

The importance of the 1st 1000 days of life and its impact on public health

SAAFP 21st National Conference
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“Family Medicine and the Circle of Life”

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A tribute to Family Medicine

- *and to home visits in my “Circle of Life”* -

1962 – 1985: Family GP **who did home visits**

- *Dr Peter Pretorius, Bulawayo, died 2015*

1986-1993: Head of Family Medicine, Medunsa

- *Prof Sam Fehrsen, Gauteng, died 2018*

1997-2009: Head of Family Medicine, University of Pretoria

- *Prof Jannie Hugo, Gauteng/Mpumalanga*

2010-2018: Family Physicians Forum Western Cape

- *Dr Werner Viljoen, Dr Janet Giddy, Dr Steve Swartz & others*
- *Dr Zandy Rosochacki, Helderberg Hospital & Ikwezi COPC **home visits***

24 August 2018: Invitation to SAAFP 21st National Conference

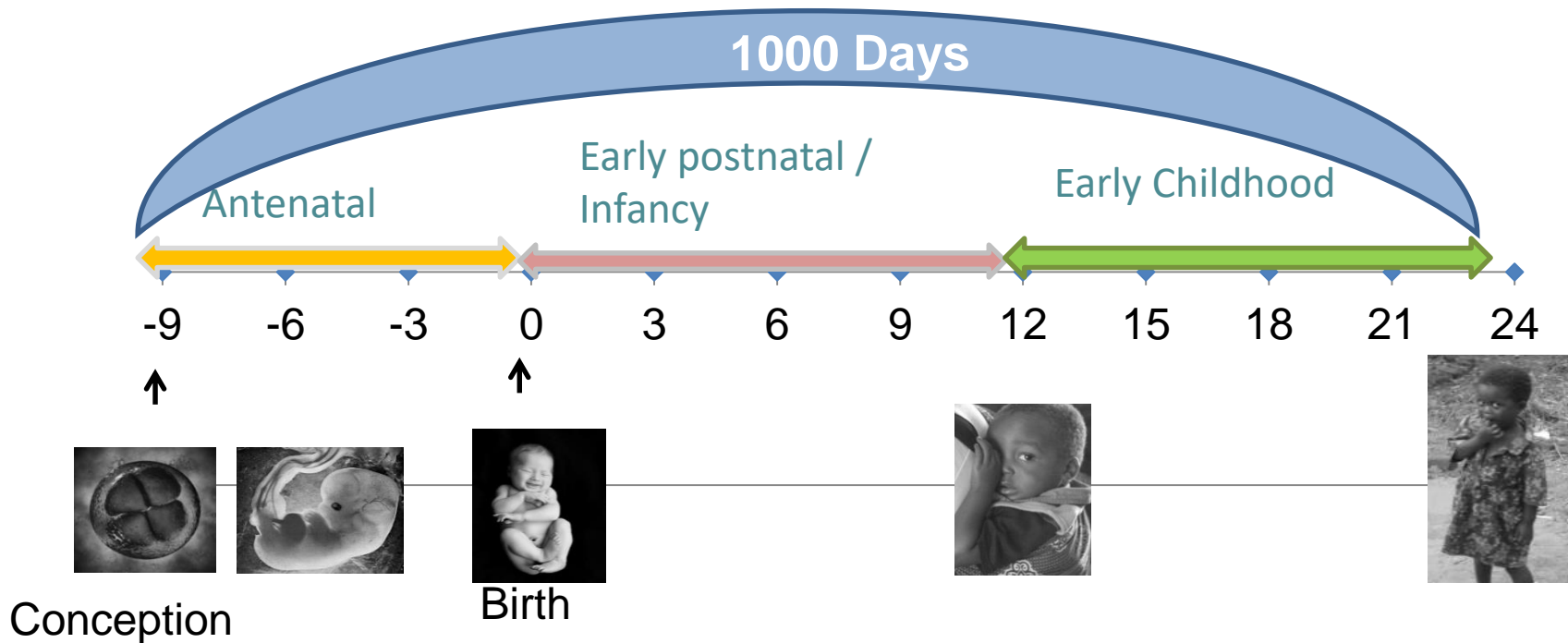
Overview

- The 1st 1000 days window of opportunity
- Nature and nurture
- Impact on public health
- Global and National mandate
- Key interventions (and W Cape initiatives)
- Critical role of Family Physicians

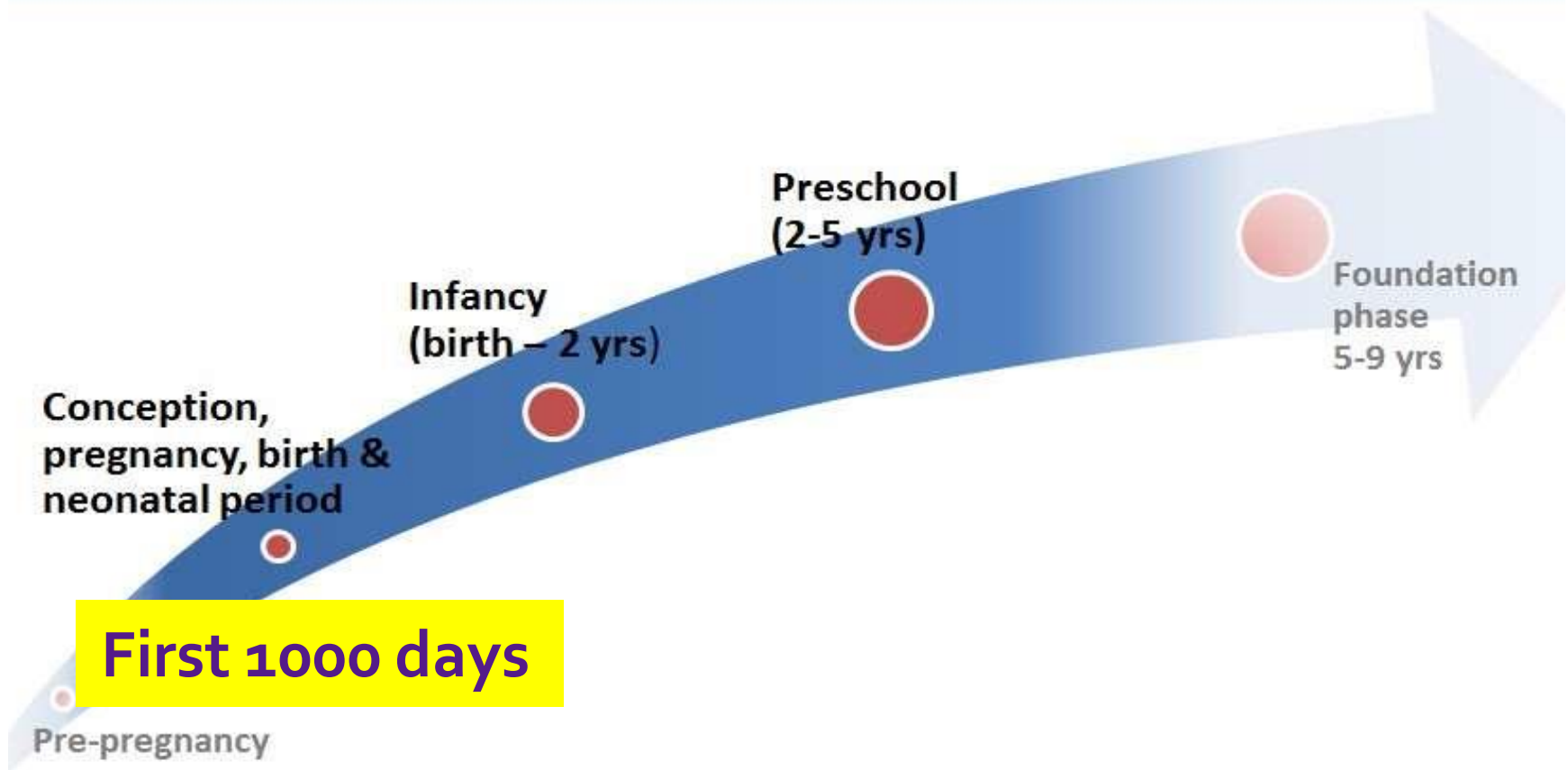
The First 1000 Days “continuum”

- -9 to 24 months
- $270 + 365 + 365 = 1000$ 😊

FIRST
1000 days
Right Start. Bright Future.



1st 1000 Days in ECD continuum



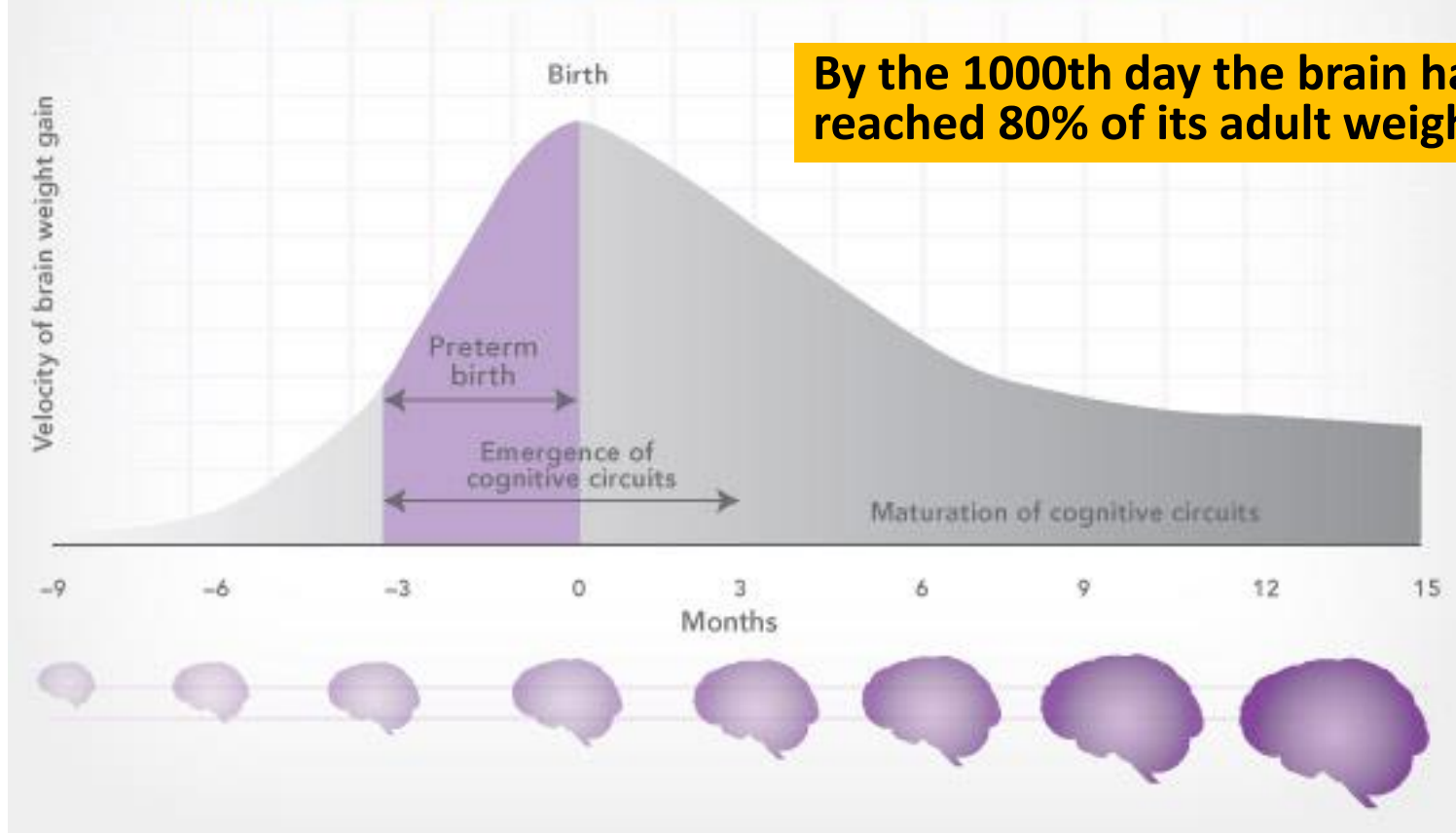
First 1000 days contexts



Importance of the first 1000 days: **Brain Growth**

The most rapid period of brain weight gain occurs immediately before and after 40 weeks' gestation¹

By the 1000th day the brain has reached 80% of its adult weight.



