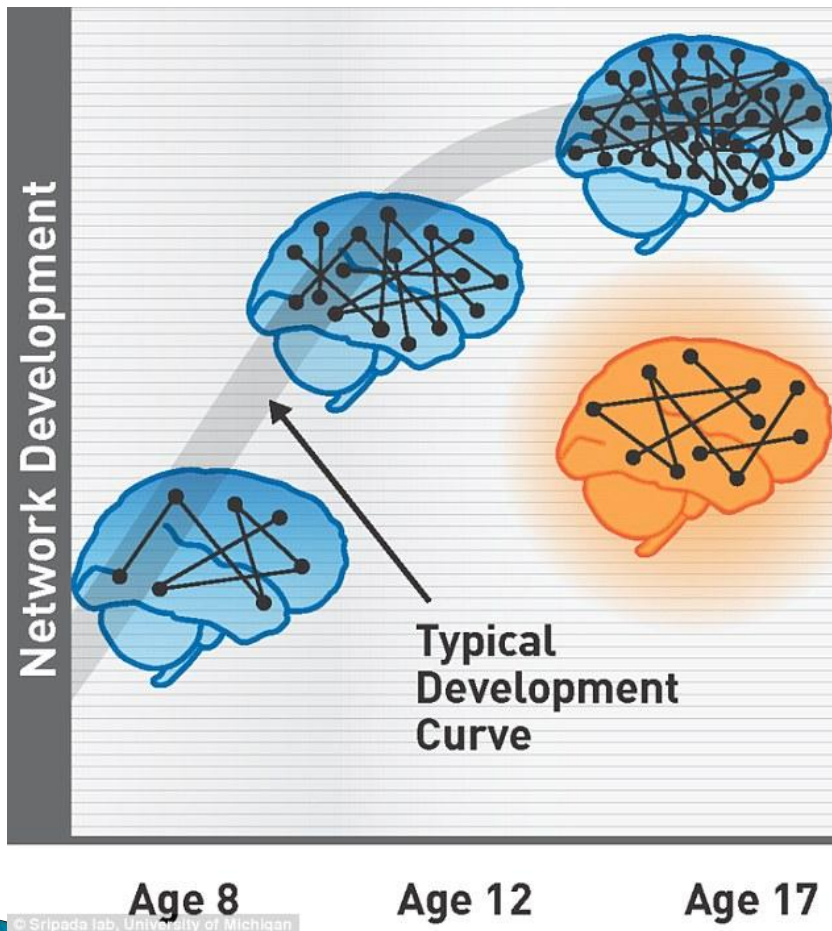


THE BRAIN IN EARLY CHILDHOOD

- ▶ During early and middle childhood the brain forms and refines a complex network of connections through synaptogenesis, pruning and myelination.
- ▶ The process of forming connections is biologically driven but experiences also promote synapse formation.
- ▶ The brain produces more synapses than it will ultimately use—synaptic overproduction. This continues throughout childhood.
- ▶ The process of myelination also continues during early childhood and is the major cause of increase in brain's size which reaches 90% of the adult brain weight of 1200–1500gm.

