## Adverse Childhood Experiences (ACEs)

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#### Session aims

- ACEs what are they?
- Initial research on ACEs
- Where are we now?
- How do ACEs affect us through the lifespan?
- What can you do as part of your role?
- Looking after yourself

#### What are ACEs?



#### Additional markers



#### Early ACEs research

- Felitti et al. (1998)
  - 9000+ respondents
  - 67% 1+ ACE
  - Of these, 87% had 2+ ACEs, 12.6% had 4+ ACEs
  - o 4+ ACEs:
    - 240% more likely to have hepatitis
    - 390% more likely to have COPD
    - 240% more likely to have an STD
    - 12 times more likely to have a suicide attempt
    - 7 times more likely to have an alcohol abuse problem
  - From 0 6 ACEs, there is a 5000% increased likelihood of suicide attempts
  - O Considerable impact on physical health

#### Here and now?

- Welsh ACEs study (Public Health Wales, 2015)
  - o 2000+ adults
  - O 47% reported 1+ ACE
  - o 14% reported 4+ ACES
  - 4+ ACES = > 5x more likely to have low mental wellbeing than those with no ACES
  - O Over the past two weeks, adults with 4+ ACES were:
    - 3 x more likely to have never or rarely felt relaxed
    - 3 x more likely to have never or rarely felt close to other people
    - 6 x more likely to have never or rarely felt optimistic about the future
- English ACEs study (Bellis et al., 2013)
  - o 1500 people
  - similar results, particularly those with 4+ ACES 35% had low mental wellbeing
- Lancet systematic review (2017)
  - Showed a wide range of adult disease, social care and lifestyle associations with ACEs

## TED talk: How childhood trauma affects health across a lifetime (Nadine Burke Harris)

https://www.youtube.com/watch?v=95ovIJ3dsNk

## Impact of ACEs during childhood

- Most research looks at impacts on ACEs in adulthood very few look at impact of ACEs during childhood other than neurobiological studies
- However, we know that children and young people who have experienced ACEs are more likely to:
  - Perform poorly at school
  - Be involved in crime
  - Have sex under the age of consent
  - Have unwanted pregnancies before 18
  - Have poor mental wellbeing before 18

#### First years

- The main message from ACEs studies is that experiences become adverse not on their own, but due to the absence of a safe, caring adult who can support and reassure the child.
- Attachment to safe adults provides children with:
  - O Safety to be protected from harm and intrusion
  - Emotional regulation to be comforted, supported, guided, learn to accept and manage intense emotions
  - Belonging for the child to feel secure in their position within the family/classroom/school

#### These will enable children to:

- Form the building blocks for their capacity to self-regulate
- Help them expand the neuronal connections in the brain enabling them to develop age appropriate emotional, social and cognitive development.

## Video

• How resilience is built

https://www.youtube.com/watch?v=xSf7pRpOgu8



### What is the impact of early trauma?

Research shows that early trauma can have a considerable impact on four main domains:

- self-regulation/emotional regulation
- Competence, including the ability to learn
- Interpersonal/social skills
- Physical health and wellbeing

#### Childhood trauma and the brain

#### Trauma in childhood changes the structure of the brain

- The amygdala over-stimulated
  - o responsible for threat detection and tagging memories with emotions
  - o can get overstimulated after traumatic experiences
- The hippocampus underdeveloped and underactive
  - o crucial for storing and retrieving memories and distinguishing between past and present memories
  - o this affects learning, memorising, recall and ability to discriminate between past and present
- The pre-frontal cortex shrinks and becomes less active when the limbic systems (including hippocampus and amygdala) are overactive
  - Involved in a variety of complex behaviours, including planning and development of personality
  - o this means that children often have fear, anxiety and extreme stress responses when the child is in a triggering situation

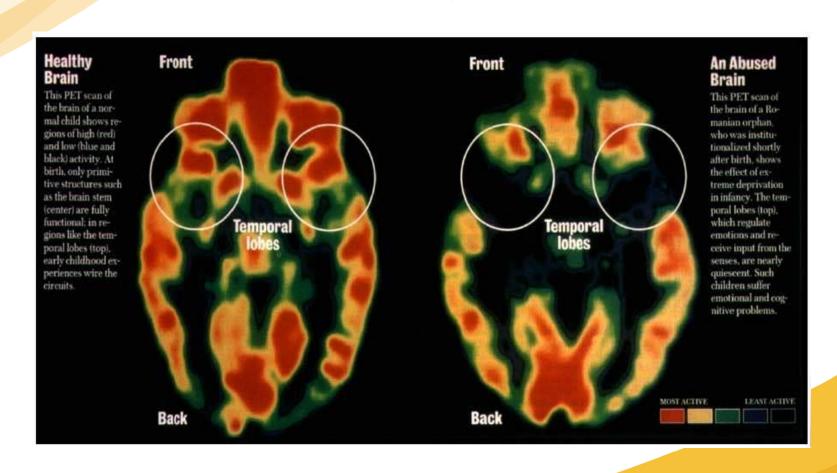
## Impact of toxic stress on brain development

