

The first 1001 Critical Days: Right from the start.

Amsterdam.

26th January, 2017.



The 1001 Critical days campaign starts with the assumption that the first relationships are the most influential.

Positive predictable interactions with nurturing caregivers profoundly stimulate and organize young growing brains.

The quality of early care has a long lasting impact on how people develop, their ability to learn, and their capacity to both regulate their own emotions and form satisfying relationships.



The 1001 Critical Days Manifesto.

- The 1001 Critical Days Manifesto is a cross-party initiative that was officially launched at each political party conference in 2013.
- It is a vision for the provision of services in the UK for the early years period, which puts forward the moral, scientific and economic case for the importance of the conception to age 2 period.
- It has been behind an All Party Parliamentary Group that, with the WAVE Trust, has produced a report 'Building Greater Britons'

<http://www.wavetrust.org/our-work/publications/reports/building-great-britons>



The 1001 Critical Days
The Importance of the Conception to Age Two Period

There is both a social and an individual goal. Secure children become socially responsible adults.

Our goal is for every baby to receive sensitive, appropriate and responsive care from their parents/caregivers in the first years of life.

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Specialized services for babies and their families should be universal and easily available, supportive and close to families.

The 1001 Critical Days
The Importance of the Conception to Age Two Period



Children's Centres must continue to provide universal services for all families, but with a focus on those families with the highest level of need.

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The Manifesto highlights the importance of acting early to enhance outcomes for children. Too many children and young people do not have the start in life they need, leading to high costs for society, and too many affected lives. Every child deserves an equal opportunity to lead a healthy and fulfilling life, and the 1001 Critical Days Manifesto supports this.





We begin at conception (if not before). Parenting classes belong in school.

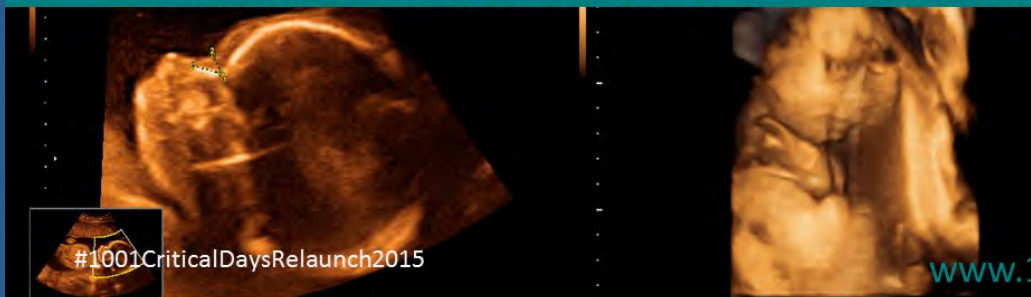
All parents should be able to access antenatal classes which address both the physical and emotional aspects of parenthood, and the baby's well-being and healthy social and emotional development.

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Pre-birth experiences have a big effect on later development, especially the stress response.



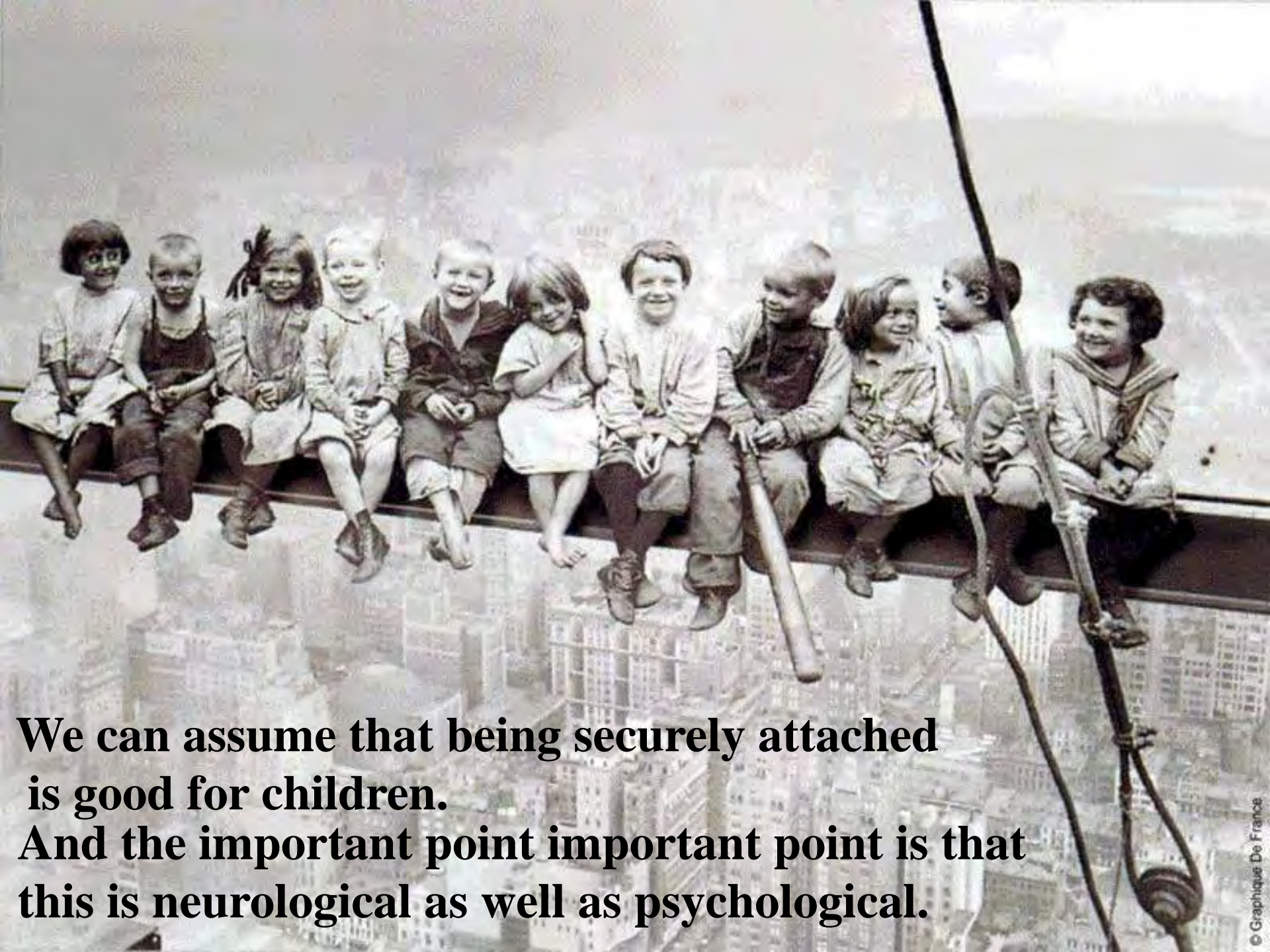
Pregnancy, birth and the first 24 months can be tough for every mother and father, and some parents may find it hard to provide the care and attention their baby needs. But it can also be a chance to affect great change, as pregnancy and the birth of a baby is a critical window of opportunity when parents are especially receptive to offers of advice and support.



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‘Our most distinctive and important human abilities – our capacities for learning, invention, and innovation; and for tradition, culture, and morality – are rooted in relationships between parents and children.’ (p. 22) Alison Gopnik, (2016) *The Gardener and the Carpenter*. London: The Bodley Head.





**We can assume that being securely attached
is good for children.
And the important point important point is that
this is neurological as well as psychological.**

The evidence from epigenetic research shows the importance of uterine experiences.

From birth to 18 months, it has been calculated that connections in the brain are created at a rate of a million per second! The earliest experiences shape a baby's brain development, and have a lifelong impact on that baby's mental and emotional health.

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The caregiving relationship begins in pregnancy – paving the way to secure attachment.

Attachment is the name given to the bond a baby makes with its parents/caregivers

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Babies' minds must adapt to their immediate emotional habitat – they have no alternative.

‘For the developing infant the mother essentially is the environment.’ (p. 78)

Schore, A. N. (1994) *Affect Regulation and the Development of the Self: The Neurobiology of Emotional Development*. New Jersey: Erlbaum.