Brain development is modified by the environment

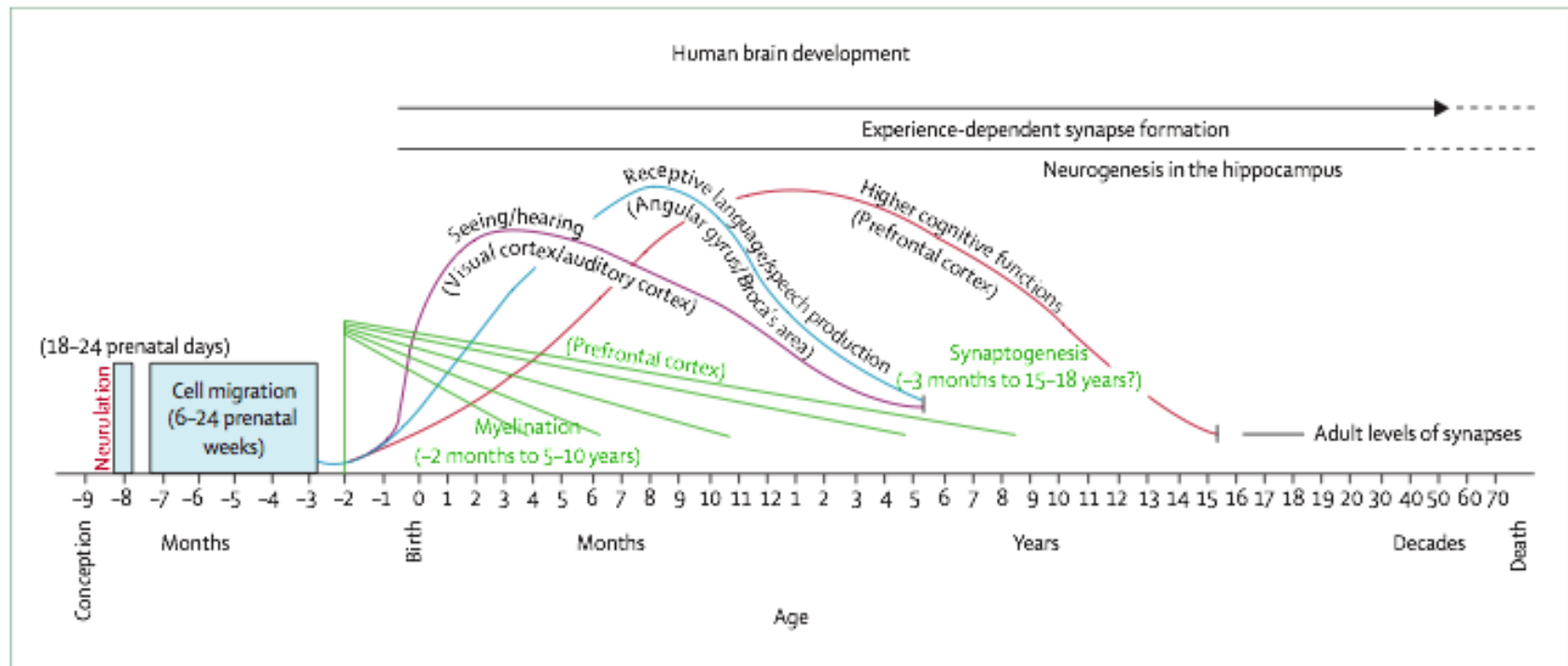


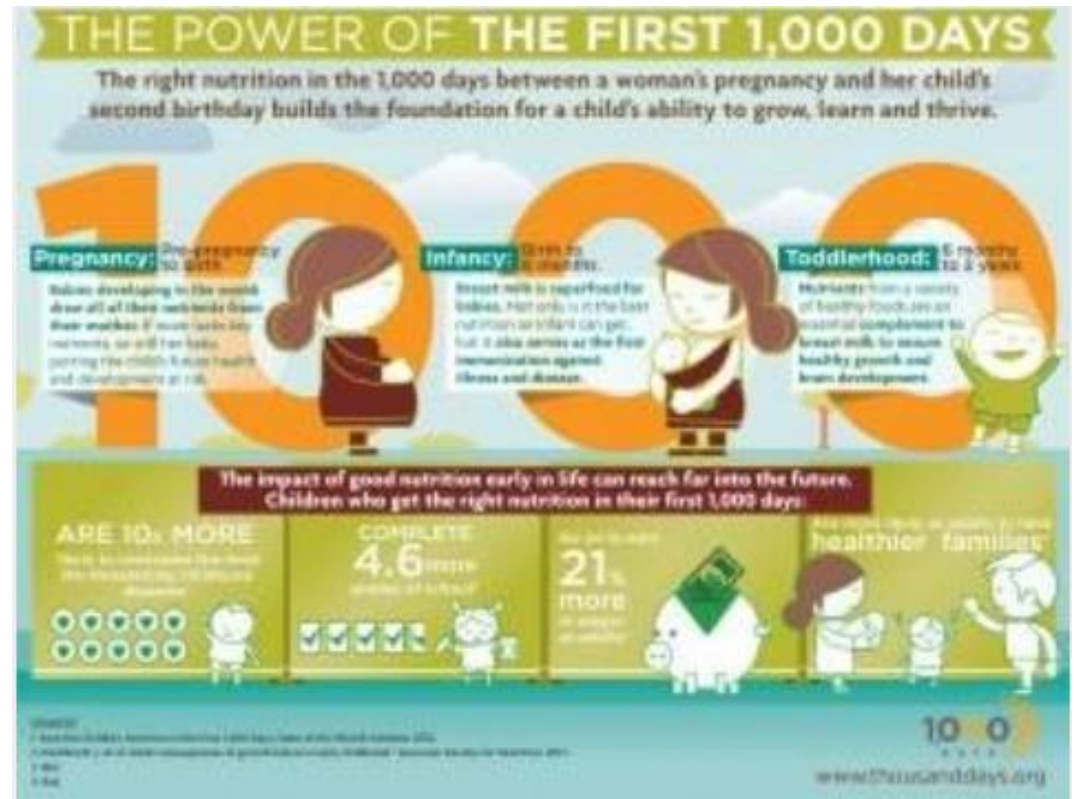
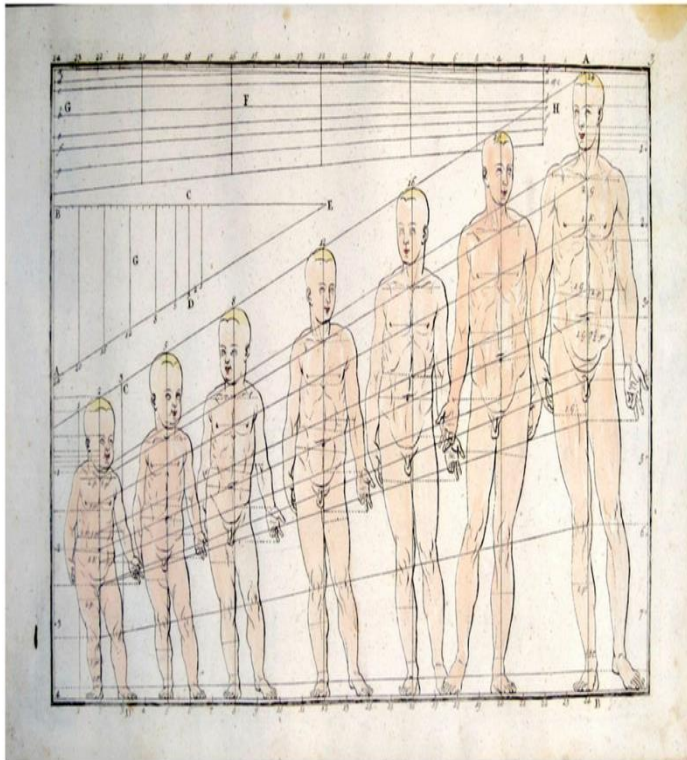
Figure 1: Human brain development

Reproduced with permission of authors and American Psychological Association⁵⁷ (Thompson RA, Nelson CA. Developmental science and the media: early brain development. *Am Psychol* 2001; 56: 5-15).

Importance of the first 1000 days: **Nutrition**



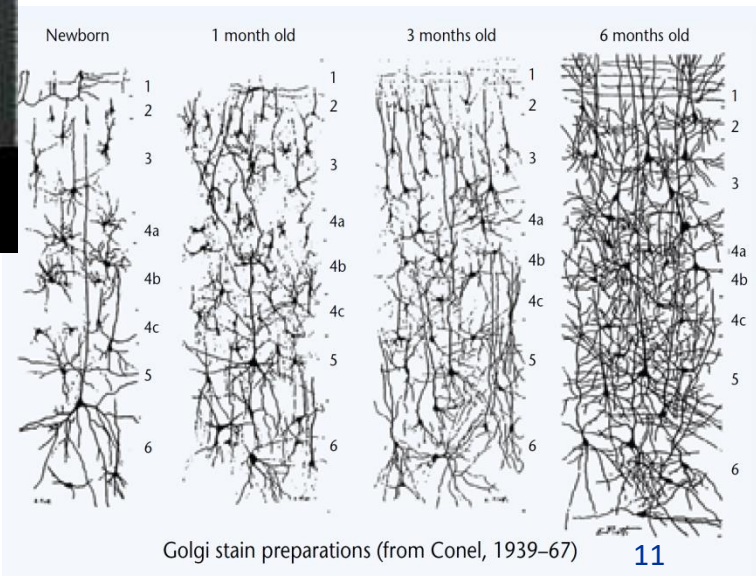
- For infants and children < 2, **the consequences** of undernutrition are particularly severe, **often irreversible**, and reach far into the future.
- **Food insecurity** is a factor in maternal depression and stress.



Importance of the first 1000 days: **Reciprocity**



From birth to age 18 months, connections in the brain are created at a rate of 1 million per second.



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Psychology
The Science of Being Human

Nature and Nurture

The first 1000 days

- Conception to age 2 years is recognized as the time during which
 - adverse exposures exert the greatest harm,
 - effective interventions offer the greatest benefit
- peak growth period
- Ensuring that the brain achieves its optimum development and nurturing is therefore vitally important, and enables babies to achieve the best start in life.



Early Experiences Matter (Zeanah et al 2009)



- Experiences can change :
 - **Structure of the brain**
 - **Expression and regulation of genes and hormones**
 - **How you see the world (facial affect recognition)**
- The same stress can shift between **toxic and tolerable**

Buffered by a caring environment of stable responsive relationships and support

Different kinds of Stress



Positive

- Moderate, short lived
- challenges of meeting new people, dealing with frustration or being immunized.
- important, necessary in the context of healthy supportive relationships



Tolerable

- severe enough to disrupt brain architecture if unchecked
- Buffered by supportive relationships that can facilitate adaptive coping
- includes death or serious illness of a loved one, a frightening injury or a natural disaster
- generally occurs within a time-limited period, which gives the brain an opportunity to recover from potentially damaging effects.



Toxic Stress

- severe and prolonged in the absence of the buffering protection of supportive relationships.
- physical or emotional abuse, chronic neglect, severe maternal depression, or family violence.
- disrupts brain architecture and leads to lifelong problems in learning, behaviour, and both physical and mental health.
- exaggerated stress response that, over time, thwarts their ability to distinguish harmful situations from neutral ones and makes them more vulnerable

Nurturing Care

- Nurturing interactions are crucial to mitigating early risks.
- There is considerable evidence that **sensitive mothering can buffer the effects of prenatal stress**, at least for some outcomes,
- A developing brain is activated and patterned by the nurturing care of trusted adults
- Nurturing interactions:
 - **Include attentive responses to young children's efforts to connect to and learn about their world,**
 - **involve efforts to present children with age-appropriate learning experiences in a safe and mutually enjoyable way.**
- Nurturing care provides the **essential care** for children **to survive and to thrive.**

How does the relationship influence things?