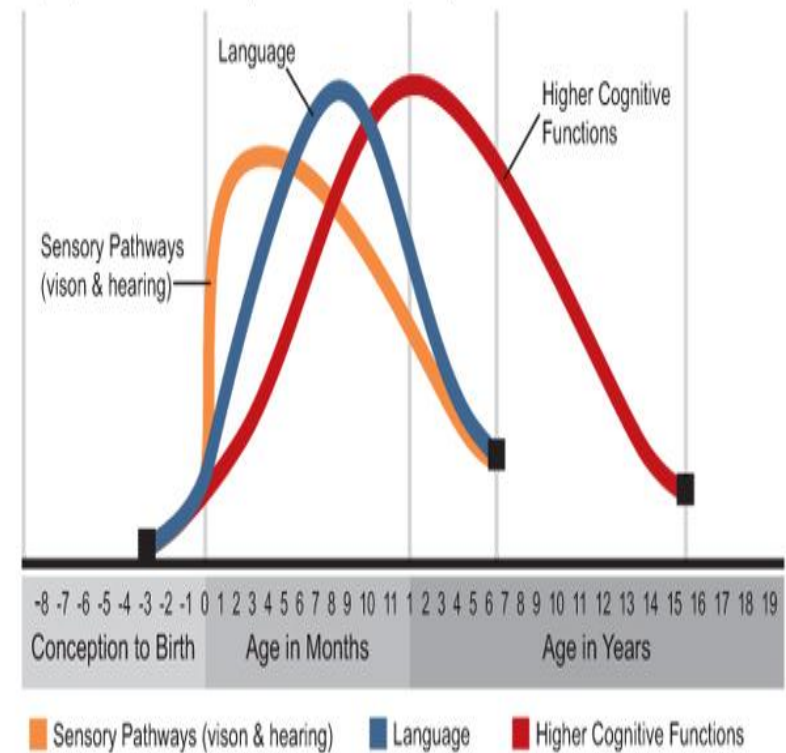


THE SYNAPSES

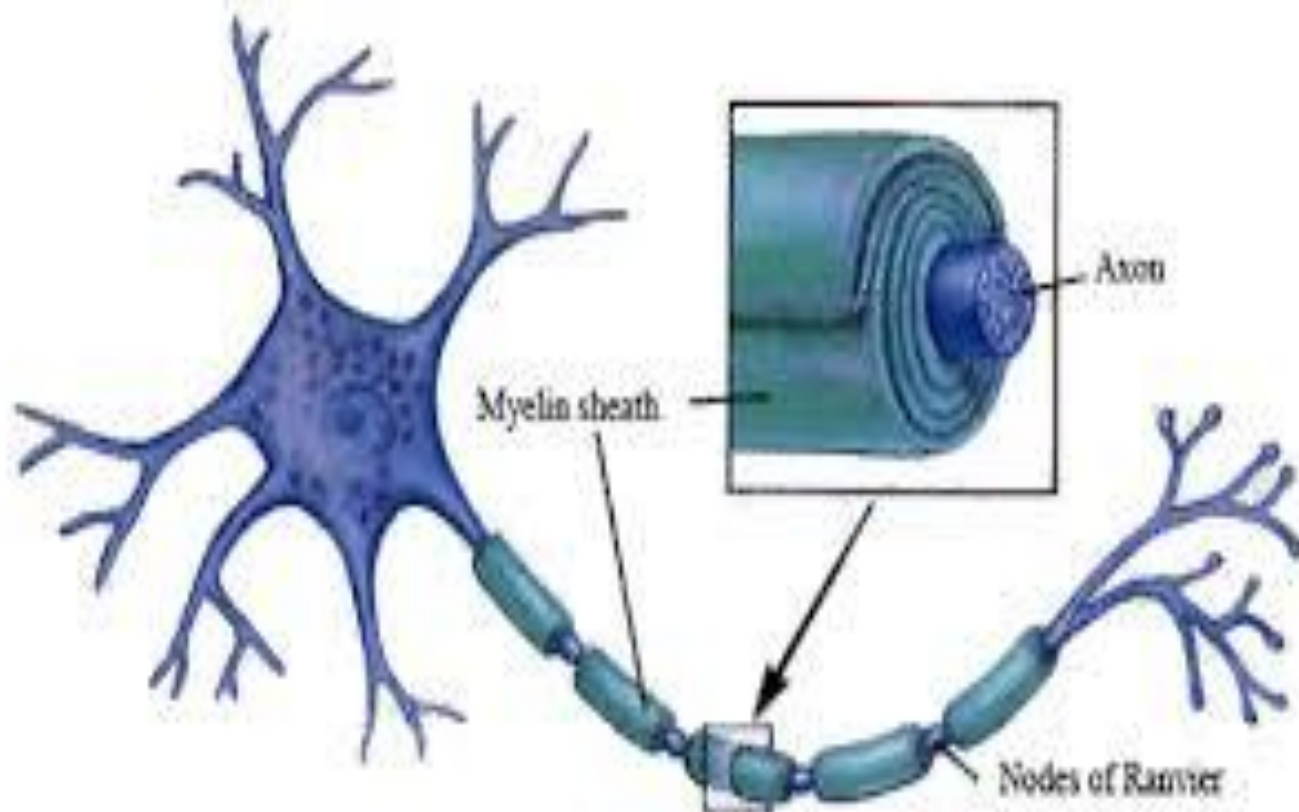


Human Brain Development

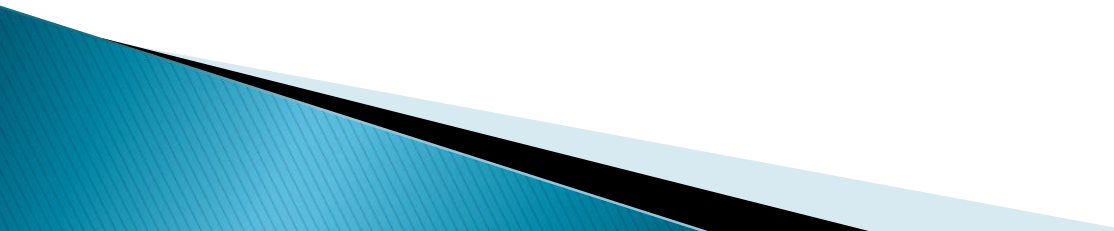
Synapse formation dependent on early experiences