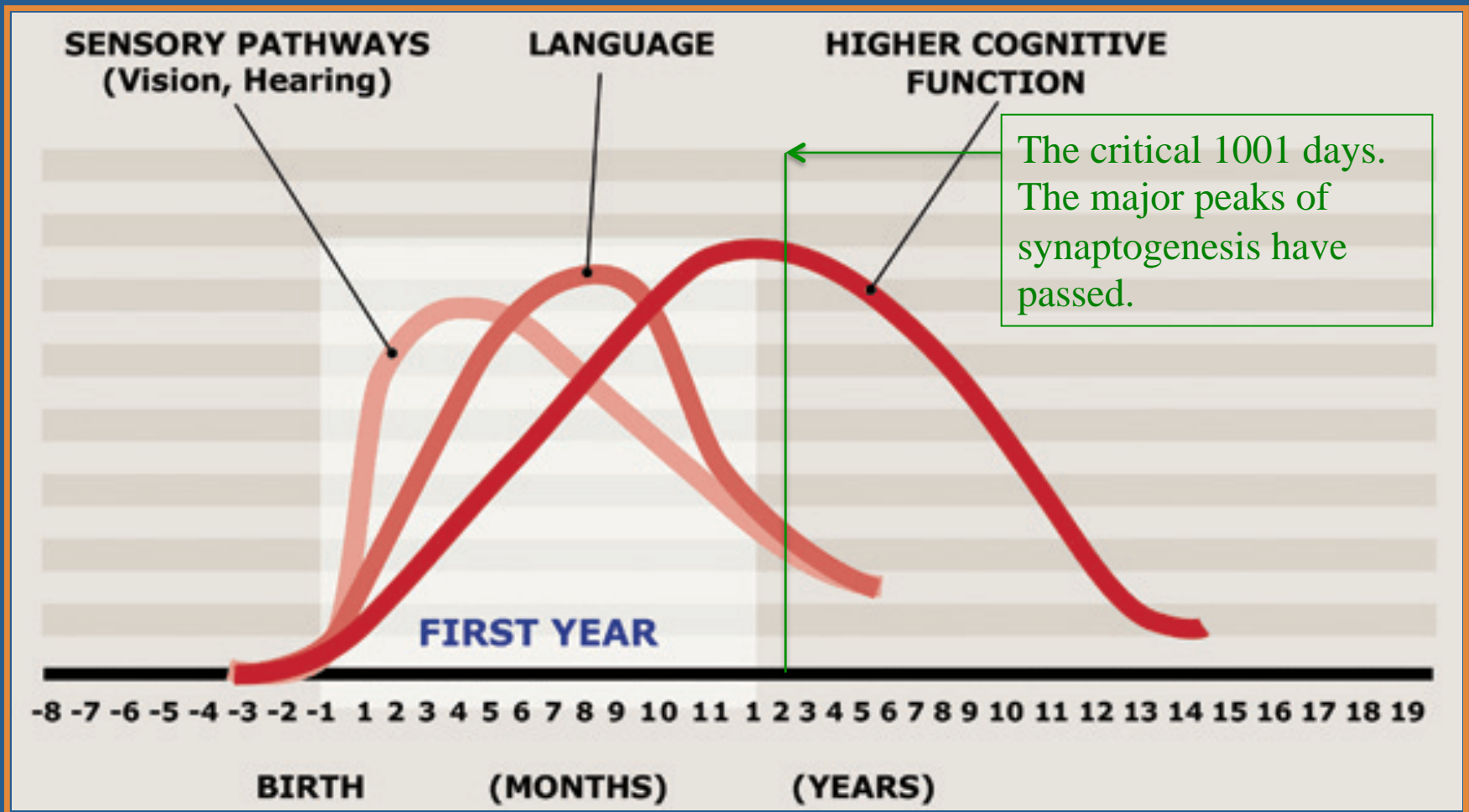
These early experiences sculpt the social brain.

A quick overview.

Just before and after birth there is a ‘blooming’ of brain connections. Such a proliferation of synapses creates great potential for the developing brain, but it makes the young brain inefficient and ‘noisy’ with redundant and unspecialised neural connections.



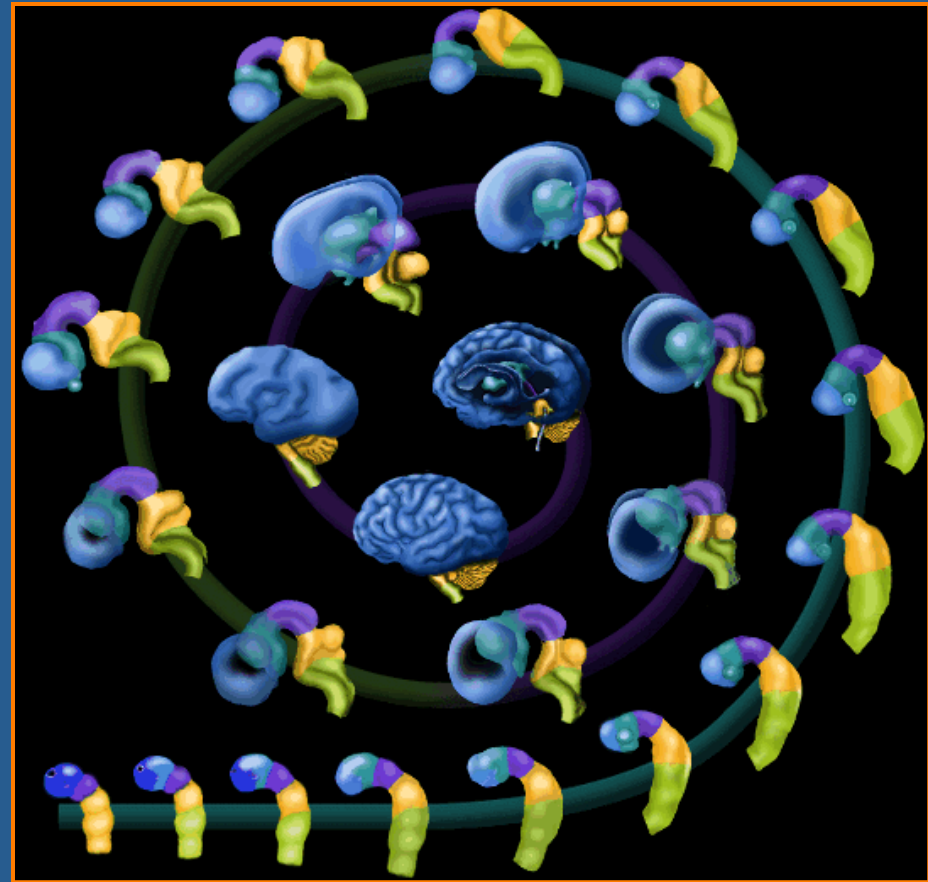
Neural networks in the different areas of the brain associated with specific functions proliferate rapidly and then begin pruning in the earliest years of life.



The emotional brain is most open to influence while it is growing the most, the first 1001 days.

‘The growth of the brain occurs in critical periods and is influenced by the social environment... development is literally being built on a daily basis during the time of accelerated and continuing brain growth in infancy.’

(p. 10) Schore, A.N. (1994) *Affect Regulation and the Origin of the Self: The Neurobiology of Emotional Development*. New Jersey: Erlbaum.