Attachment

- Attachment behaviour is

“any form of behaviour that results in a person attaining or maintaining proximity to some other clearly identified individual who is conceived as better able to cope with the world”

(John Bowlby)

- Deep and genuine connection with another human
- Kind of love that children feel for their parents, takes a lot to derange/disrupt this
- Archetype: relationship of baby with its mom/dad

Attachment Figures

Primary = usually mom/dad



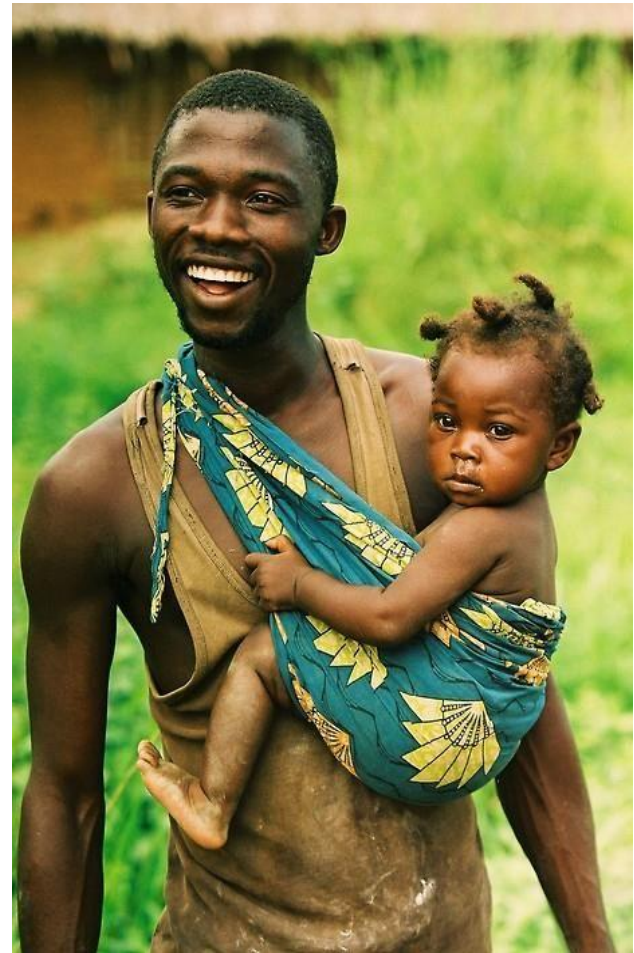
Secondary = Key person
(all babies need a key person)



Tertiary = Familiar friend/people



Everyone else = Strangers



“There is no such thing as just a baby. A baby cannot exist alone, but is essentially part of a relationship”

D.W. Winnicott, 1966

- All infants need is for care to be “mostly” (not always) responsive, reliable, understanding and patient.
- We are “hardwired” for relationships.

Attunement



- “Reciprocal connectedness” / “dance”
- Maternal sensitivity - Notice of the verbal and non-verbal cues and meeting those needs to the best ability
- “mindful parenting”
- Unconditional acceptance of the emotion – anger or happiness
- Methods:
Touching/visceral connections
Facial mirroring/matching

Babies behave differently

- Depends on
 - age, developmental stage
 - temperament (goodness of fit)
 - previous experiences, poverty, social
 - medical : disabilities, prematurity etc
 - security of the primary attachment
- Ability to regulate their emotions (anger/aggression/empathy) and self soothe will depend on their experience of *attachment and attunement*

Maternal Mental Health

- Providing continuous care and attention of children is a demanding task
- Childbearing and childrearing are two common human experiences
- Poor mental health in mothers might be expected to have adverse consequences on their children's health and development

Perinatal Mental Health

- Perinatal Period is one of enormous vulnerability but also of enormous potential
- Complex association between child outcomes and maternal mental health
- WHO: 'There's no health without mental health'
- Less than 10% of women with psychiatric illnesses get any treatment
- Vast majority go untreated

Maternal Stimuli on the Developing Brain

- Prenatal Stress associated with changes in development:
 - Maternal substance use eg alcohol, tobacco, illicit drugs
 - Maternal depression & anxiety
 - Maltreatment /trauma
- may severely dysregulate the homeostasis and even future development – by influencing an already at risk brain substrate
- Studies show that maternal stressful events during pregnancy:
 - Predicts poorer cognitive outcome Huizink et al 2002; laplante et al 2004
 - are positively associated with fearfulness in infancy Bergman et al 2007

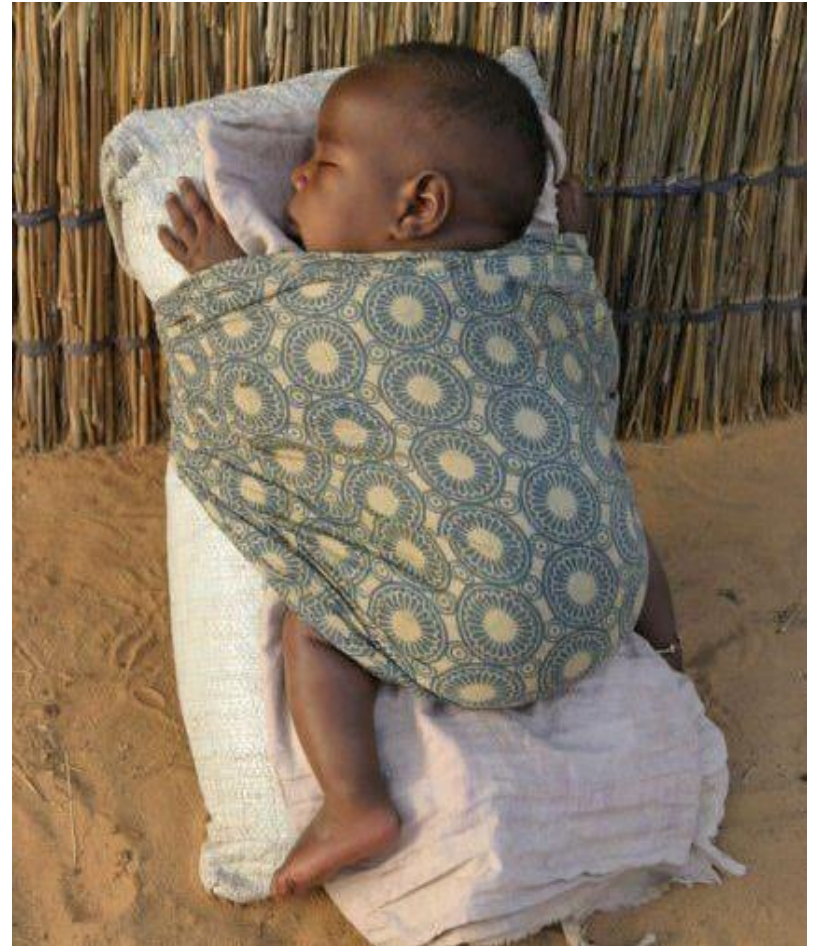
Depression in Pregnancy

- Depressed mood during pregnancy is associated with:
 - poor attendance at antenatal clinics,
 - Small for gestational age babies
 - preterm delivery
 - risk taking behaviours such as smoking, substance abuse,
- Prenatal exposure of fetus to depression in mom specifically results in:
 - Greater negative behavioural reactivity
 - Fussiness
 - Sleep problems
 - Externalizing behaviours

Depressed mothers have been found to:

- speak less to their infants during play Rowe, Pan, & Ayoub, 2005
- be more preoccupied with their own negative affect and cognitions
- Have impaired ability to identify and respond to infant interactional cues and to communicate responsively with their infants during play

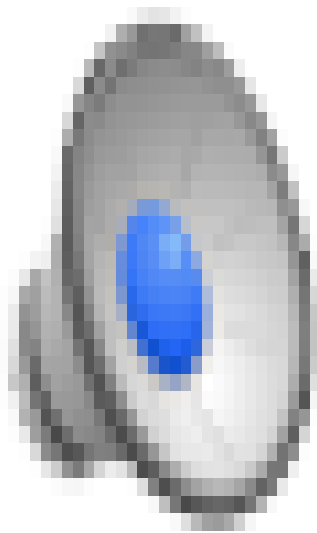
Goodman & Gotlib, 1999



The Still face

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Effects on Mother-baby interactions

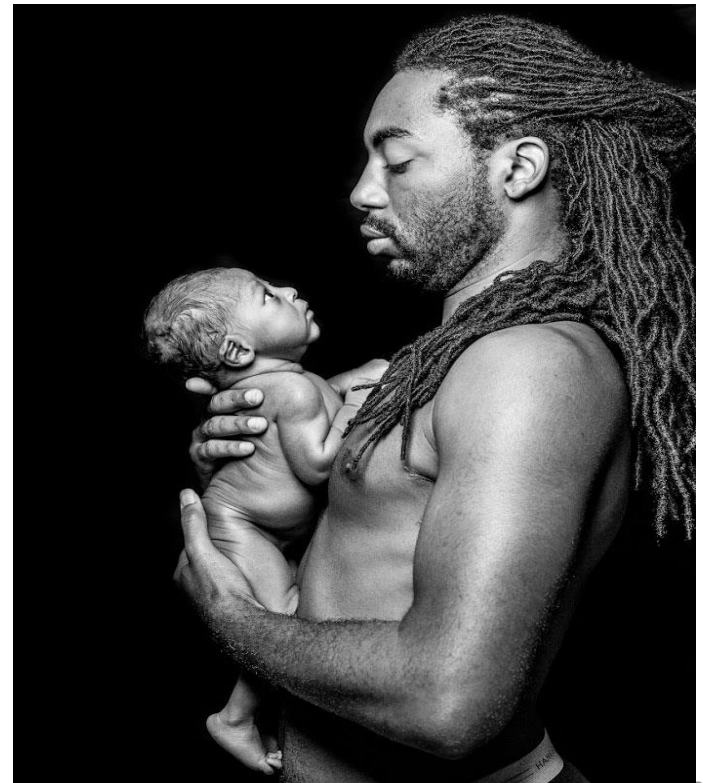
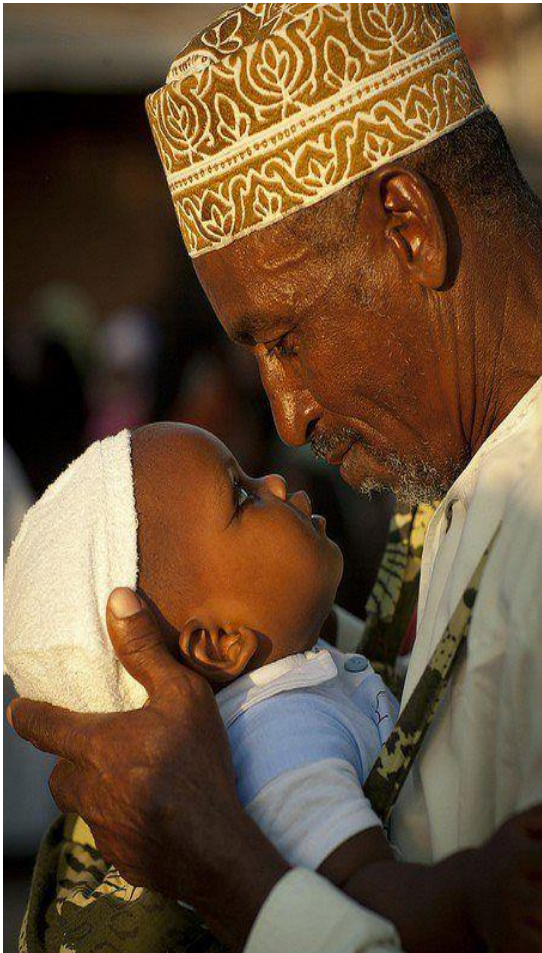
- The interaction disturbances of depressed mothers and their infants appear to be universal, across different cultures and socioeconomic status groups
- These include *less sensitivity* of the mothers and *responsivity* of the infants.
- Postpartum Depression compromises feeding practices, most especially breastfeeding, sleep routines and well-child visits, vaccinations and safety practices.
- Postnatal depression has been associated with adverse infant outcomes in the cognitive and emotional domains Field, 1992; Hay et al., 2001