MYELINATION



PRUNING

- ▶ Pruning is a key process that shapes the brains of young children. The process involves refining the synaptic connections based on experience.
 - ▶ Connections used regularly become stronger and more complex whereas those not used are shed off.
 - ▶ For example acquisition of mother tongue or language development.
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PRUNING-TRIMMING!!!

36 weeks
gestation

Newborn

3 months

6 months

2 years

4 years

6 years

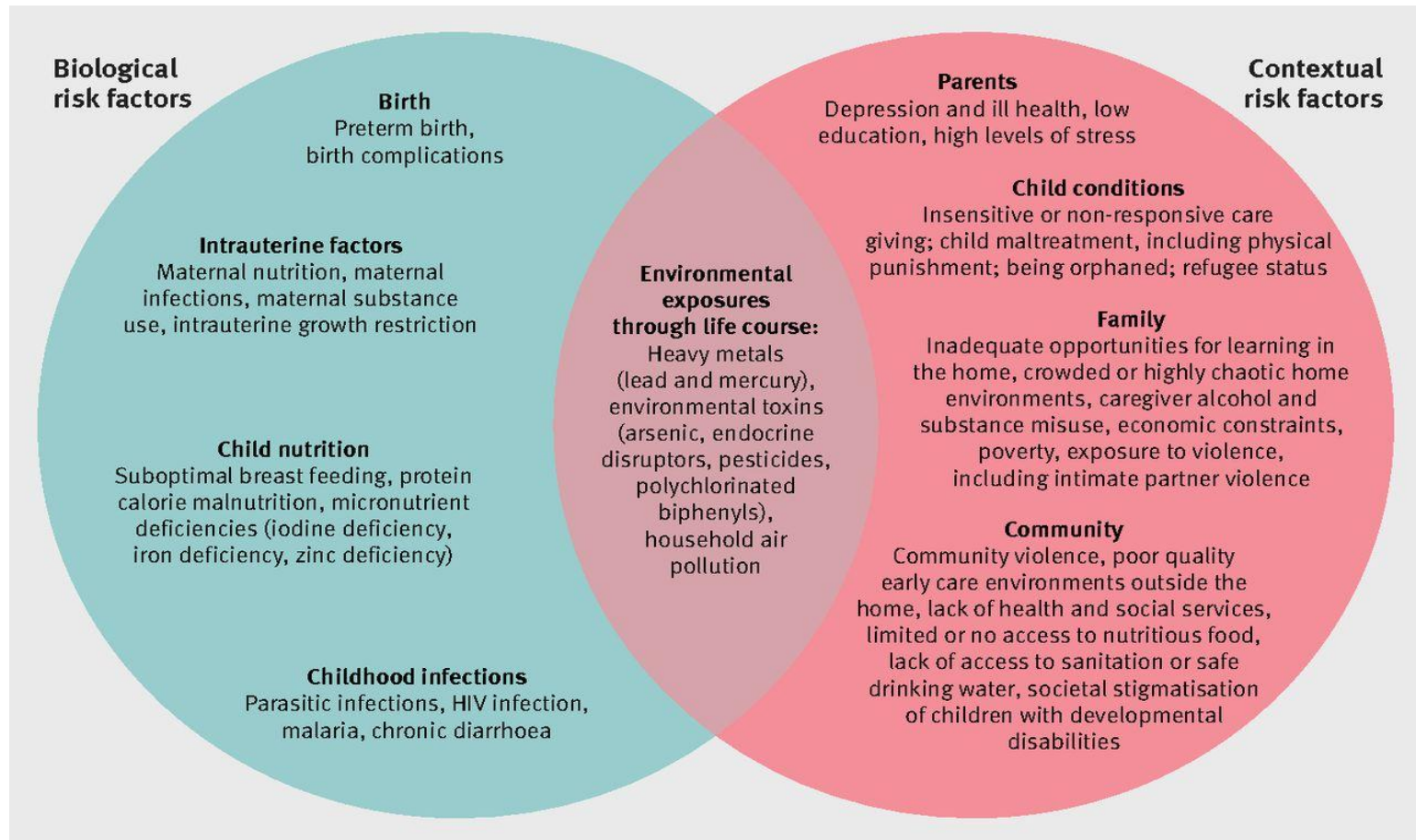


Synapse formation

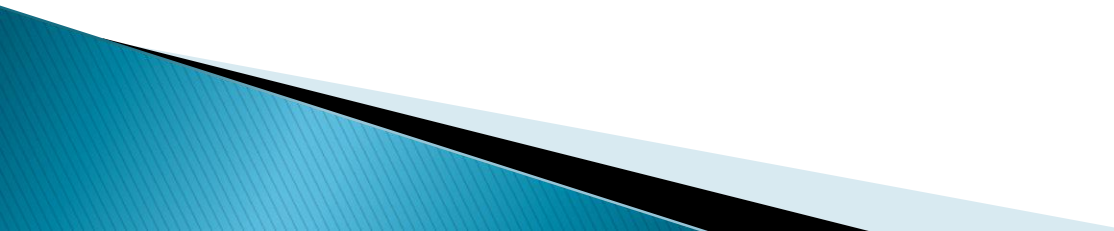
Synapse pruning



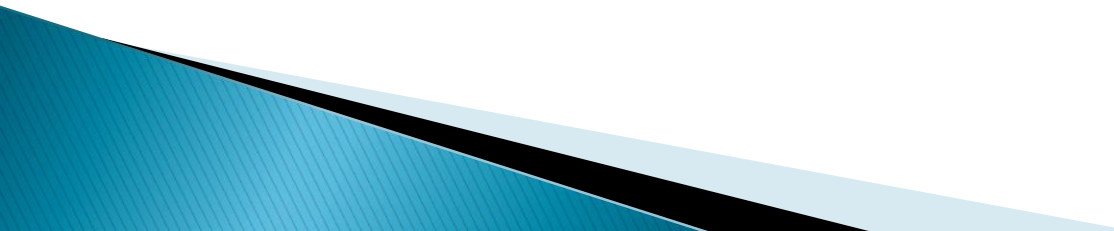
RISK FACTORS FOR CHILD DEVELOPMENT




CHILD ABUSE/NEGLECT

- ▶ Abuse and neglect are defined as “injury,sexual abuse,sexual exploitation,negligent treatment or maltreatment of a child”.