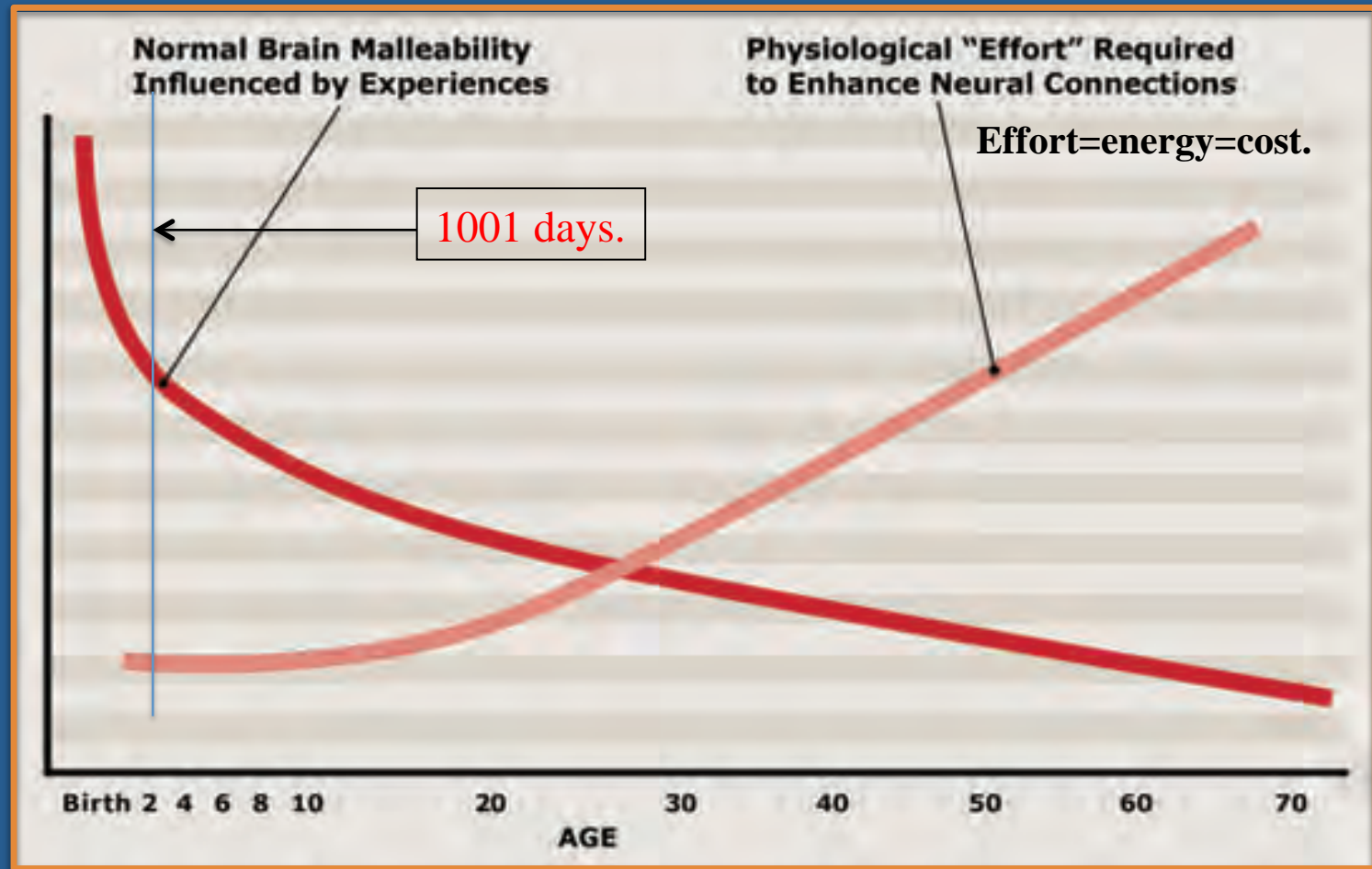


This amazing proliferation of synapses is followed by a stage of 'pruning' to the level of efficiency needed in response to individual experiences.

The core of the environment during early development is relationships with other people.



As the maturing brain becomes more specialized in order to assume more complex functions, it is then less capable of reorganizing and adapting.



Parenting, plasticity and adaptability.

This process of proliferate and prune ensures that specialised circuits emerge and are set in place at the right time. Environmental demands tailor appropriate neural networks specialised to deal with them. In this way neural plasticity builds adaptive cognitive, emotional and reactive structures without any genetic guidance.

The architecture of the brain comes to mirror the child's relationships and experiences. Just remember:-



“Neurons that fire together wire together.”

“Use it or loose it.”

‘During brain growth there is a constant sorting and juggling of nerve cells and connections. Those that make a match with their environment thrive, and the others wither.’ (p.124.) *And so:*

‘Impoverished environments appear to have the opposite effect of rich and varied surroundings. They suppress brain development.’ (p. 158)

Bownds, M. D. (1999) *The Biology of the Mind*. Bethesda: Fitzgerald Science Press.





Many reasons make it hard for a parent to attune to their baby.

Every child deserves an equal opportunity to lead a healthy and fulfilling life, and with the right kind of early intervention, there is every opportunity for secure parent infant relationships to be developed.

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A holistic approach to all ante, peri (around 20th week of pregnancy to around the 28th day of life) and postnatal services would enable seamless access for all families.

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We need to address all the risks that can affect the caregiving relationship.

The neurobiological impact of maltreatment.

‘Because childhood abuse occurs during the critical formative time when the brain is being physically sculpted by experience, the impact of severe stress can leave an indelible imprint on its structure and function. Such abuse, it seems, induces a cascade of molecular and neurobiological effects that irreversibly alter neural development.’ (p.56)

Martin H. Teicher. *Scars that won't heal: the neurobiology of child abuse*.
Scientific American, March 2002. pp.54-61.

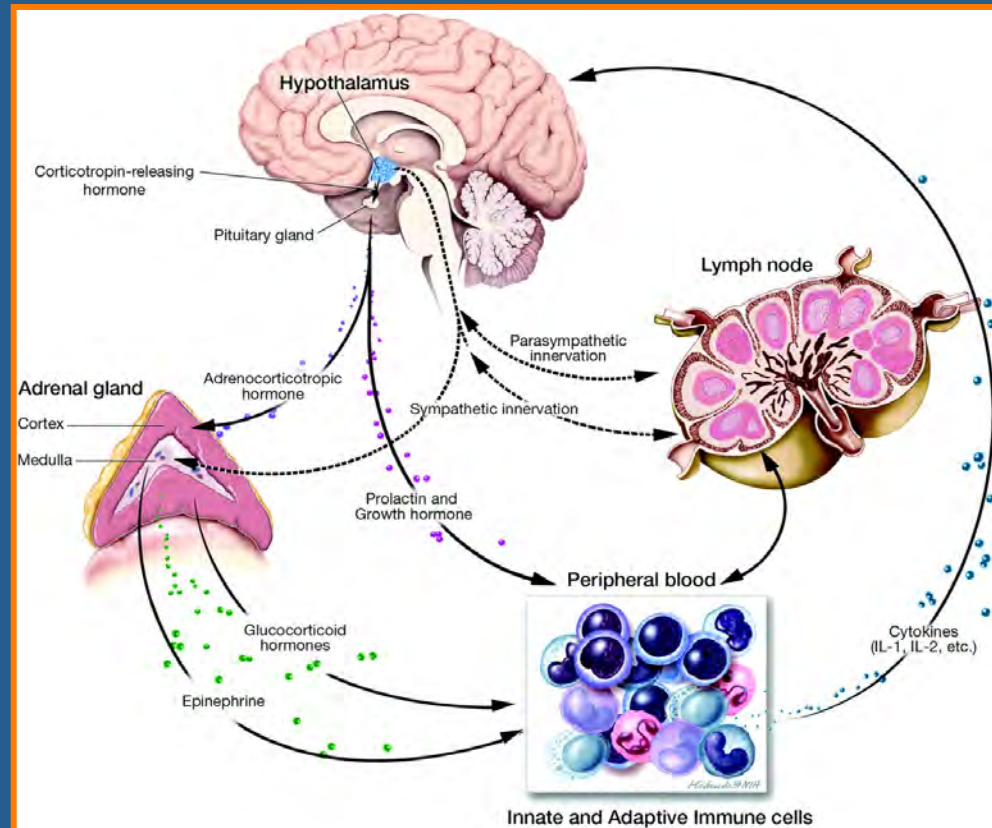


‘The overwhelming stress of childhood maltreatment is associated with alterations of the biological stress response, which, in turn, leads to adverse affects on brain development and delays in cognitive, language and academic skills.’ (p. 728) Watts-

English, et al., (2006) *The psychobiology of maltreatment in childhood.*

Journal of Social Issues, 62, (4), 717-736.

The neuro-hormonal adaptations to trauma lead to the behaviours that are associated with disorganized attachment, conduct disorder and mental ill-health. These may last a lifetime.





Stress can be positive or negative.

*Super Nanny
to the rescue.*



A sensitive carer
in the phase of
early brain growth.

Heightened
arousal and stress.

Out of touch or
harsh caregiver.

Recovery of
calmness in
body and mind.

Infant learns to
handle challenges.

States

become

traits.

Resilient.

At risk.

Hardwired
dysregulated
stress response.

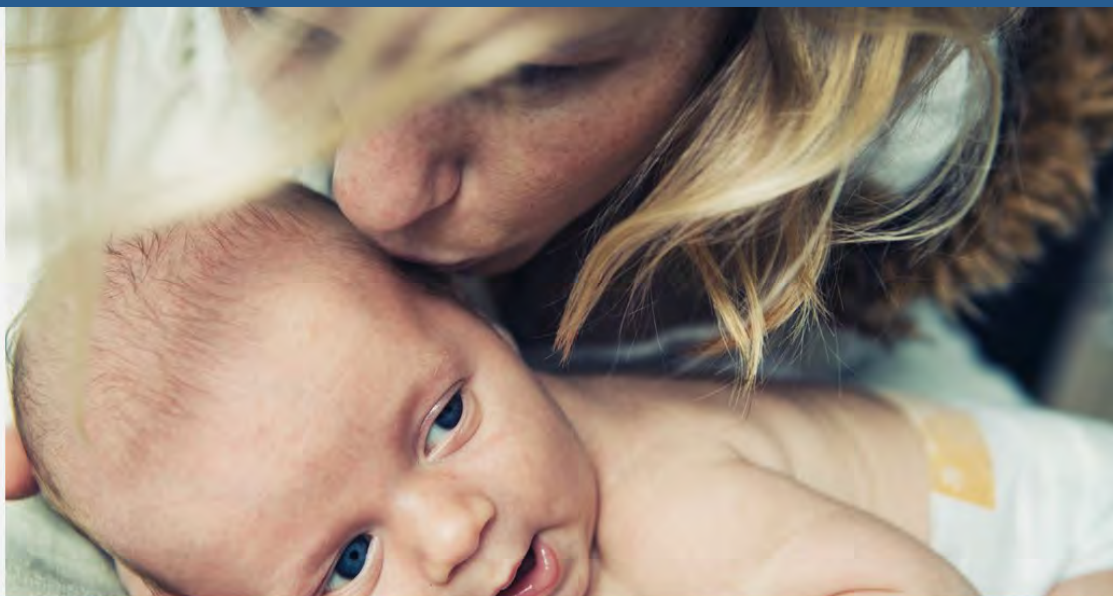
Under or over
activity and
hypervigilance
become features
of the stress
response system.