Effects of perinatal mental health disorders on children

Stein, A *et.al* 2014, *The Lancet*

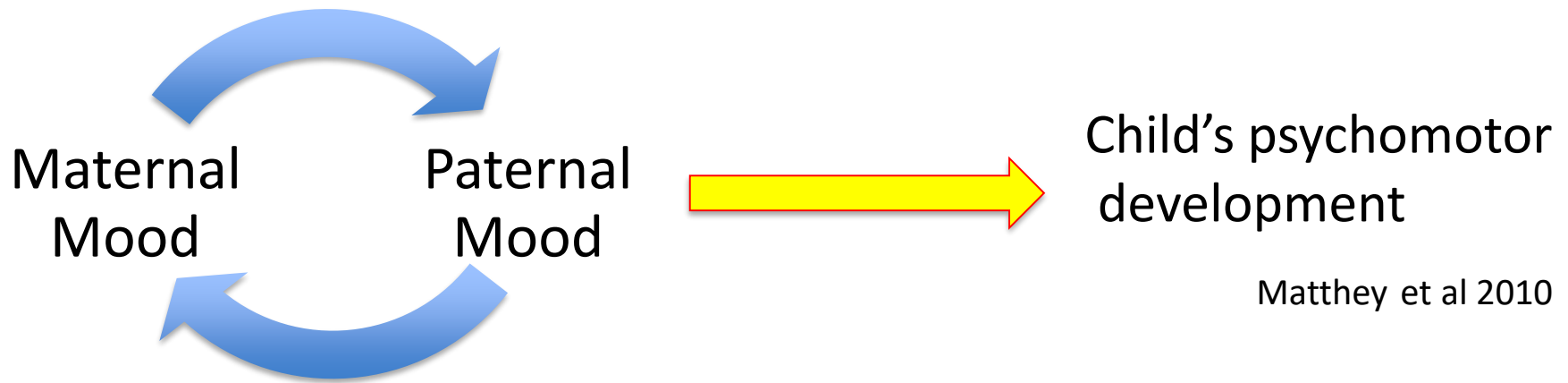
- Perinatal disorders are associated with risk of a broad range of negative child outcomes into late adolescence
- ***Adverse outcomes are not inevitable***, unless severe chronic maternal disorders or other adversities
- Mechanism is complex – genetic & environmental
- ***Parenting is a key*** modifiable pathway – minimises additional adversities. Parents and infants benefit from parental preparedness and support.

WHAT ABOUT THE FATHER?



Transition to Fatherhood

- Complex process involving change and transformation in:
 - self representation,
 - relationship with the partner,
 - development of new responsibilities,
 - triadic relations
- Adjusting to pregnancy for the father is stressful and working to see things differently may result in:
 - Discomfort, distress, ambivalence, uncertainty
- Only in last few years, the literature shows a growing interest in the study of paternal perinatal depression and anxiety



Matthey et al 2010

- Fathers use externalizing strategies (violence, addictions, depression/anxiety/ compulsions, somatization) to cope, and influences the pregnant partner in this regard Matthey, Baldoni 2016

BUT

- Fathers can also buffer maternal MSE and stress in the perinatal period, reducing the risk in utero to the developing fetus.

Effect of **family** on responsive care ...

*“The quality and disposition of the **whole family** plays a much greater role in the creation of the child’s disposition than the individual disposition of the father or the mother.”*

- Carl Jung. Swiss psychiatrist.

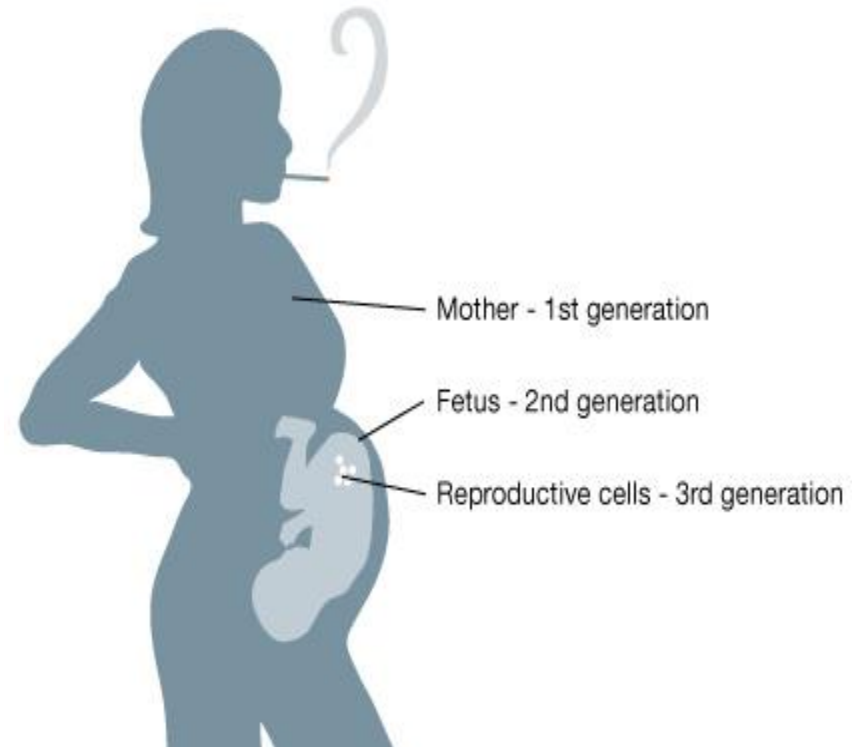
*“It takes **a whole village** to raise a child”*

- African proverb.

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Intra-uterine Environment – Intergenerational effect

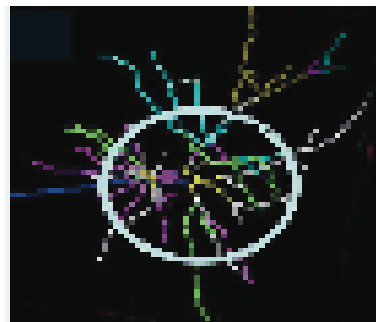




Center on the Developing Child
HARVARD UNIVERSITY

Persistent Stress Changes Brain Architecture

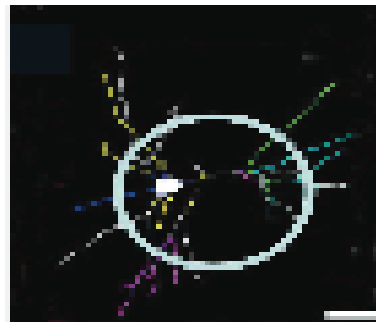
Normal



Typical neuron
many connections



Toxic stress



Atypical neuron—
fewer connections



Prefrontal Cortex and
Hippocampus

Source: Nelson et al. (2004)
Decker et al. (2007)

Brains subjected to toxic stress have underdeveloped neural connections in areas of the brain most important for successful learning and behavior in school and the workplace.

Importance of the first 1000 days

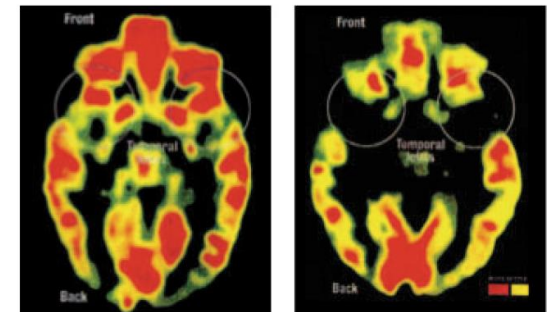
Toxic Stress can impact children in the following ways:

- Causes children to live in **fight, flight** or **fright** (freeze) mode.
- Short attention span
- Struggle learning; fall behind in school
- Respond to world as constant danger
- Distrustful of adults
- Unable to develop healthy peer relationships
- Feel failure, despair, shame and frustration



A fetus or baby exposed to toxic stress can have their responses to stress distorted in later life.

Comparison of the Developing Brain

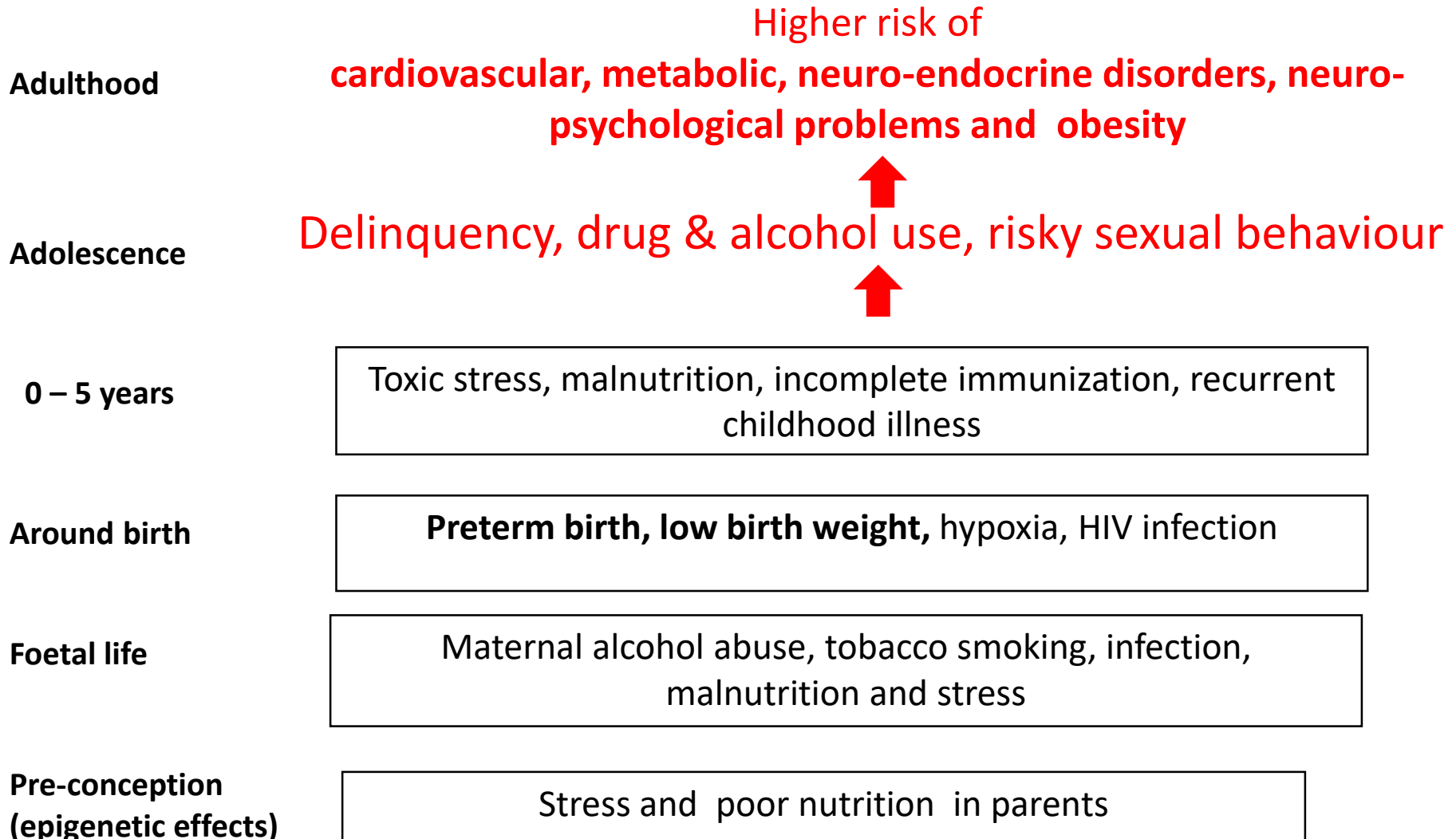


Healthy Development Development Affected by Environmental Stress

Source: Dr. H. T. Chugani, Newsweek, Spring/Summer 1997
Special Edition: "Your Child: From Birth to Three," pp 30-31.