POSITIVE STRESS: When a young child is protected by supportive relationships with adults, they learn to copy with every day challenges and their stress response system returns to normal

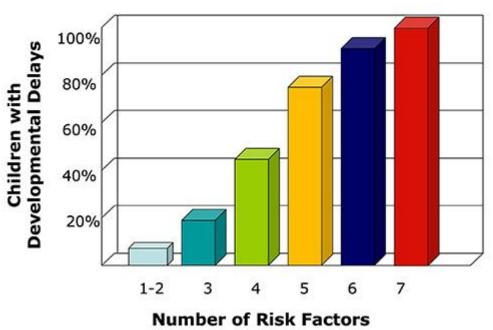
TOLERABLE STRESS: when more serious difficulties, such as loss of a loved one or a frightening injury are buffered by caring adults who help the child adapt, which helps to mitigate the potentially damaging effects of abnormal levels of stress hormones

TOXIC STRESS: when strong, frequent or prolonged adverse experiences such as extreme poverty or repeated abuse are experienced without adult support - excessive cortisol disrupts the developing brain circuits

# Impact of toxic stress on brain development



#### Significant Adversity Impairs Development in the First Three Years



As the number of adverse early childhood experiences mounts, so does the risk of developmental delays. Source: Barth et al (2008). Credit: Center on the Developing Child.

#### Neuroplasticity

- = the brain's ability to be moulded by experience
- The brain is constantly changing and re-organising with each new experience
- Neuroplasticity refers to the ability of neurons to change and to retain the new structure (3yrs, 7yrs)
- Some systems have a sensitive period early in life when they have greater plasticity
- Neuroplasticity is naturally easier during periods of brain restructuring (eg. childhood and adolescence

Neuroplasticity is what enables us to change outcomes for children affected by ACES

# What happens for preschool aged children?

- You may start to see violent or unpredictable behaviour, or alternatively children who are withdrawn and disengaged
- Children may feel angry and hurt and often have not had the support to recognise and learn to manage there strong emotions
- Understandably, many children cannot see the point of education as they have so many other things to deal with
- Often children do not trust adults and find it difficult to build relationships, both with children and adults
- You may find children cannot sit still and relax and are hypervigilant

#### Intergenerational impacts

- People who experience ACES as children often end up trying to raise their own children in households where ACES are more common.
- Such cycles can lock successive generations of families into poor health and anti-social behaviour for generations.

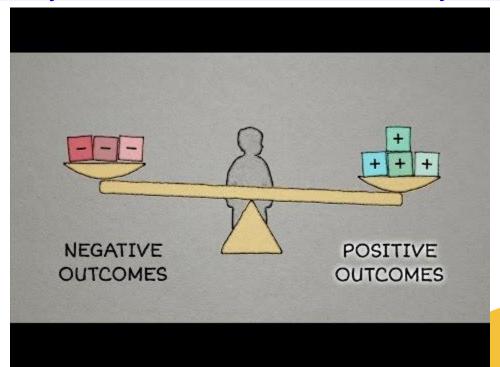
#### **BUT**

this also means that preventing ACEs in a single generation or reducing their impacts can benefit not only those children but also future generations.

## Video

#### •Science of resilience

https://www.youtube.com/watch?v=1r8hj72bfGo



#### Resilience and hope

Not all children who experience ACEs will have negative outcomes

Research shows that childhood resilience resources were strongly associated with lower levels of mental illness, self-harm and suicidal ideation

- By helping to increase resilience you are helping to create the ability to achieve positive outcomes despite difficult circumstances
- Key protective factors = building blocks to resilience:
  - Caring and supportive relationship with an adult
  - O Believing you can overcome hardship
  - Feeling grounded within your culture and traditions
  - Having the skills to regulate your emotions and behaviours

#### Resilient children

"Can resist adversity, cope with uncertainty and recover more successfully from traumatic events of episodes." Newman, T (2002)



### What else can you do?

Relationships matter - every interaction is an opportunity for an intervention

- Adopt trauma-informed care principles
- Have a professional curiosity about adversity and trauma: Consider a shift from thinking "what is wrong with you" to considering "What has happened to you?"
- Trauma-informed care principles (Health Education England):
  - Safety
  - Transparency and trustworthiness
  - o Choice
  - o Collaboration
  - Empowerment

#### Safety and reliability

- Recognise the strengths of individuals and systems
- Ensure these strengths are built upon and validated at every contact

#### **Collaboration and Support**

- Recognise that healing happens through relationships and partnerships with shared decision-making.
- Who can you turn to for support and advice
- Staff interactions should be seen to promote a sense of safety within and between teams

#### **Transparency and trustworthiness**

- Main respectful and professional boundaries
- Provide full information about what is happening and what will happen next

#### Your practice

- What are you doing already? What are you going to do or do differently?
- What support network do you have around you?
- How do you ensure your child feels safe?
- How do you support the parents?
- How do you empower yourself?
- How do you empower the child you work with?

#### How can you look after yourself?

- Maintain a healthy work/life balance
- Make time for yourself to do the things you enjoy
- Connect with your team, co-workers and manager
- Reflect individually and as a team
- Exercise and eat well!