‘Traumatic events of the earliest years of infancy and childhood are not lost but, like a child’s footprints in wet cement, are often preserved lifelong. Time does not heal the wounds that occur in those earliest years; time conceals them. They are not lost; they are embodied.’ (p.xiii)

Lanius, R. A., Vermetten, E. & Pain, C. (2010) *The Impact of Early Life Traumas on Health and Disease*. Cambridge: Cambridge University Press.

It is important to remember that after a traumatic event what might otherwise have been experienced as normative stress becomes overwhelming; no longer normative, now costly.





Parental mental illness is an accidental trauma and one of the many risks for later insecure attachment.

Every woman with a history of past or present serious mental illness should have access to a Consultant Perinatal Psychiatrist and specialist support in relation to mother-infant interaction as required, in accordance with the NICE guidelines.

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Some parents may need extra help to be able to hold the baby in their mind. We must not forget fathers.



A range of services must be in place in every local area to ensure that parents who are at risk of suffering from mental health problems are given appropriate support at the earliest opportunity.

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Future shock – a lifetime perspective.

‘Adult and adolescent community violence begins with violence inflicted on the babies these individuals once were.’ (p. 161) Karr- Morse, R. & Wiley, M. (1997) *Ghosts From the Nursery*. New York: Atlantic Monthly Press.



Supporting the first 1001 days is social immunization.

Trauma in the critical 1001 days – abusive or out of touch parenting, toxic stress, attachment system compromised, emotional dysregulation, chronic fearful arousal, hopelessness, disorganized caregiving, etc.

Sensitised nervous system as brain adapts to emotional environment.

Stress in adult: maladaptive coping strategies, reminders and experiences of trauma, adverse life events, relational aggression, etc.

Permanent psychological distress - conscious or unconscious: lack of reflection, unbearably painful emotional states, dysregulated affect, low self-esteem.

Retreat as self-protection:
isolation and loneliness,
dissociation,
depression.

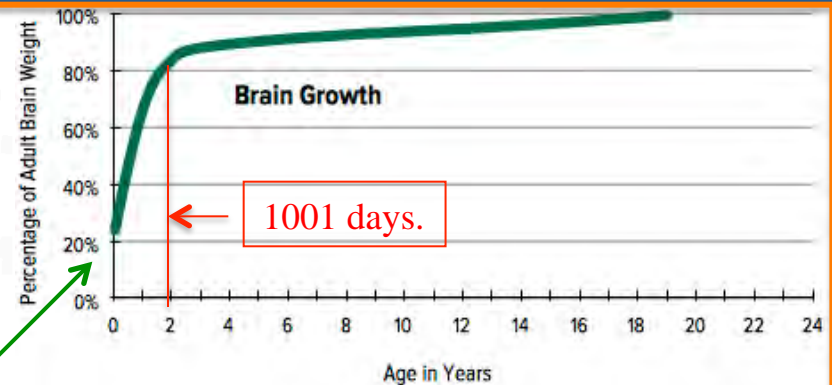
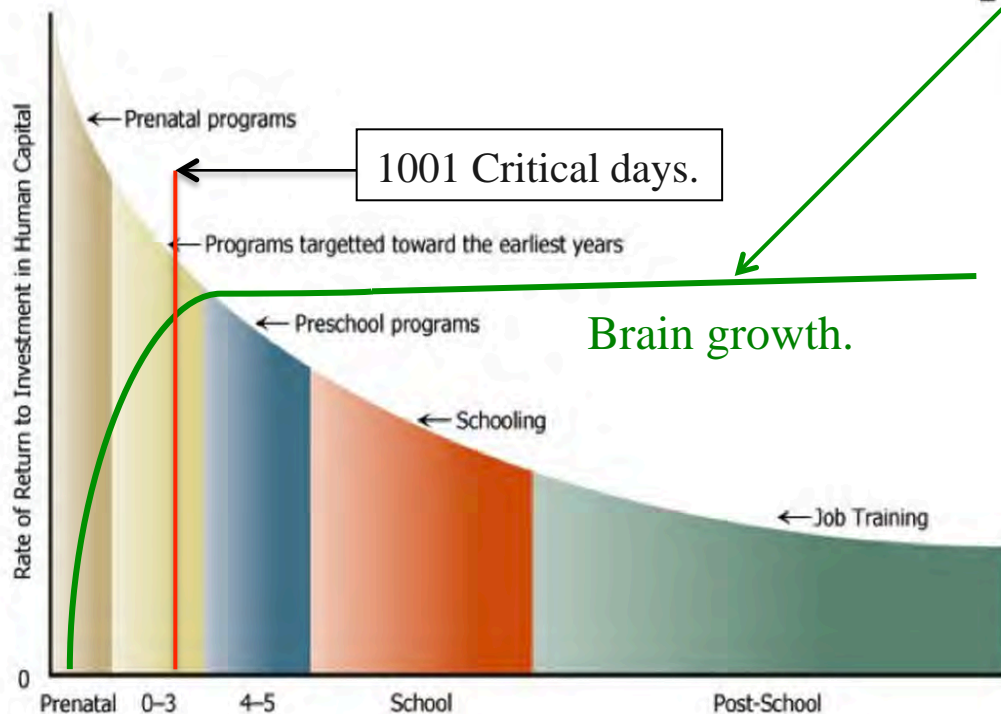
Self-damaging actions:
substance abuse,
eating disorders,
deliberate self-harm,
risk-taking,
suicidal actions.

Destructive actions:
aggression,
violence,
fundamentalism,
exploiting others,
rage, crime.

Investment in the first 1001 days is the most cost-effective, and it is also the kindest.

Early childhood development is a smart investment

The earlier the investment, the greater the return



“A solid body of research shows the cost-effectiveness of early childhood development in helping to prevent achievement gaps, boost school achievement, promote better health outcomes, improve our workforce, increase productivity and reduce the need for costly social spending.”

James Heckman

Nobel Laureate in Economics,
On the *Strong Start for America's Children Act*

Source: James Heckman, Nobel laureate in economics

And this is why: The science behind the 1001 Critical Days campaign.

‘Neurobiological, neuropsychiatric, and attachment data clearly indicate that prevention and intervention should begin even before the nursery, during pregnancy, and extend through the perinatal and postnatal period, the interval of the brain growth spurt.’ (p. 146)

Alan Schore. *Early relational trauma, disorganized attachment, and the development of a predisposition to violence.* pp. 107-167 in: Solomon & Siegal (Eds) (2003) *Healing Trauma*. The Guilford Press.



So early intervention, when needed, is crucial for the child, the family and society – and the grandchildren.

The economic argument for early intervention. For this we need a long-term perspective. The most important task of early intervention is to prevent trauma in the very early years of life, especially maltreatment within the family. This is often neither obvious nor intended.

All experiences that cause a disjunction in the caregiving relationship can be harmful; and in the majority of instances this presents as 'disorganized attachment'. Children who have had very difficult experiences will call upon many state-provided services over the lifespan; and in addition they will be far less likely to 'contribute in' to society.

Cost benefit analyses have shown:

- For every \$1 spent almost \$13 were saved in terms of later services not accessed when participants were followed up at age 40. *High/Scope Perry Preschool Program, follow-up report in 2005.*
- Elmira Home Visiting Project paid back its costs by 4 years. (This approach is known as the Family Nurse Partnership in the U.K.) At a 15 follow up the savings exceeded the costs of the program by a factor of 4. *Olds et al (1999) Prenatal and Infancy Home Visitation by Nurses: Recent Findings. The Future of Children. 9 (1)*
- An RCT in Jamaica set up a two year programme of early intervention targeting failure to thrive infants; 25 years later the participants earnings were 25% more than the control group. *Gertler, et al., (2014) Labor market returns to an early childhood stimulation intervention in Jamaica. Science, 344 (6187) 998-1001.*

‘To be worth undertaking, the intervention thus needs a success rate of only one in 25 for conduct disorder and one in 55 for conduct problems. In other words, the potential benefits are so large relative to costs that intervention is worthwhile, even if its effectiveness is very limited.’ Friedli, L. & Parsonage, M. (2007) *Building an economic case for mental health promotion: part1*. Journal of Public Health. Vol. 6, (3), 14-23.