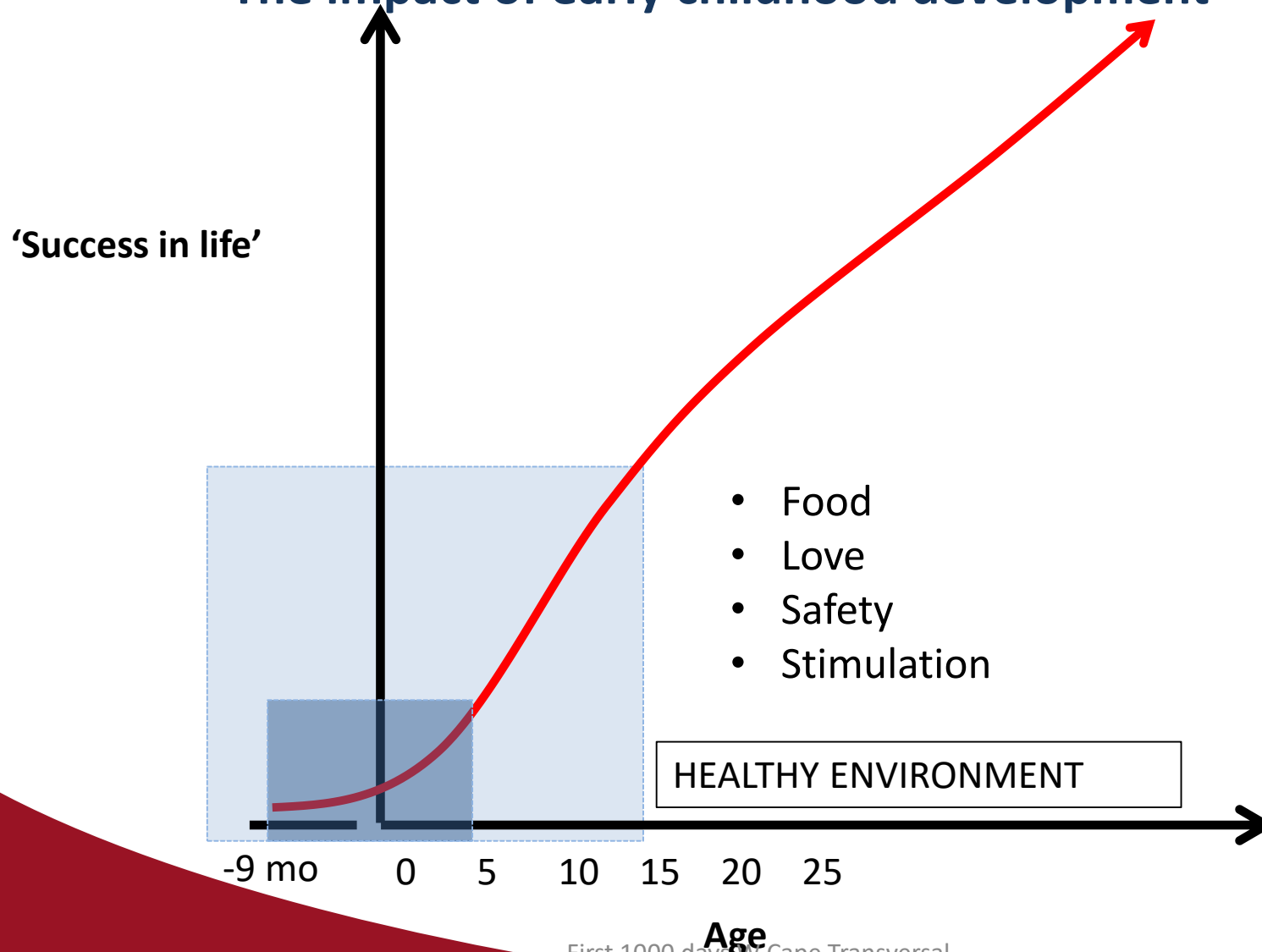
Patterns of ill-health are established in first few years of life:

Link between First 1000 Days & Chronic Disease & Trauma

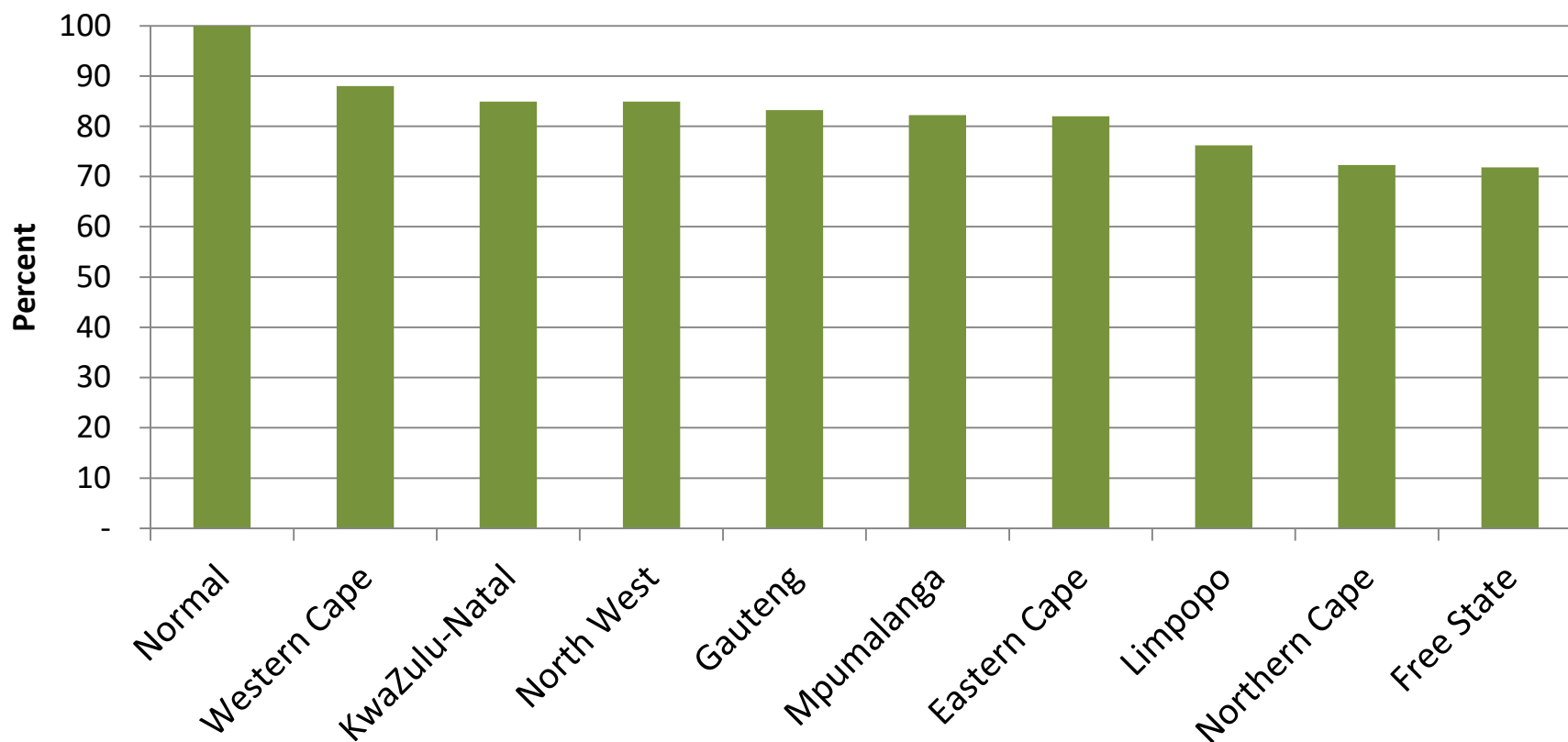


Child Development Outcomes

The impact of early childhood development

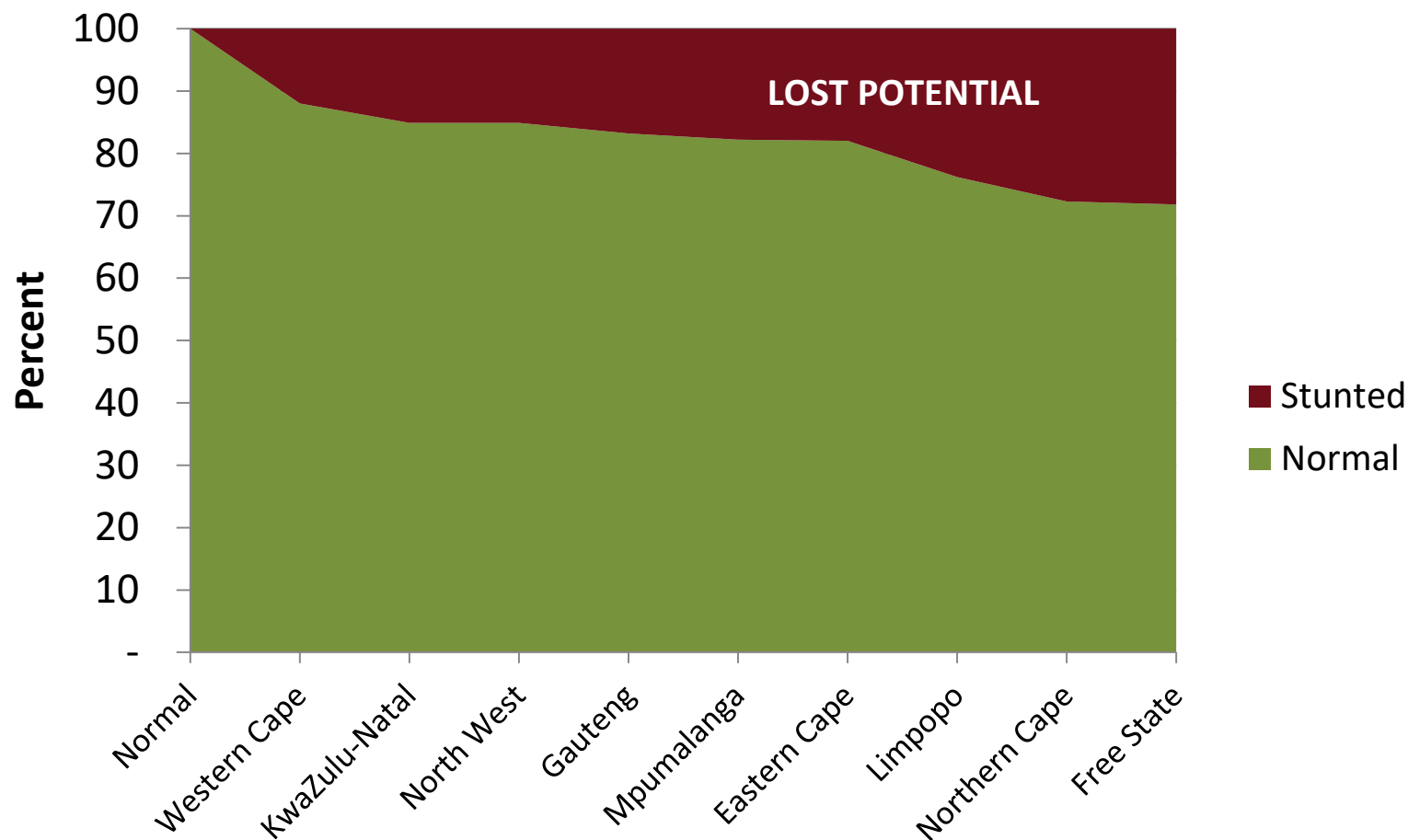


Proportion of 1-9 year olds of normal height (+2SD) in South Africa, 2005



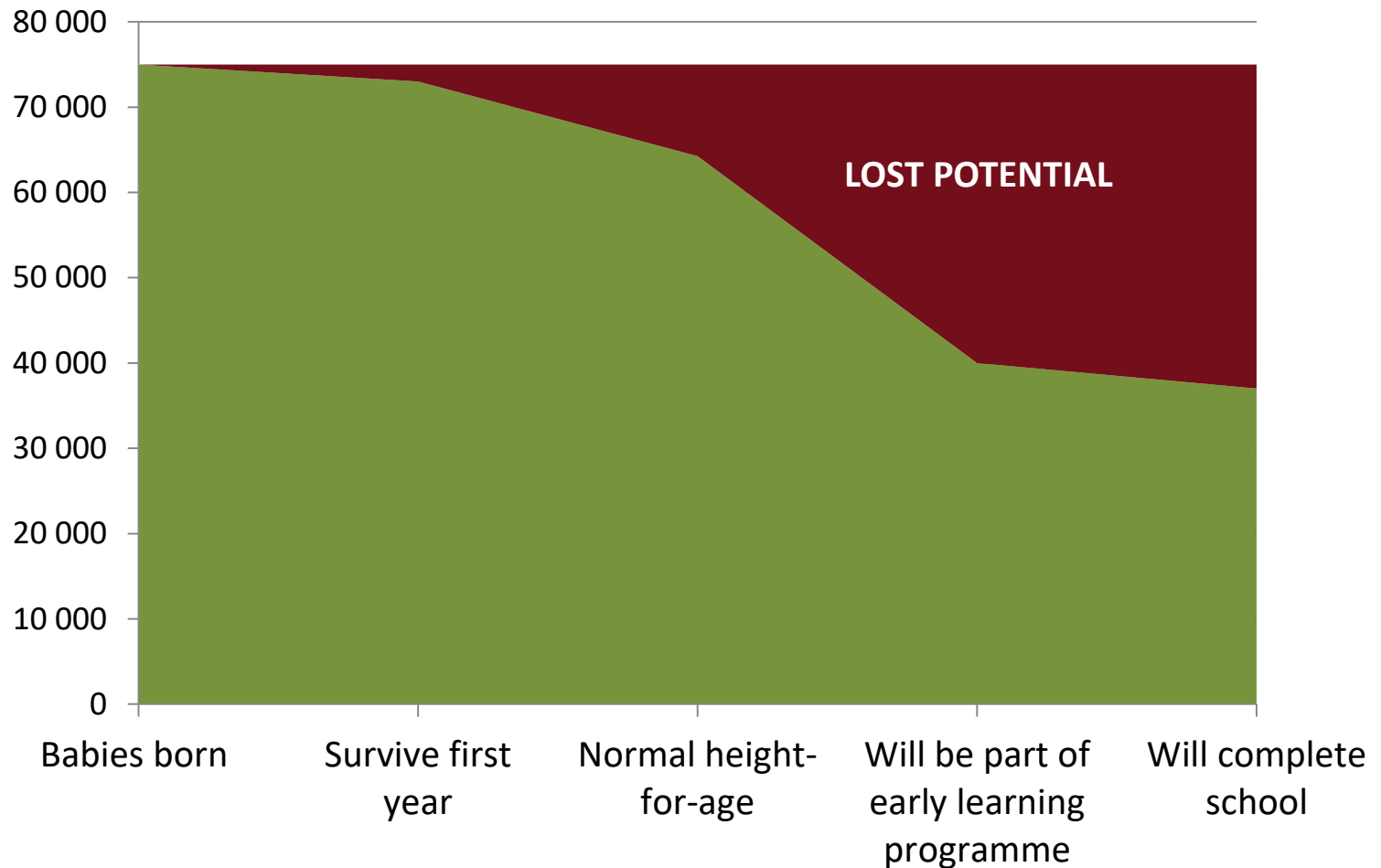
Source: Kruger HS, Swart, R, Labadarios, D, Dannhauser A & Nel JH (2007) Anthropometric status. In: Labadarios D (ed). (2007) The National Food Consumption Survey – Fortification Baseline (NFCS-FB): The knowledge, attitude, behaviour and procurement regarding fortified foods, a measure of hunger and the anthropometric and selected micronutrient status of children aged 1 – 9 years and women of child bearing age: South Africa, 2005. Pretoria: Directorate: Nutrition, Department of Health.

Lost potential among 1-9 year olds, 2005

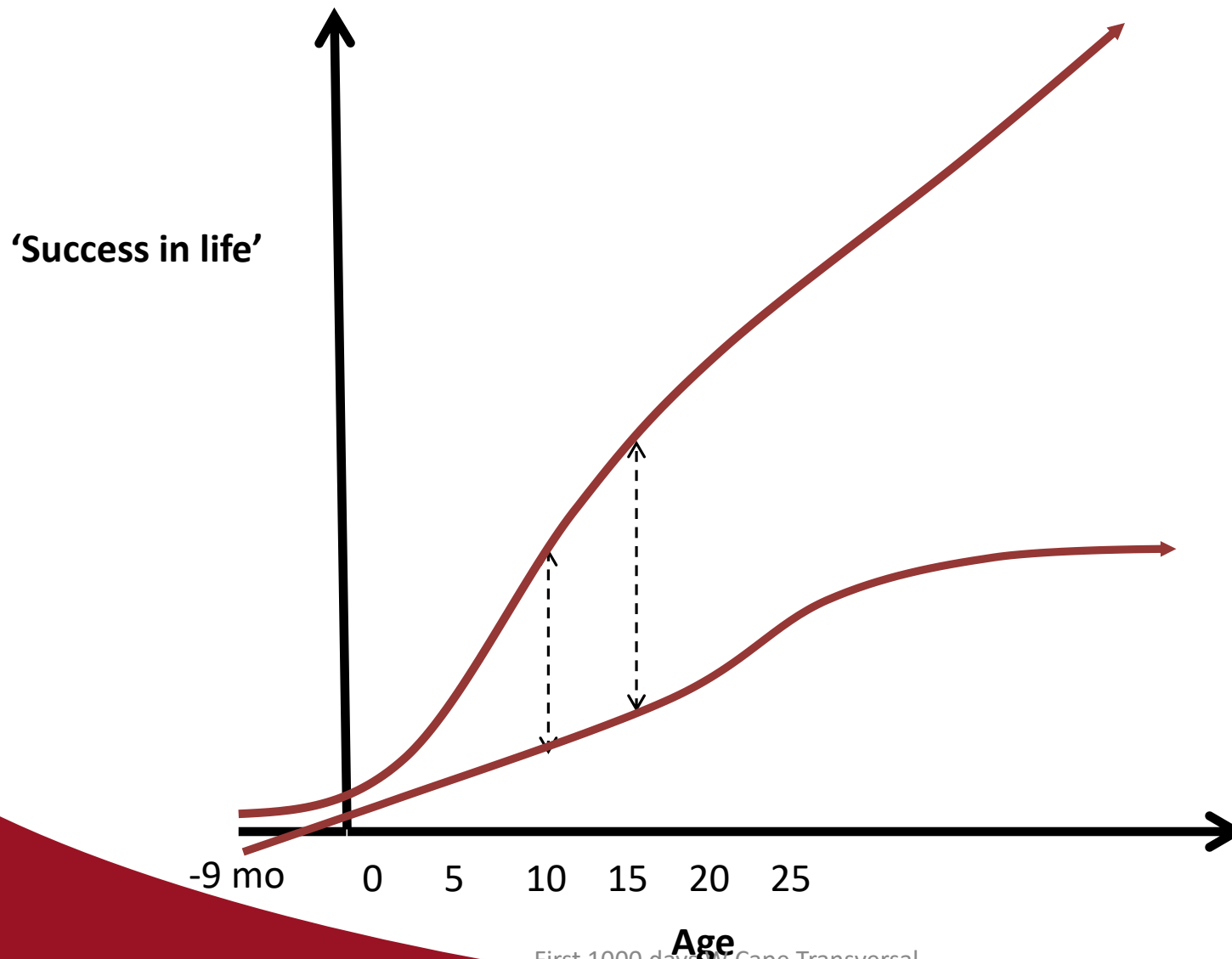


Source: Kruger HS, Swart, R, Labadarios, D, Dannhauser A & Nel JH (2007) Anthropometric status. In: Labadarios D (ed). (2007) The National Food Consumption Survey – Fortification Baseline (NFCS-FB): The knowledge, attitude, behaviour and procurement regarding fortified foods, a measure of hunger and the anthropometric and selected micronutrient status of children aged 1 – 9 years and women of child bearing age: South Africa, 2005. Pretoria: Directorate: Nutrition, Department of Health.

Lost potential of babies born in Cape Town in 2014



Two children with the same potential born in Cape Town on 9 May 2014



Effects of stunting and poor stimulation

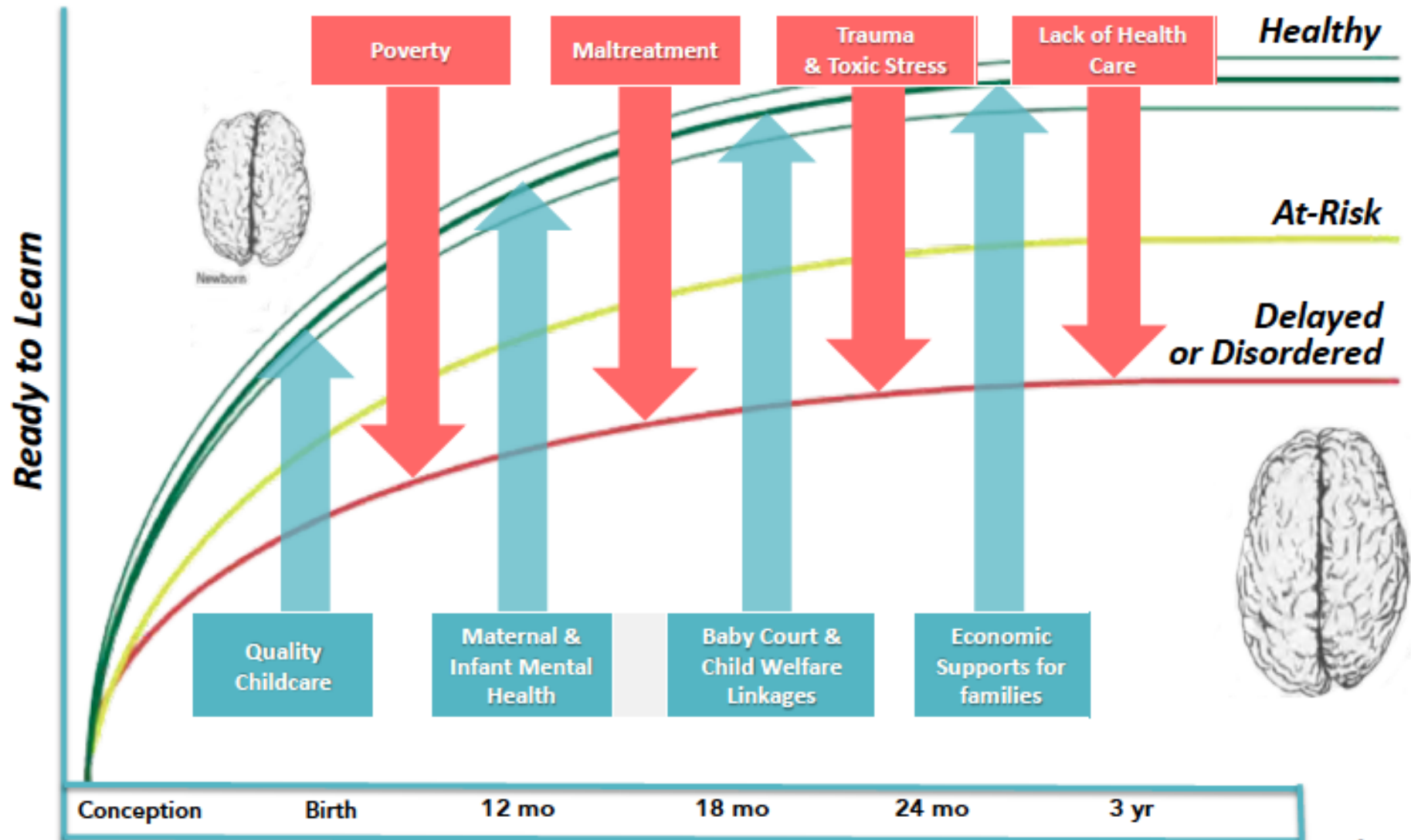
Stunting

- Poor cognition and socio-emotional development
- Lower levels of school readiness and late enrolment
- Poor school achievement
- Lower earnings in adulthood
- Higher risk of non-communicable diseases

Lack of stimulation

- Failure to thrive and stunting
- Impairment in brain processes and developmental delay

Trajectory of Risks & Protective Factors



ACE Study

The Lifetime Negative Impact of Adverse Childhood Experiences



Of 17,000 middle class respondents,
2/3 had at least one adverse childhood
experience.