 - ▶ According to WHO abuse can be of several kinds– physical,mental,emotional,psychological or in the form of neglect or exploitation.
 - ▶ Abuse and neglect represent the absence of adequate input[neglect] or the presence of threatening input[abuse] either of which can compromise development.
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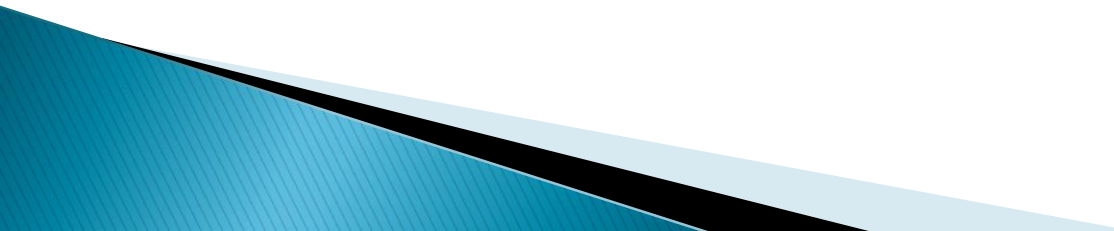
TYPES OF CHILD ABUSE

- ▶ Physical abuse
 - ▶ Neglect–nutritional,emotional,educational,health related and avoidant behaviour
 - ▶ Sexual abuse
 - ▶ Child sexual exploitation
 - ▶ Emotional abuse
 - ▶ Domestic abuse
 - ▶ Bullying and cyberbullying
 - ▶ Child trafficking
 - ▶ Female genital mutilation
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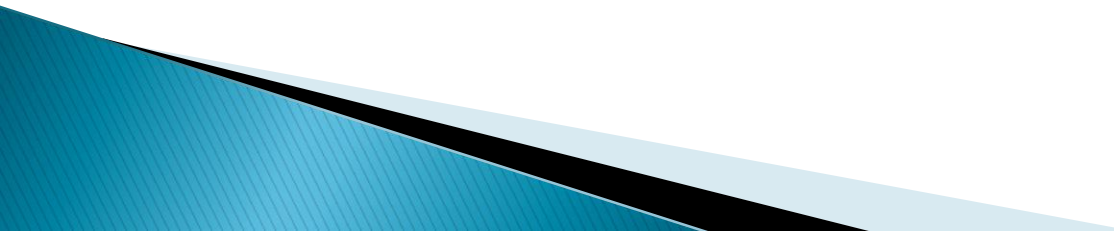
SIGNS TO LOOK FOR