Sinclair, writing for The Work Foundation and coming from a background in practical economics, is clear.

‘Dysfunctional parenting and children at risk represent classic market failure. This is where the government will get the greatest rate of returns for money invested.’ (p. 54) Sinclair, A. (2007) 0-5:How Small Children Make a Big Difference. Provocation Series, Vol. 3, (1) www.theworkfoundation.com London: The Work Foundation.

The costs of not intervening.

It has been calculated that a young adult who eventually suffers social exclusion due to conduct problem will cost the country three and a half times more than someone with no problem; while conduct disorder will incur costs of ten times higher than having no problem. (Scott, Knapp, Henderson & Maughan (2001) *Financial costs of social exclusion: Follow up study of antisocial children into adulthood*. BMJ, 323 (7306):191)



And ...

A conservative estimate (so it will grow year on year) is that preventing conduct disorders in those children who are most disturbed would save around £150,000 of lifetime costs for each individual; and promoting positive mental health in those children with moderate mental health would yield lifetime cost benefits to each of about £75,000. (Friedli, L. &

Parsonage, M. (2007) *Building an economic case for mental health promotion: part1*. Journal of Public Health. Vol. 6, (3), 14-23.)



A 1992 analysis of the the costs related to child maltreatment and its consequences in Michigan compared these with the costs of providing prevention services to all first time parents. The comparison yielded an 19 to 1 advantage to prevention i.e. for every dollar spent on prevention 19 dollars were saved.

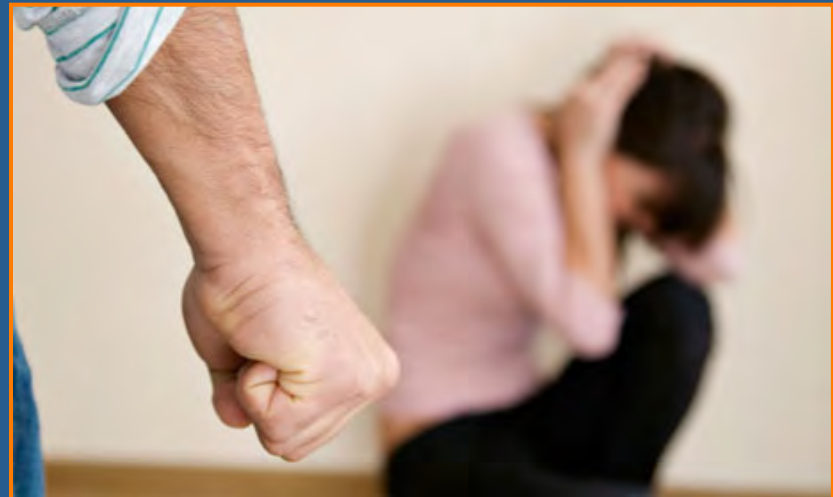
<https://www.msu.edu/user/bob/cost.html> The Children's Trust Fund in Michigan continues to target the prevention of maltreatment as 'Research shows that for every \$1 spent on child abuse and neglect prevention, \$7 will not be spent on publicly-funded, crisis-oriented programming such as protective services, foster care, special education, and counseling with the exception of juvenile delinquency or adult incarceration.'

<http://www.michigan.gov/ctf/0,1607,7-196--232496--,00.html>

A shattered self leads to cruelty.

Trauma in infancy disrupts all areas of development; and children who have been a victim may identify with destruction and hate following the experience of having been treated as a non-human. Their personality grows around a nucleus of horror, and this can be unthinkingly passed on if their stress response has become hard-wired for dissociation.

Thus revenge is the most common reaction to trauma. A traumatized child will unconsciously seek a victim in adulthood.



Maltreatment and future mental illness.

‘Child abuse has a causal role in most mental health problems, including depression, anxiety disorders, PTSD, eating disorders, substance abuse, personality disorders, and dissociative disorder. Psychiatric patients subjected to childhood sexual or physical abuse have earlier first admissions and longer and more frequent hospitalizations, spend longer time in seclusion, receive more medication, are more likely to self-mutilate, and have higher symptom severity.’ (p.218)

Read, J., Fink, P. J., Rudegeair, T., Felitti, V. & Whitfield, C. L. (2008) *Child maltreatment and psychosis: A return to a genuinely integrated bio-social model.* Clinical Schizophrenia & Related Psychosis, 2 (3) 217-225.

The 'Adverse Childhood Experiences Study': Consequences of maltreatment.

- Undertaken at the Center for Disease Control and Prevention & Kaiser Permanente in California.
- One of largest investigations ever on the links between childhood maltreatment and later-life health and well-being.
- Over 17,000 members at comprehensive physical examinations provided detailed information on childhood abuse, neglect and family dysfunction.
- A middle-class sample, all of whom could afford high quality health insurance.

The 'Adverse Childhood Experiences' were:

- Emotional abuse – recurrent humiliation.
- Physical abuse – beating.
- Physical neglect.
- Emotional neglect.
- Contact sexual abuse.
- Mother treated violently.
- Household member was alcoholic or drug user.
- Presence of mental illness.
- Parental separation or divorce – not raised by both biological parents.
- Incarcerated household member.



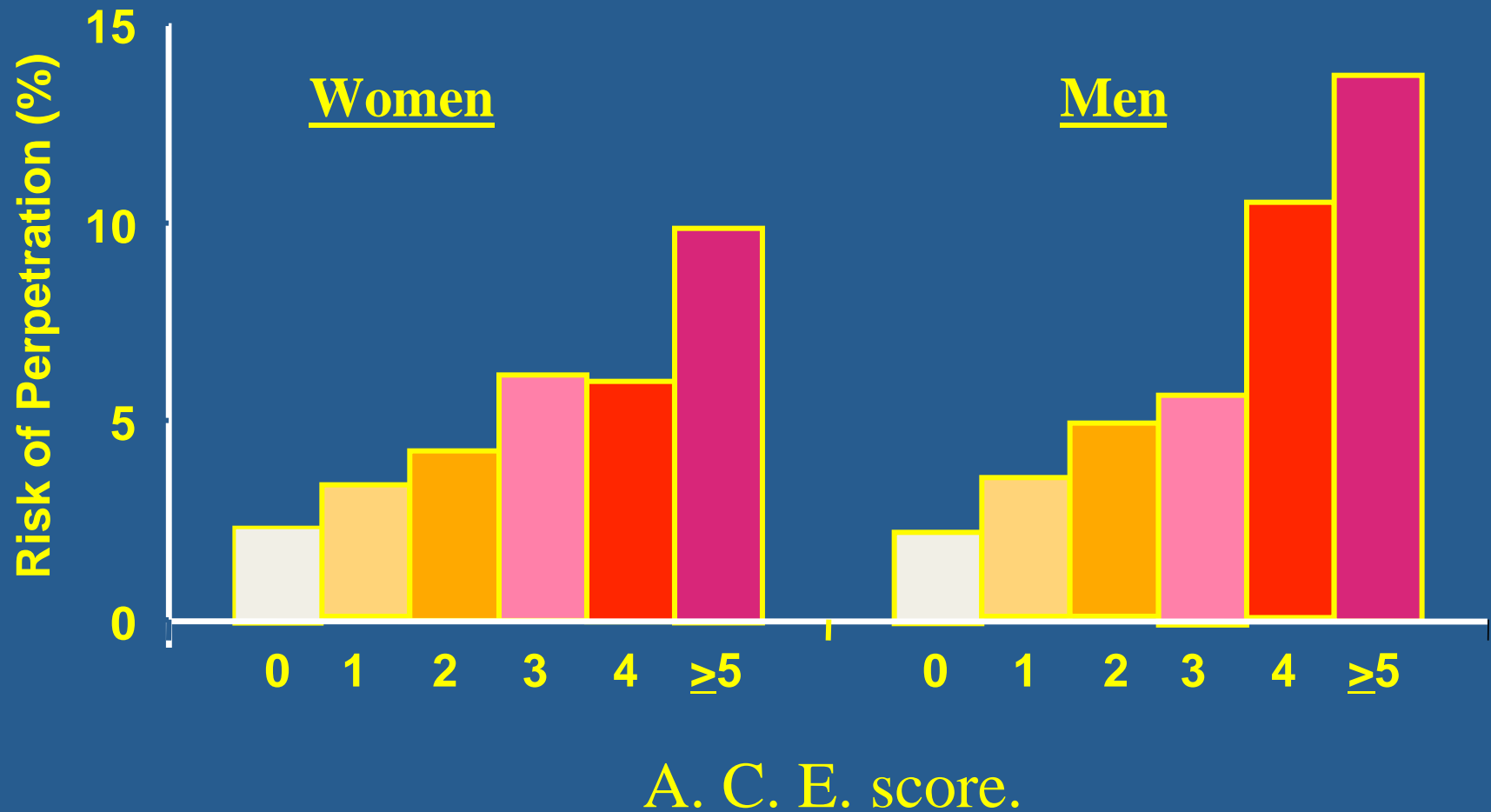
Overall conclusions of the Adverse Childhood Experiences (A.C.E.) study.