Finding Your ACE Score

While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in the household **often** or **very often**...
Swear at you, insult you, put you down, or humiliate you?
or
Act in a way that made you afraid that you might be physically hurt?
Yes No If yes enter 1
2. Did a parent or other adult in the household **often** or **very often**...
Push, grab, slap, or throw something at you?
or
Ever hit you so hard that you had marks or were injured?
Yes No If yes enter 1
3. Did an adult or person at least 5 years older than you **ever**...
Touch or fondle you or have you touch their body in a sexual way?
or
Attempt or actually have oral, anal, or vaginal intercourse with you?
Yes No If yes enter 1
4. Did you **often** or **very often** feel that...
No one in your family loved you or thought you were important or special?
or
Your family didn't look out for each other, feel close to each other, or support each other?
Yes No If yes enter 1
5. Did you **often** or **very often** feel that...
You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?
or
Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
Yes No If yes enter 1
6. Were your parents **ever** separated or divorced?
Yes No If yes enter 1
7. Was your mother or stepmother...
Often or **very often** pushed, grabbed, slapped, or had something thrown at her?
or
Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard?
or
Ever repeatedly hit at least a few minutes or threatened with a gun or knife?
Yes No If yes enter 1
8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?
Yes No If yes enter 1
9. Was a household member depressed or mentally ill, or did a household member attempt suicide?
Yes No If yes enter 1
10. Did a household member go to prison?
Yes No If yes enter 1

Now add up your "Yes" answers: _____ This is your ACE Score.

092420RA4CR

ACE Questionnaire

Adverse Childhood Experiences

- 1. Recurrent physical abuse
- 2. Recurrent severe emotional abuse
- 3. Contact sexual abuse
- 4. Physical neglect
- 5. Emotional neglect

Growing up in a household...

- 6. where someone was in prison
- 7. where the mother was treated violently
- 8. with an alcoholic or drug user
- 9. where someone was chronically depressed, mentally ill, or suicidal
- 10. where at least 1 biological parent was lost to the person during childhood, regardless of the cause.

ACE are more common than expected...

- 64% of study participants reported at least 1 ACE score.
- If you experienced 1 adverse childhood experience, you had an 80% chance of having at least 1 more.
- 20% had 3, 12% had 4 or more
- 16% of men and 26% of women reported childhood sexual abuse
- 66% of the women in the sample experienced abuse, violence, or household dysfunction in childhood. (Felitti, 2002)

According to the American Academy of Pediatrics,
the average pediatrician will see
2-4 children each day with an ACE Score of 4+.



ACEs Linked to Problems in Learning & Behavior

1 of 4

School children exposed to a traumatic event.



Early Adversity Is the Pipeline to Florida's Criminal Justice System

In a study of 64,329 Florida DJJ youth,
97% reported one or more ACES



50%
had 4+
ACES

Source: Baglivio, M., Epps, N., Swartz, K., Huq, M. S., Sheer, A. & Hardt, N. (2014). The prevalence of adverse childhood experiences (ACE) in the lives of juvenile offenders. *Journal of Juvenile Justice*, (3)2.

ACE have a powerful relationship to adult health

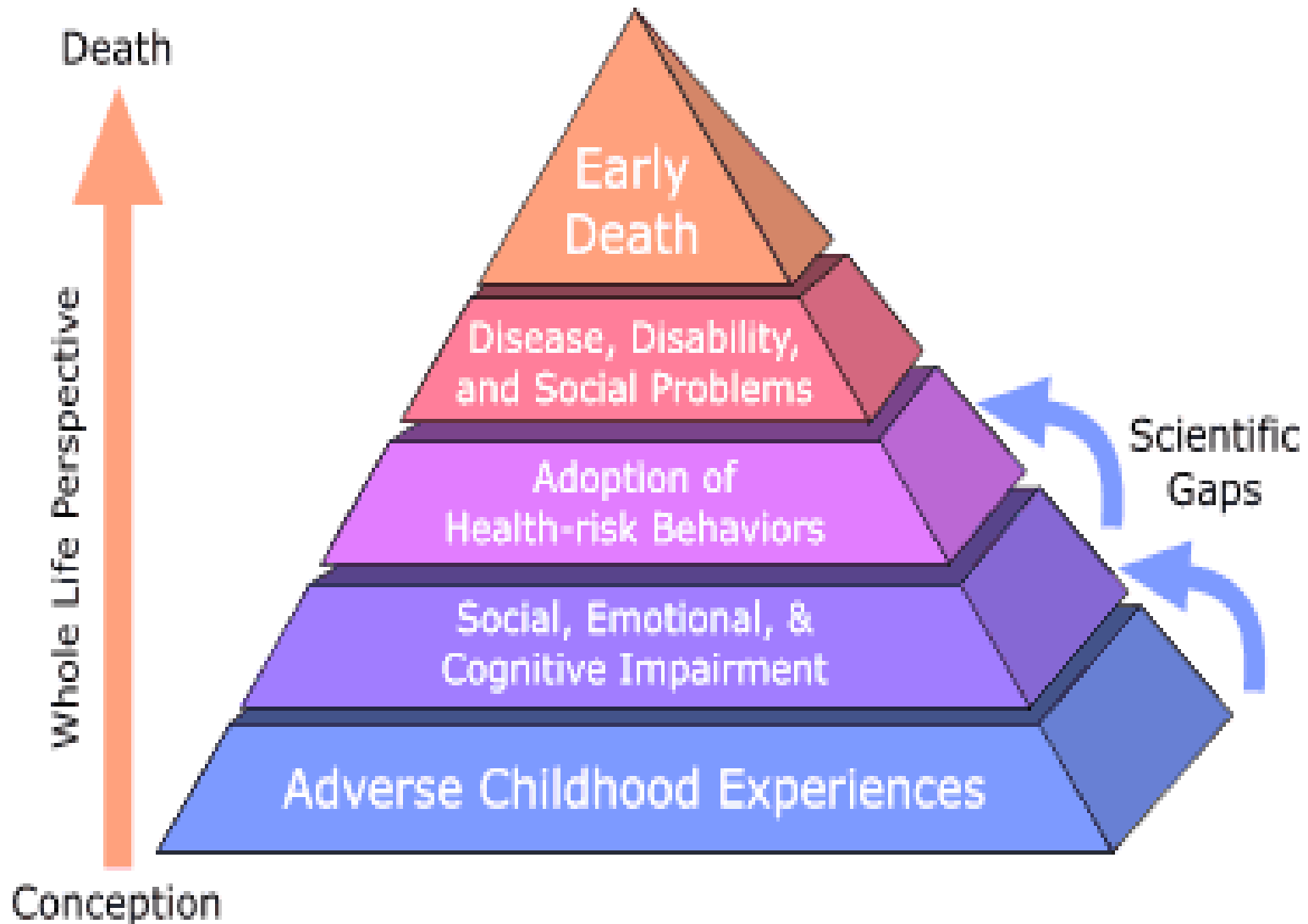
As the number of adverse childhood experiences increased, the number of health and social outcomes also increased:

Including obesity, diabetes, substance abuse, and mental illness

*****MAJOR PUBLIC HEALTH CRISES*****

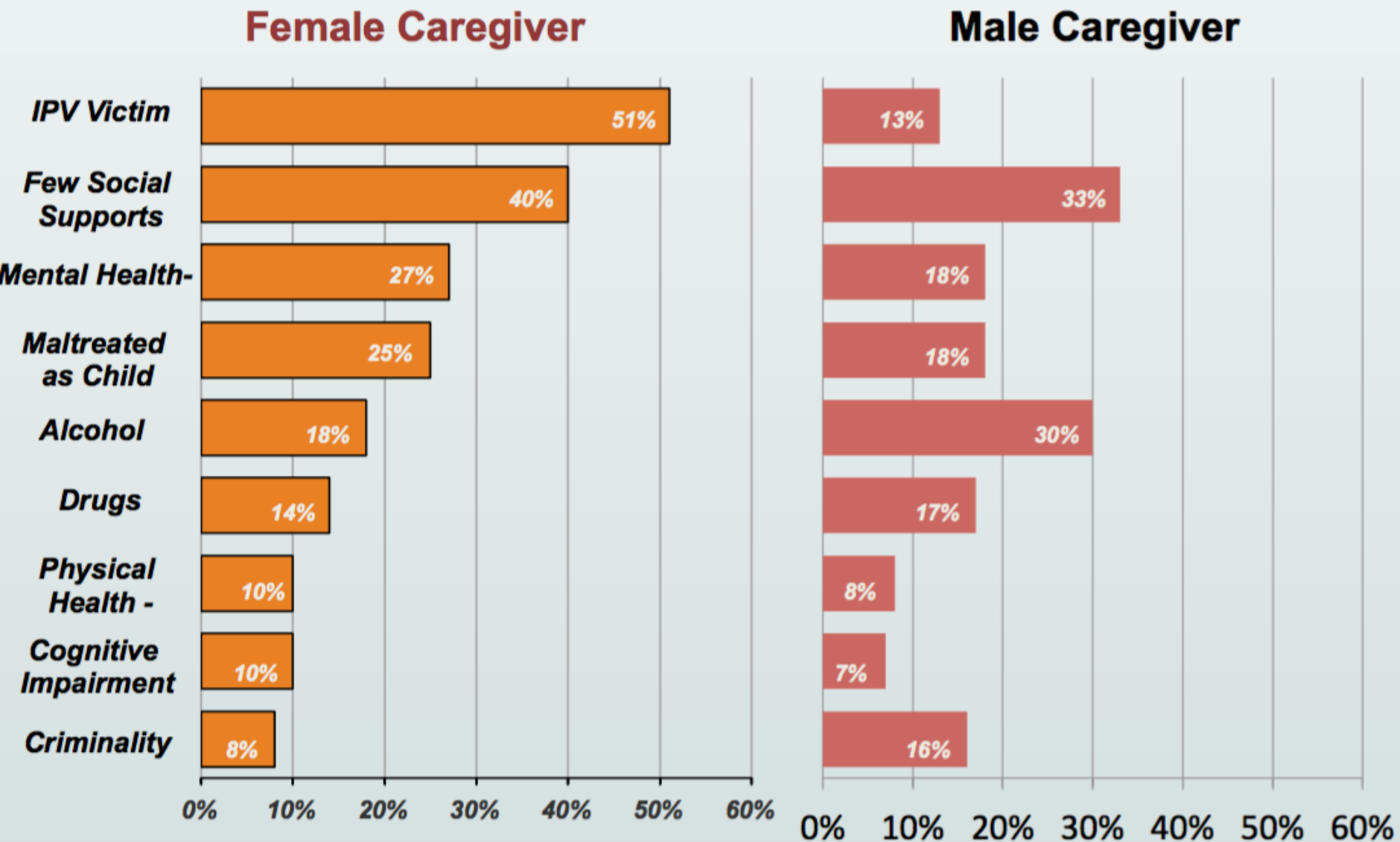
“Every adult was once a child”

Robert Block



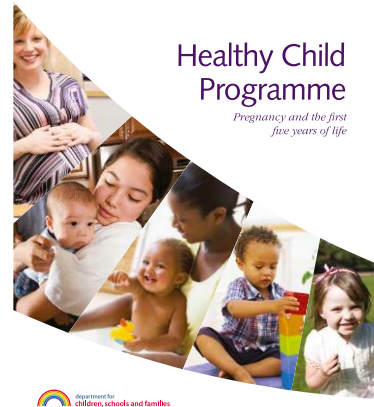
Caregiver Risk Factors

Indicators for Early Intervention (NIS Data Canada)

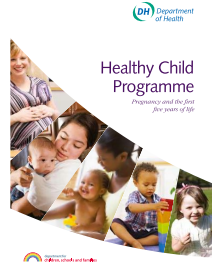


Social Risk Factors (UK)

- Neither parent in the family is in work.
- The family lives in poor-quality or overcrowded housing.
- Neither parent has any educational qualifications.
- Either parent has mental health problems.
- At least one parent has a longstanding limiting illness, disability or infirmity.
- The family has a low income.
- The family cannot afford a number of food and clothing items.