- ▶ Showing a fear for a particular place/people
 - ▶ Regular flinching in response to sudden action
 - ▶ Knowledge of adult issues–alcohol/drugs/sex
 - ▶ Aggressive behaviour/angry outbursts
 - ▶ Withdrawn/clingy/depressed
 - ▶ Self-harming/suicidal attempts
 - ▶ Eating disorders
 - ▶ Nightmares/sleep problems
 - ▶ Bedwetting
 - ▶ Risky behaviour in older children
 - ▶ Running away from home/foster care
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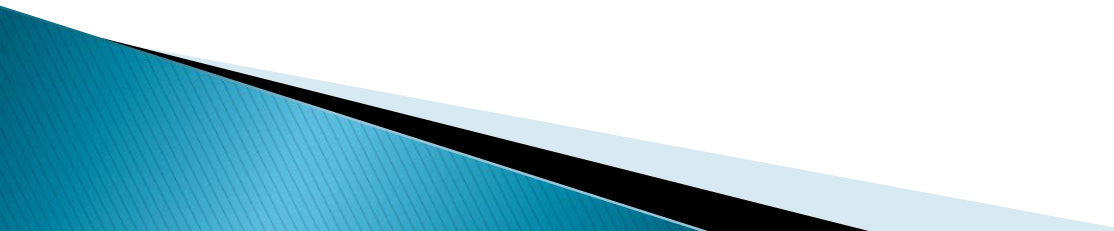
CONSEQUENCES OF CHILD ABUSE/NEGLECT

- ▶ Key concepts
 - positive and negative influences found among individual predict outcomes.
 - child abuse and neglect in the context of child's brain development.
 - multiple stressors.
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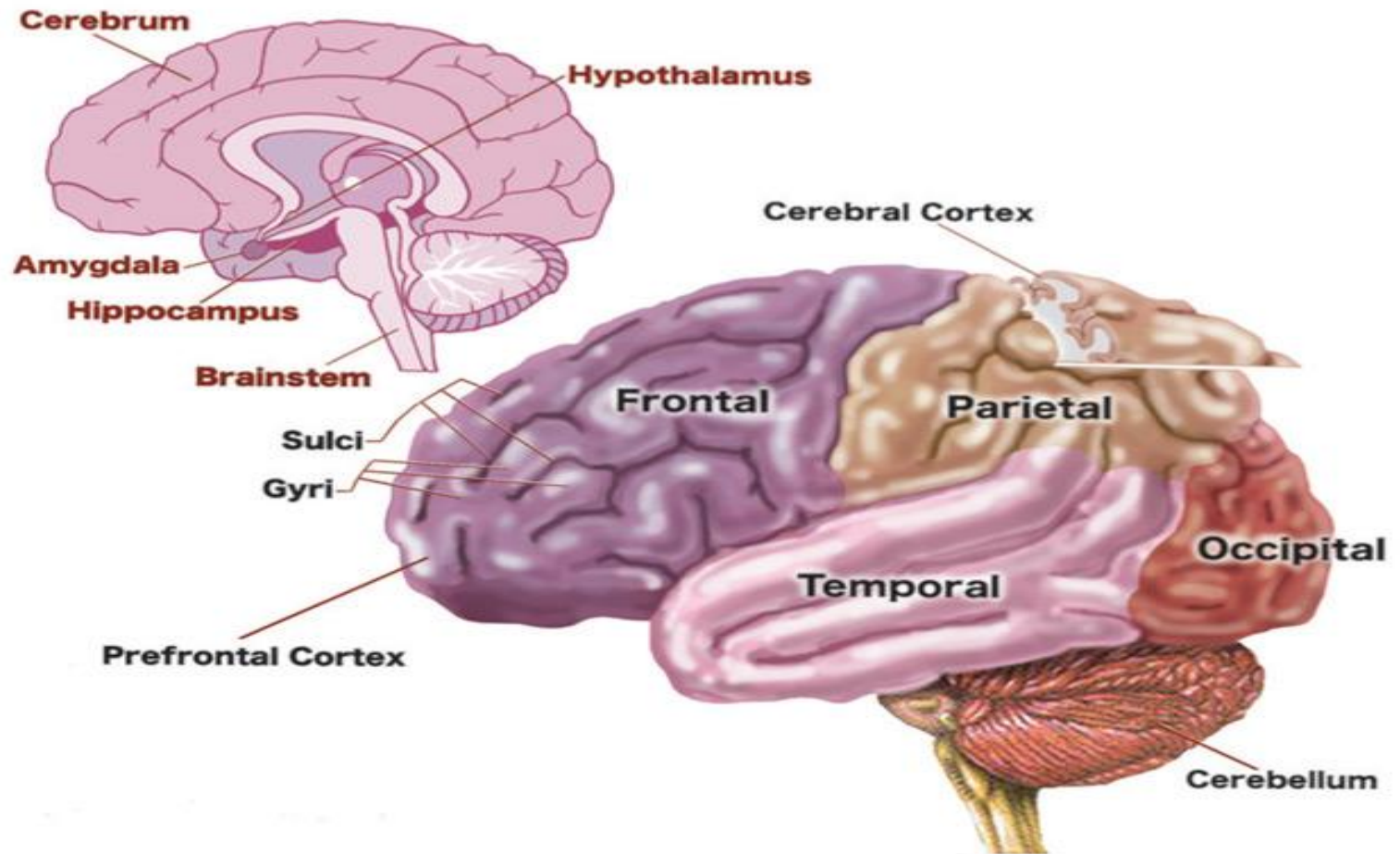
SENSITIVE/CRITICAL PERIODS