The more Adverse Childhood Experiences an individual has endured, the greater the later incidence of:

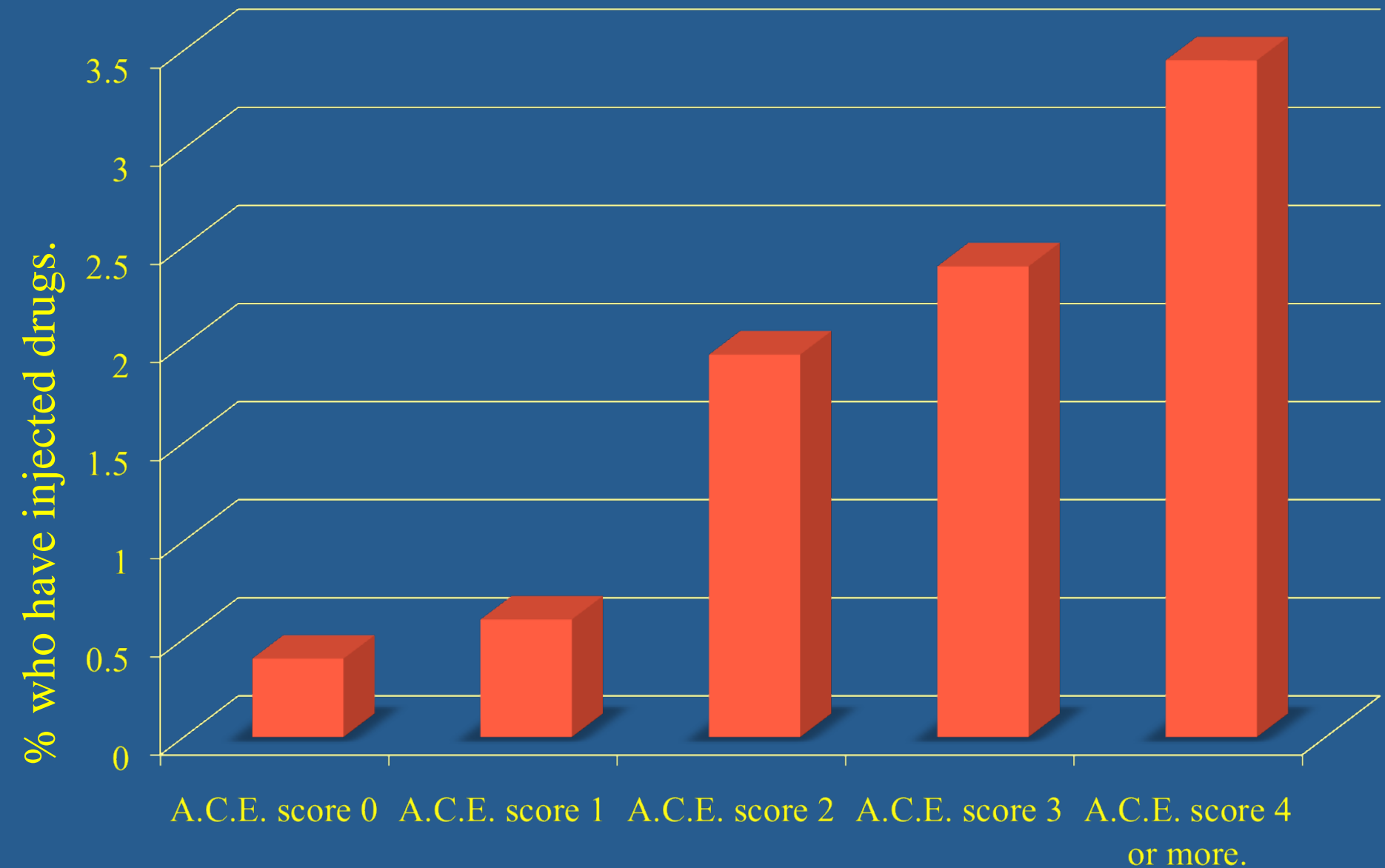
1. Smoking, fractures, severe obesity, alcohol and drug use;
2. Ischaemic heart disease, stroke, chest diseases, cancer;
3. Diabetes, hepatitis, sexually transmitted diseases;
4. Depression, attempted suicide.

Felitti, et al. (1998) *Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults.*
American Journal of Preventive Medicine. 14, (4)

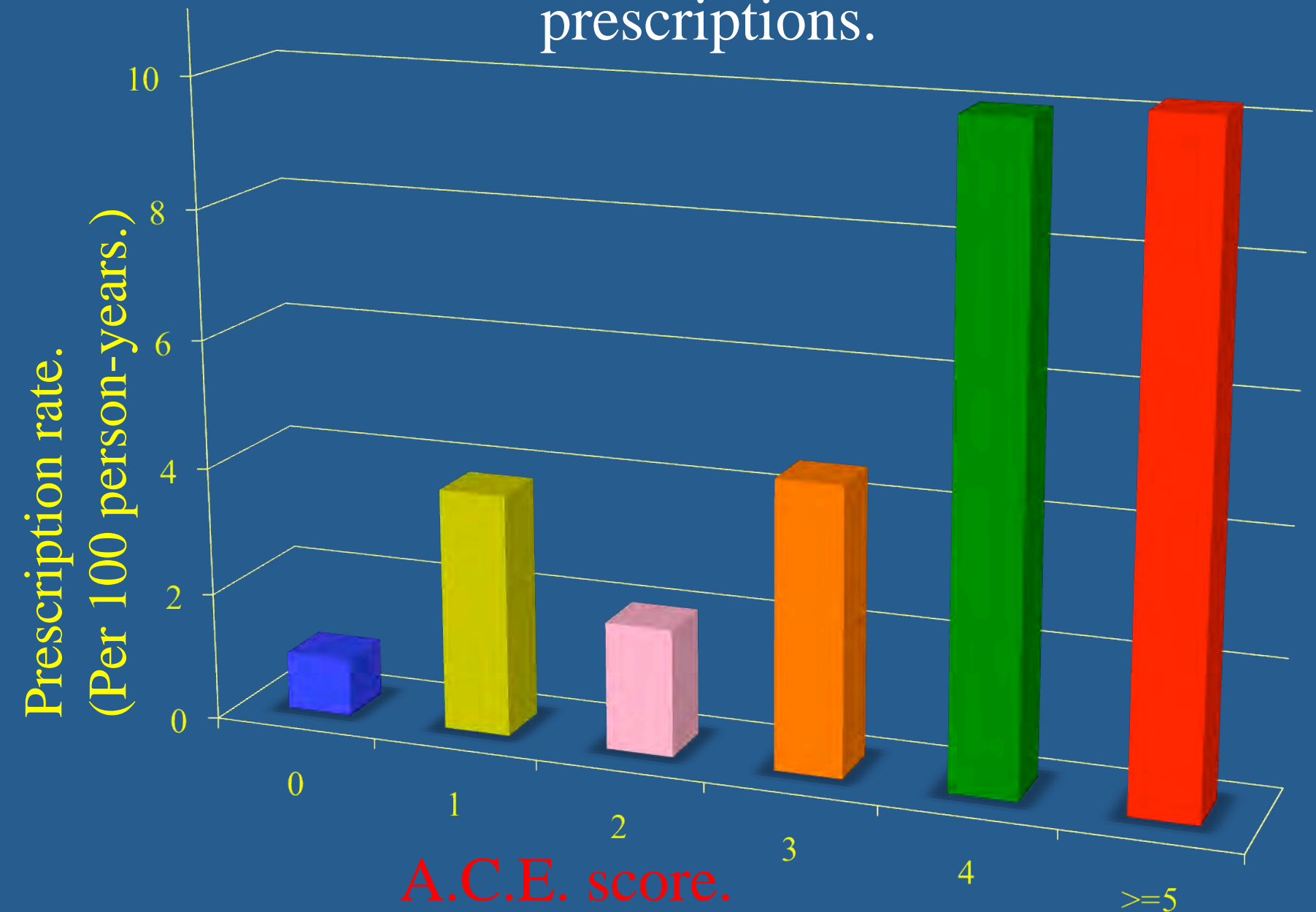
A.C.E. score and the risk of perpetrating domestic violence.



Adverse childhood experiences and adult intravenous drug use.

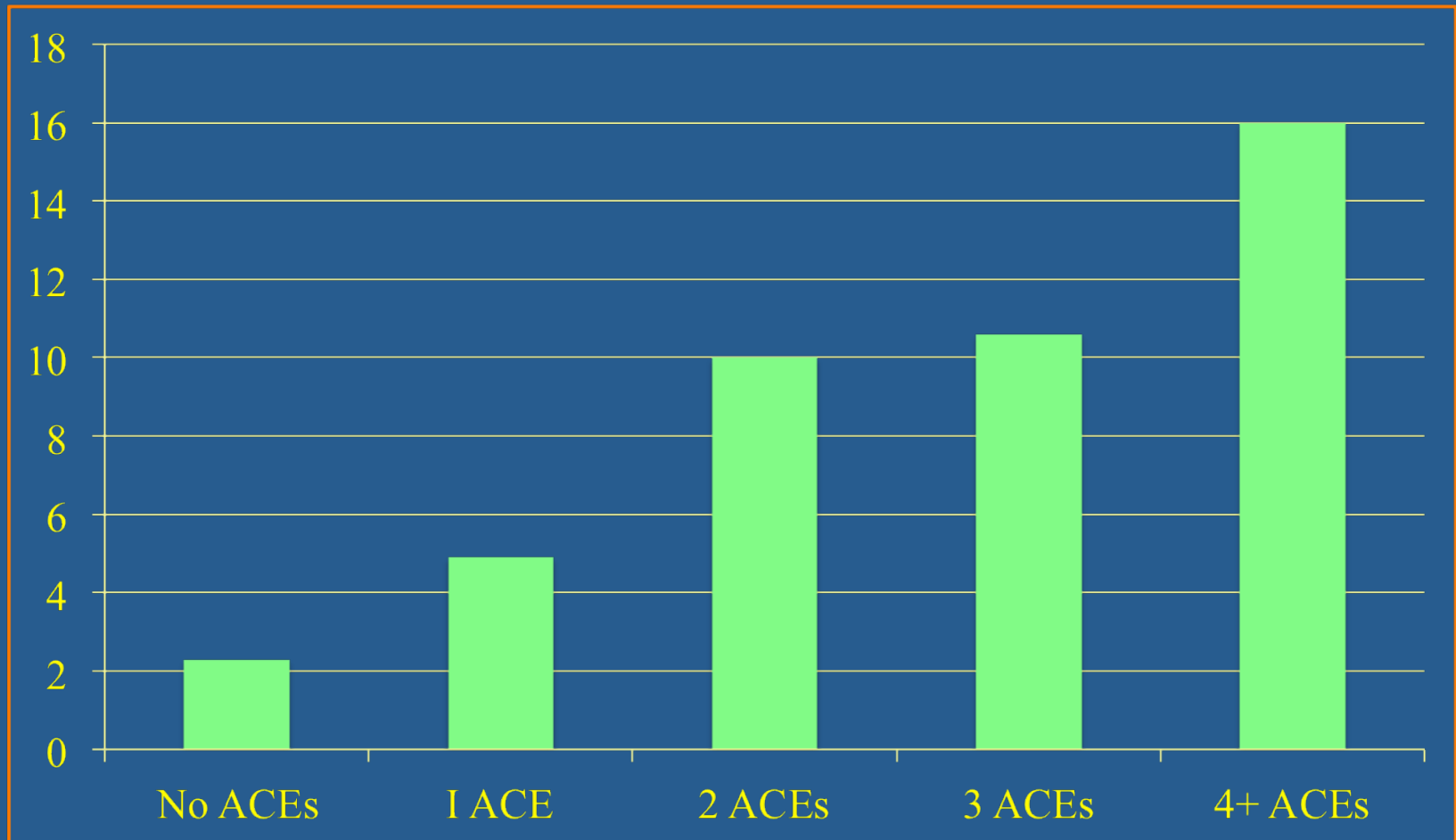


A. C. E. scores and rates of anti-psychotic prescriptions.

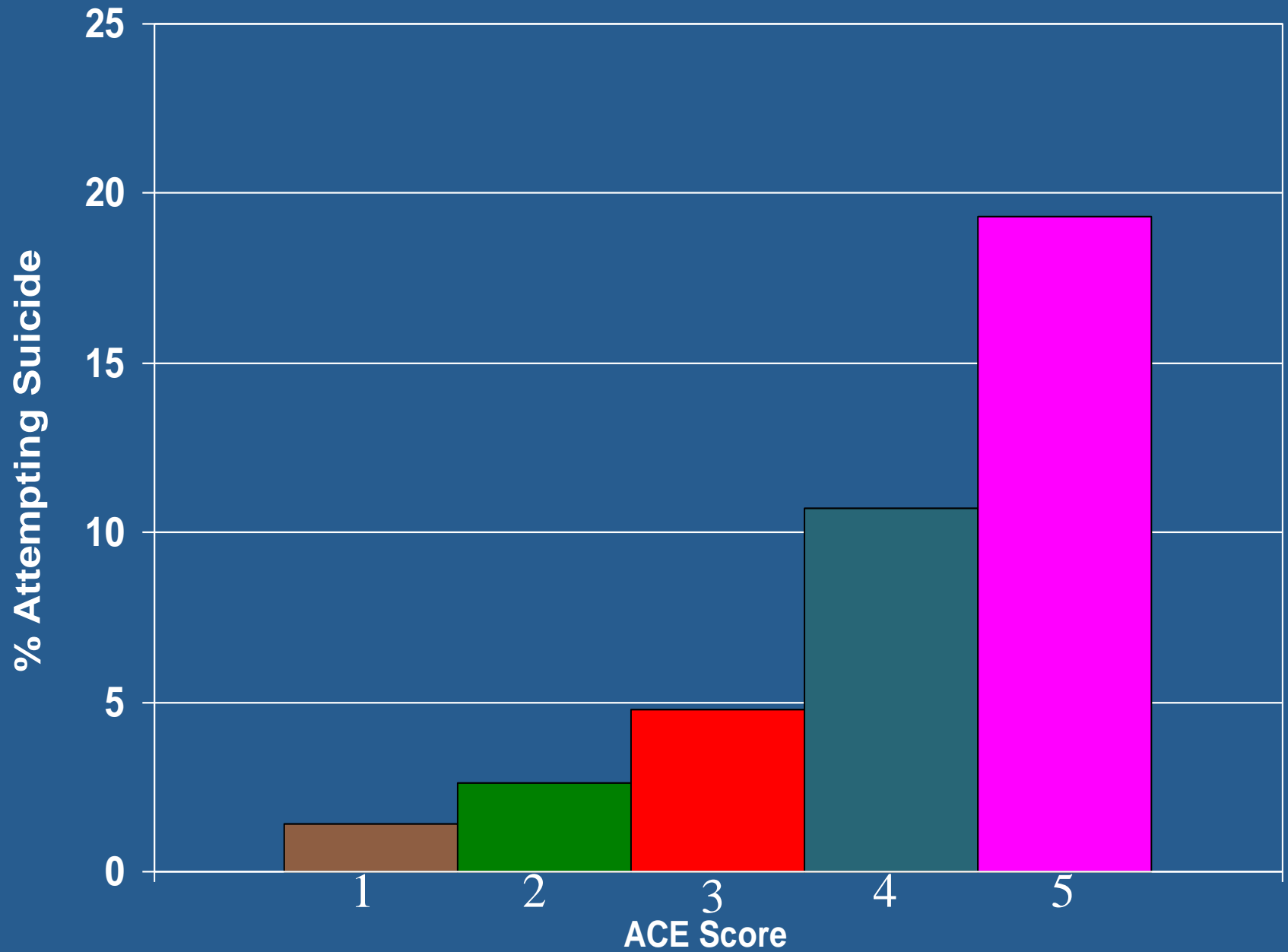


ACE score and self-defined alcoholism.