- ▶ Many aspects of brain development depend on experiences occurring during particular time periods often the first few years of life called the sensitive periods.
 - ▶ If specific experience fails to occur or the wrong experiences occur the development can go awry.
 - ▶ If the child is exposed to good experiences the brain benefits while bad experiences or inadequate input affect the brain.
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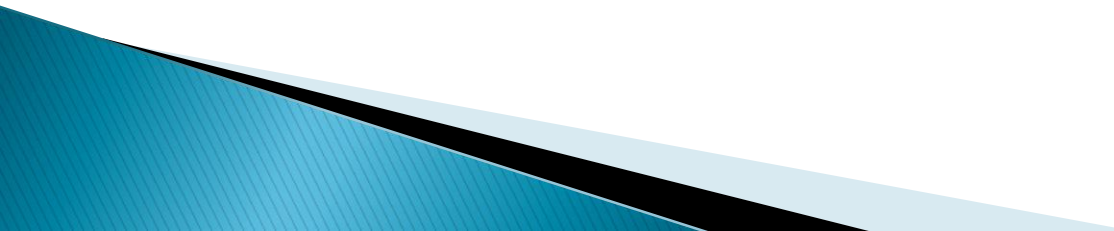
SPECIFIC CHANGES IN THE BRAIN

- ▶ The HPA axis in the brain has the prime functions of mounting a stress response and maintaining a diurnal rhythm.
 - ▶ Abused children have a disrupted HPA axis with increased cortisol levels that damage the limbic and prefrontal regions.
 - ▶ The above changes also affect the telomere length so that the cells become old or tend to malfunction to form tumours.
 - ▶ With sensitive mothers tending to abused children the telomeres were longer than with insensitive mothers.
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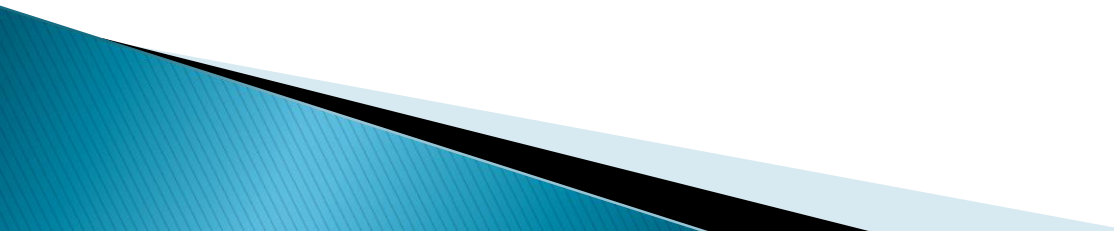
PARTS OF THE BRAIN