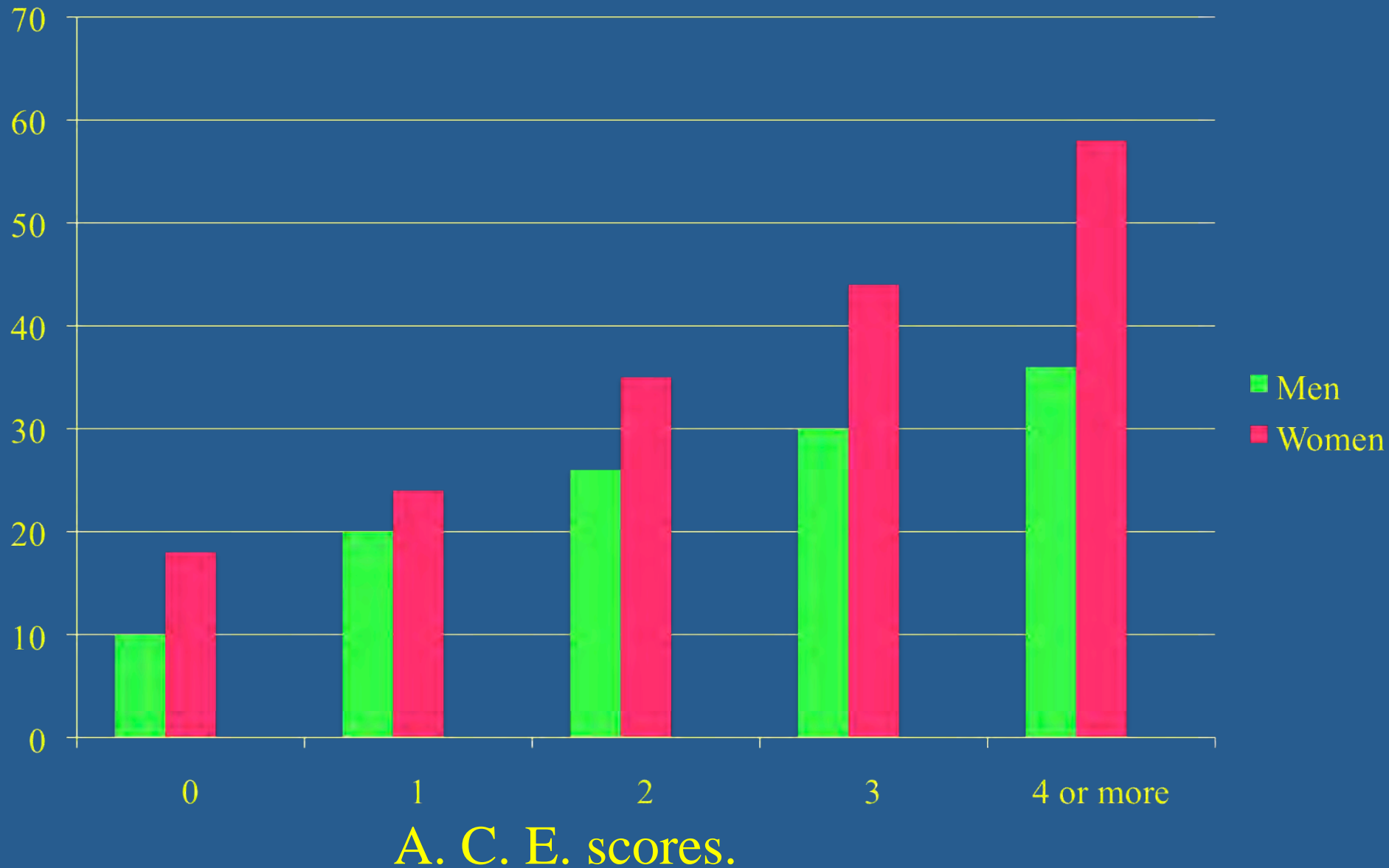
Alcoholic %



A.C.E. scores and later attempted suicide.



A.C.E. scores and self-acknowledged chronic depression.





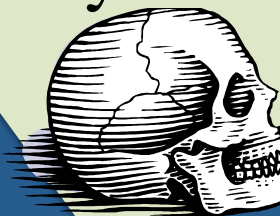
Adverse Childhood Experiences.

Social, emotional & cognitive impairment.

Adoption of health-risk behaviors.

Disease, disability & social problems.

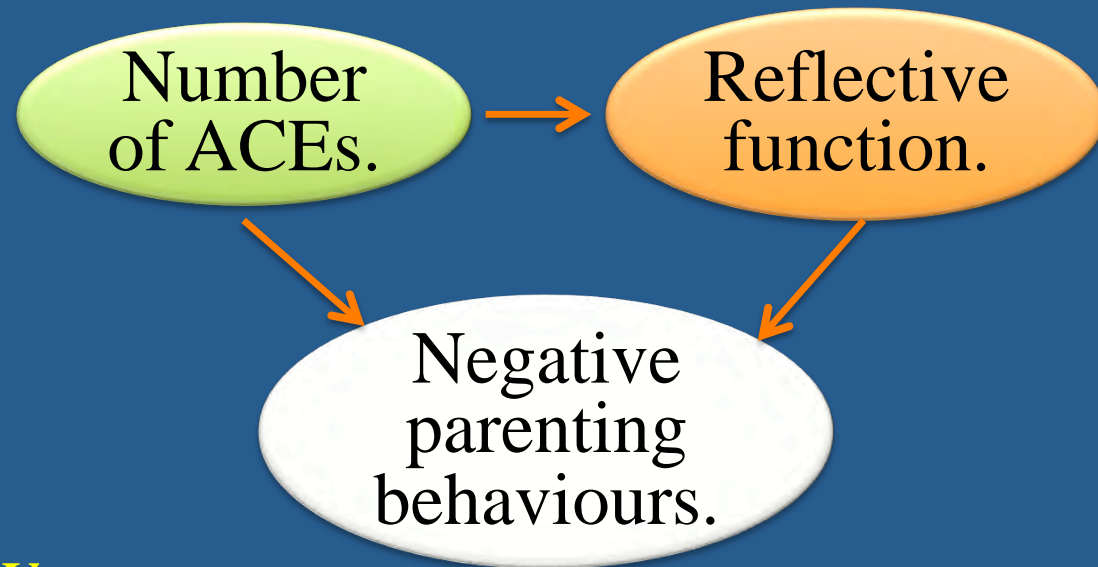
Early death!



From:
Felitti, et al. (1998)
*Relationship of childhood
abuse and household
dysfunction to many of the leading
causes of death in adults.*
American Journal of Preventive
Medicine. 14, (4)

But the most important impact is on the next generation.

The higher number of ACEs a mother has been exposed to then the more negative overall is their parenting behaviour; this is mediated by low reflective function.



(Kolomeyer, et al. (2016) *Mothers' Adverse Childhood Experiences and Negative Parenting Behaviors*. Zero to Three, 37 (1), 5-12.)

So early intervention is vital if we want to break the cycle.





Vulnerable families, or those experiencing difficulties, should be able to access specialist services which promote parent-infant interaction.

PIP UK sets up local early intervention services in the voluntary sector.

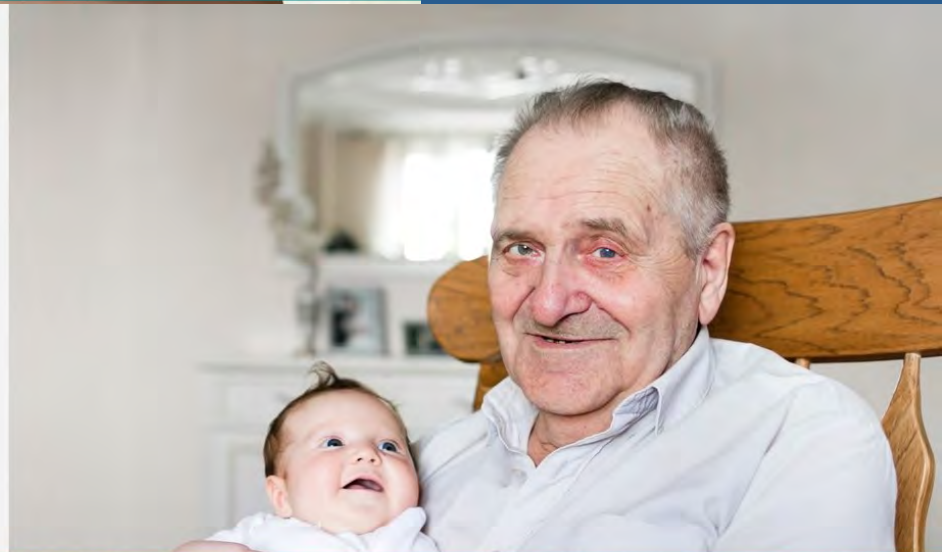
<http://www.pipuk.org.uk/home>



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The 1001 Critical Days®
The Importance of the Conception to Age Two Period

It is allied to the 1001 Critical Days campaign and is collecting data on outcomes from every PIP team.



A radical change is required to our approach to the 1001 Critical Days.

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The aim of all forms of infant mental health interventions is to enable the parents to become both a secure base and a safe haven for their baby, and for the growing child, and to consider how they want their grandchildren to be raised.

This must come from a change in behaviour; but the change in behaviour may not occur until they have integrated their own early negative experiences of being parented, these may be both conscious and unconscious. The aim of intervention is to nurture a reflective self rather than a reactive self.



Implications for babies and parents.

The best growth and development occurs within nurturing relationships; and these directly affect the formation of critical neural networks and the eventual capacity for emotional-regulation. The 1001 Critical days campaign advocates for early intervention because the birth and care of a baby, offers a privileged chance for positive change.



In conclusion – why we need to allocate resources to these first 1001 days.

Important relationships during the first years of life ‘form the foundation and scaffold on which cognitive, linguistic, emotional, social, and moral development unfold.’ (p.349) *Neurons to Neighborhoods.*



Remember, babies cannot wait.

Thank you for listening.