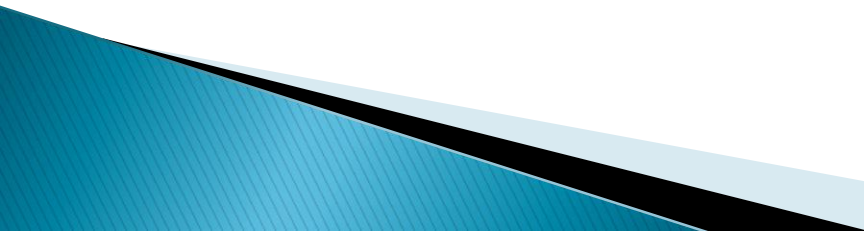
AMYGDALA AND HIPPOCAMPUS

- ▶ The amygdala and hippocampus are in charge of memories and emotions and they undergo rapid development in first few years.
 - ▶ They are susceptible to adverse experiences.
 - ▶ As a result an abused child may have internalising problems, heightened anxiety, emotional reactivity and deficits in emotional processing.
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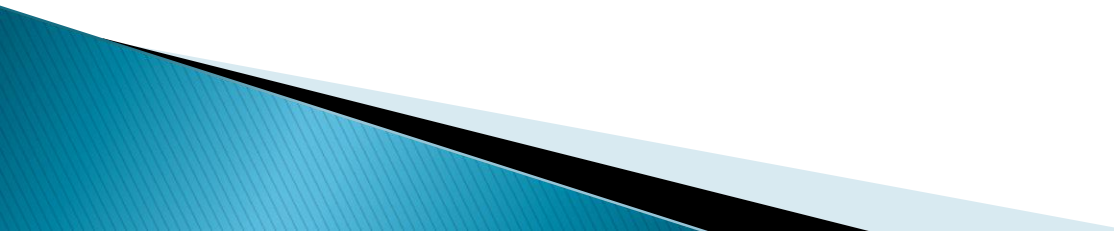
PREFRONTAL CORTEX

- ▶ The prefrontal cortex is the CEO of the brain and abused children tend to have functional changes due to the effects of cortisol on myelination.
 - ▶ There is a decrease in cognitive functioning and decision making abilities in such children.
 - ▶ Planning and executive functioning are compromised.
 - ▶ Academically such children score less in IQ.
 - ▶ Problems like inattention/overactivity is pronounced in abused children.
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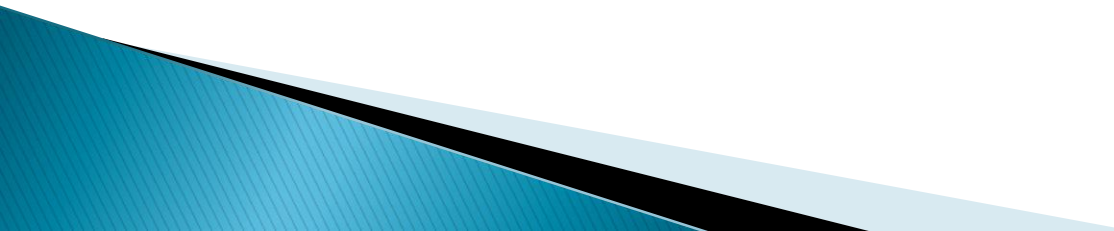
ATTACHMENT DISORDERS

- ▶ Children develop secure attachments to parents who are responsive to them when they are distressed and insecure or avoidant attachments when parents are unresponsive.
 - ▶ This is one of the important factors predictive of long term outcome in such children.
 - ▶ Evidence suggests a link between disorganised attachment and later externalising disorders like conduct disorder, substance abuse, ODD..
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OTHER PROBLEMS

- ▶ Internalising disorders like depression and anxiety.
 - ▶ Suicide attempts.
 - ▶ Delinquency and violent behaviour.
 - ▶ Personality disorders.
 - ▶ PTSD
 - ▶ Early sexual initiation and risky sexual behaviour.
 - ▶ Teenage pregnancy.
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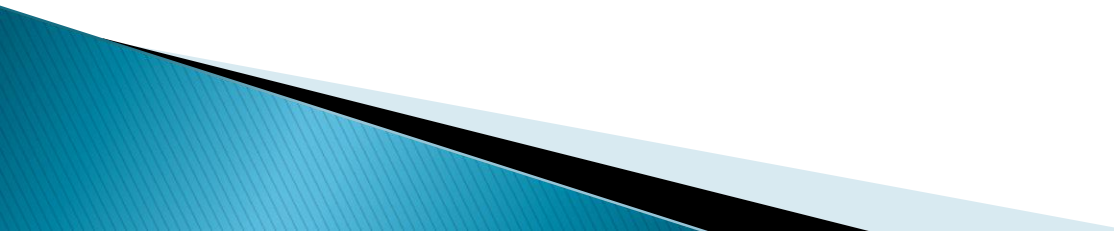
INFLUENCE ON BRAIN ELECTRICAL ACTIVITY

- ▶ Studies show institutionalised children had higher levels of theta waves and lower levels of alpha and beta waves in the EEG, which suggests a maturational delay or deficit in cortical development, profiles similar to those seen in ADHD children.
 - ▶ Event related potentials/ERP measure changes in EEG in response to an internal/external stimulus. Abused children showed larger deflections to angry target faces than non-abused children.
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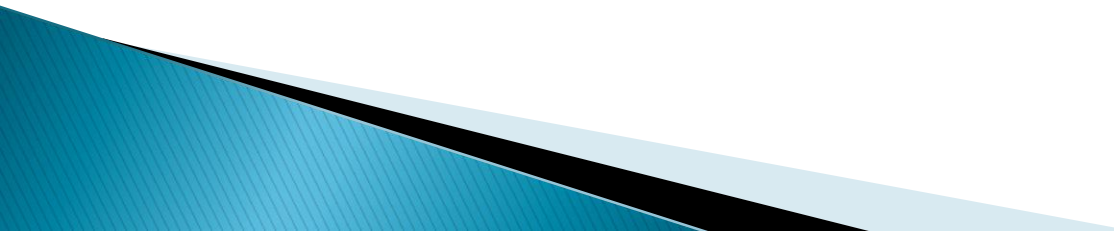
THE BUCHAREST EARLY INTERVENTION PROJECT

- ▶ It was a RCT of foster care as an intervention for children abandoned at or around the time of birth and placed in one of six institutions in Bucharest, Romania.
 - ▶ Began in 2000 with a comprehensive baseline assessment of 136 children and their caregiving environments.
 - ▶ Following assessment half the children were placed in high quality foster care and the other half in institutional care.
 - ▶ Average age being 22 months.
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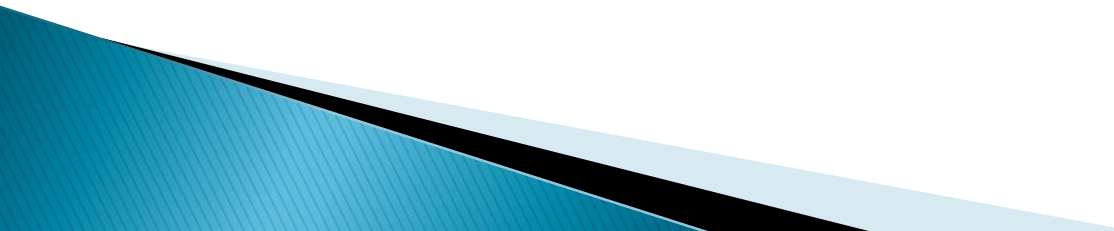
BEIP-CONT'D

- ▶ Follow up assessment was done at 30 mon, 42 mon, 54 mon, 8 yrs and 12 yrs.
 - ▶ 12 yr assessment revealed that foster care enhances child's development in attachment, language and cognition.
 - ▶ Early institutional care had caused profound deficits in cognitive and socio emotional behaviours and an increase in the incidence of psychiatric disorders.
 - ▶ So earlier the child is put into foster care better the recovery.
- 

CASE DISCUSSION

- ▶ A 15 year old young girl was brought to the casualty with a cut in the forearm, disclosed for the first time that she was sexually abused by her father when she was 6 years old. The impact of the abuse appears to have had a significant impact leading to anxiety and depression and several self harm attempts.
 - ▶ h/o domestic abuse on the mother and violence towards children.
 - ▶ Elder sister has made similar disclosure against father but was suppressed.
 - ▶ Father is an alcoholic and has borderline personality disorder.
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INTERVENTION STRATEGIES

- ▶ Working with abused children and parents/counsellors as a team.
 - ▶ Dealing with family issues.
 - ▶ Recognising child abuse and neglect.
 - ▶ Training support staff to recognise child abuse, neglect and sexual abuse.
 - ▶ Supporting families .
 - ▶ Parenting programmes.
 - ▶ Multi agency response.
 - ▶ Therapeutic interventions.
 - ▶ Reporting.
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LET US WORK TOGETHER!!!



Child Abuse

a 7 unit courses addressing
'red flags', assessment, detection,
intervention strategies
community resources &
treatment



THANK YOU