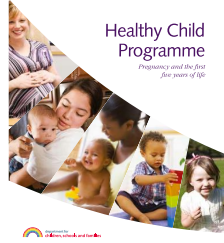
Useful predictors in pregnancy 1



- young parenthood, which is linked to poor socio-economic and educational circumstances;
- educational problems – parents with few or no qualifications, non-attendance or learning difficulties;
- parents who are not in education, employment or training;
- families who are living in poverty;
- families who are living in unsatisfactory accommodation;
- parents with mental health problems;

Useful predictors in pregnancy 2

- unstable partner relationships;
- intimate partner abuse;
- parents with a history of anti-social or offending behaviour;
- families with low social capital;
- ambivalence about becoming a parent;
- stress in pregnancy;
- low self-esteem or low self-reliance; and
- a history of abuse, mental illness or alcoholism in the mother's own family.



Specific Risk Factors

- smoking in pregnancy (this has multiple short- and long-term adverse effects on both the fetus and child, and can be a wider indicator of a pregnant woman's self-esteem); and
- smoking by partners (this also has both a direct and an indirect impact on children, and is the most powerful influence on the

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SURVIVE *End preventable deaths*

- Reduce global maternal mortality to less than 70 per 100,000 live births
- Reduce newborn mortality to at least as low as 12 per 1,000 live births in every country
- Reduce under-five mortality to at least as low as 25 per 1,000 live births in every country
- End epidemics of HIV, tuberculosis, malaria, neglected tropical diseases and other communicable diseases
- Reduce by one third premature mortality from non-communicable diseases and promote mental health and well-being

THRIVE *Ensure health and well-being*

- End all forms of malnutrition and address the nutritional needs of children, adolescent girls, and pregnant and lactating women
- Ensure universal access to sexual and reproductive health-care services (including for family planning) and rights
- Ensure that all girls and boys have access to good-quality early childhood development
- Substantially reduce pollution-related deaths and illnesses
- Achieve universal health coverage, including financial risk protection and access to quality essential services, medicines and vaccines

TRANSFORM *Expand enabling environments*

- Eradicate extreme poverty
- Ensure that all girls and boys complete free, equitable and good-quality secondary education
- Eliminate all harmful practices and all discrimination and violence against women and girls
- Achieve universal and equitable access to safe and affordable drinking water and to adequate and equitable sanitation and hygiene
- Enhance scientific research, upgrade technological capabilities and innovation
- Provide legal identity for all, including birth registration
- Enhance the global partnership for sustainable development



EVERY WOMAN
EVERY CHILD

THE GLOBAL STRATEGY FOR WOMEN'S, CHILDREN'S AND ADOLESCENTS' HEALTH (2016-2030)

**SURVIVE
THRIVE
TRANSFORM**

 SUSTAINABLE
DEVELOPMENT **GOALS**

Chile : Child Creche Contigo (CCC)

- *The Chile CCC model is a fully government funded program implemented since 2007 and guaranteed by law from 2009*
- ***Combines health services, community-based parenting support and preschool learning from gestation to 4 years of age in all 345 municipalities.***
- *Ministries of Social Development coordinates with the Ministries of Health and Education.*
- ***It uses prenatal care in public health facilities as its entry point, providing universal as well as targeted services to ensure that children younger than 4 years living in a family with risk factors for poor early development also have access to age-appropriate stimulation and education and that their families are referred to additional social protection services including cash transfers and home visits***
- *Provides high quality information about ECD to families and providers through media such as TV and a website.*

Lancet ECD Series October 2016

Advancing Early Childhood Development: from Science to Scale 1



Early childhood development coming of age: science through the life course

Maureen M Black, Susan P Walker, Lia C H Fernald, Christopher T Andersen, Ann M DiGirolamo, Chunling Lu, Dana C McCoy, Günther Fink, Yusra R Shawar, Jeremy Shiffman, Amanda E Devercelli, Quentin T Wodon, Emily Vargas-Barón, Sally Grantham-McGregor, for the Lancet Early Childhood Development Series Steering Committee†*

Advancing Early Childhood Development: from Science to Scale 2



Nurturing care: promoting early childhood development

*Pia R Britto, Stephen J Lye, Kerrie Proulx, Aisha K Yousofzai, Stephen G Matthews, Tyler Vaivada, Rafael Perez-Escamilla, Nirmala Rao, Patrick Ip, Lia C H Fernald, Harriet MacMillan, Mark Hanson, Theodore D Wachs, Haogen Yao, Hirokazu Yoshikawa, Adrian Cerezo, James F Leckman, Zulfiqar A Bhutta, and the Early Childhood Development Interventions Review Group, for the Lancet Early Childhood Development Series Steering Committee**

Advancing Early Childhood Development: from Science to Scale 3



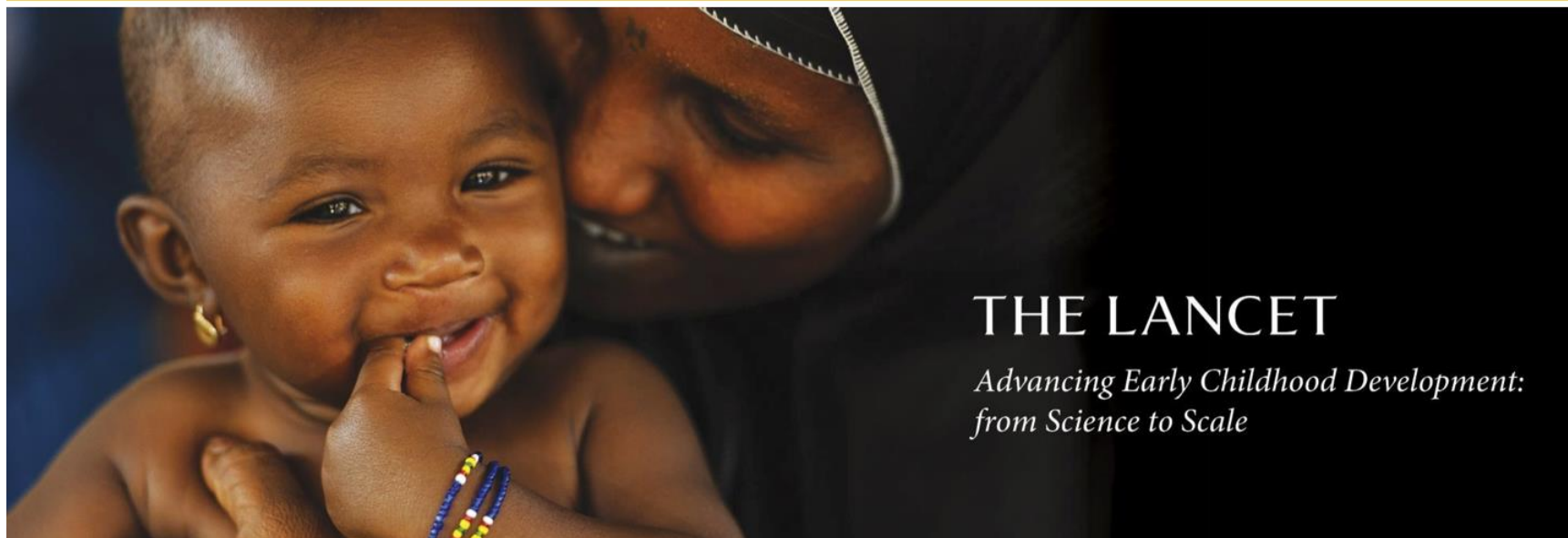
Investing in the foundation of sustainable development: pathways to scale up for early childhood development

*Linda M Richter, Bernadette Daelmans, Joan Lombardi, Jody Heymann, Florencia Lopez Boo, Jere R Behrman, Chunling Lu, Jane E Lucas, Rafael Perez-Escamilla, Tarun Dua, Zulfiqar A Bhutta, Karin Stenberg, Paul Gertler, Gary L Darmstadt, with the Paper 3 Working Group and the Lancet Early Childhood Development Series Steering Committee**

South African Launch of the Lancet ECD Series:

Prof Linda Richter, 2nd Science Forum South Africa, 7 Dec 2016

South African Launch of the 2016 Lancet Series

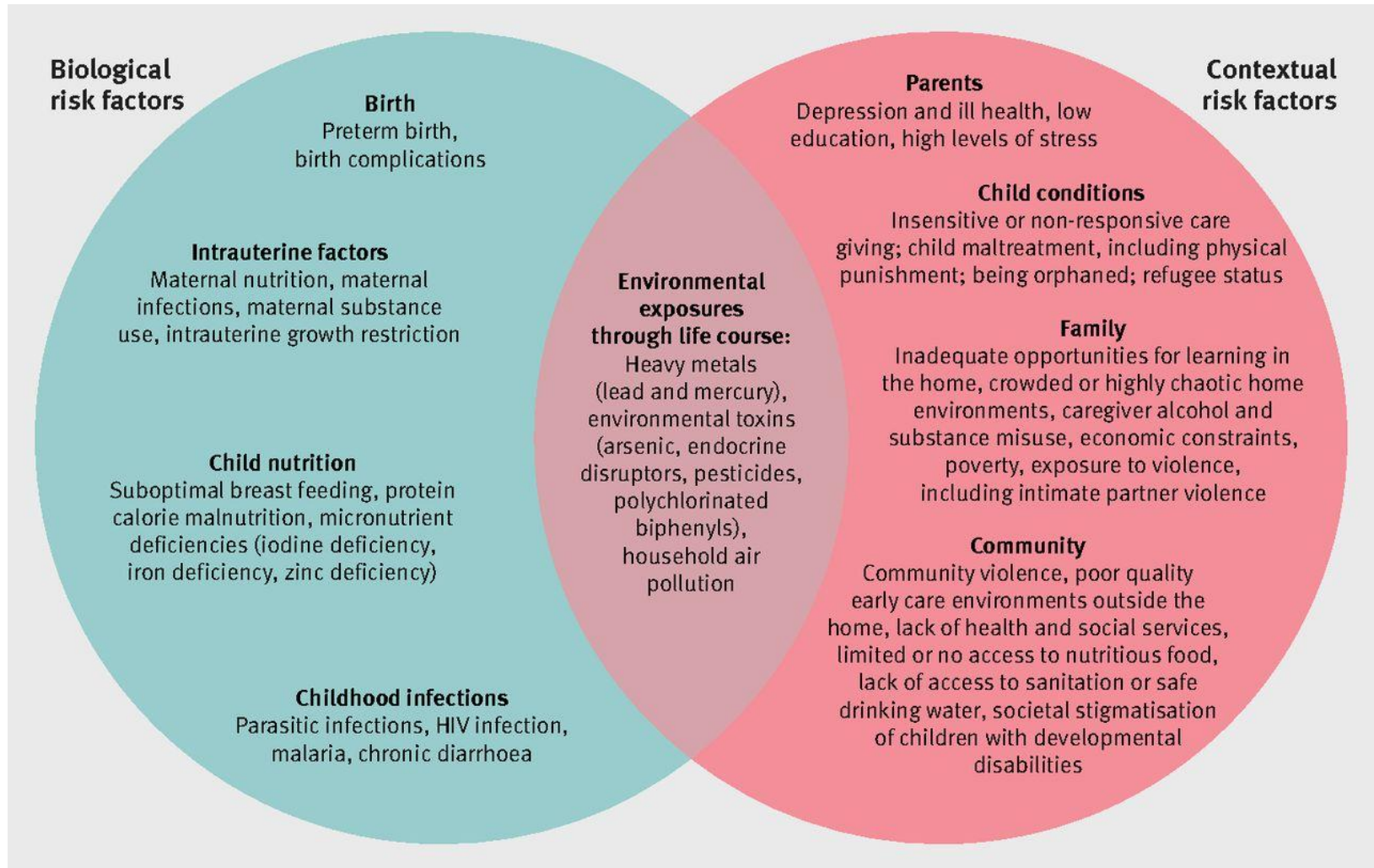


DST-NRF Centre of Excellence
in Human Development



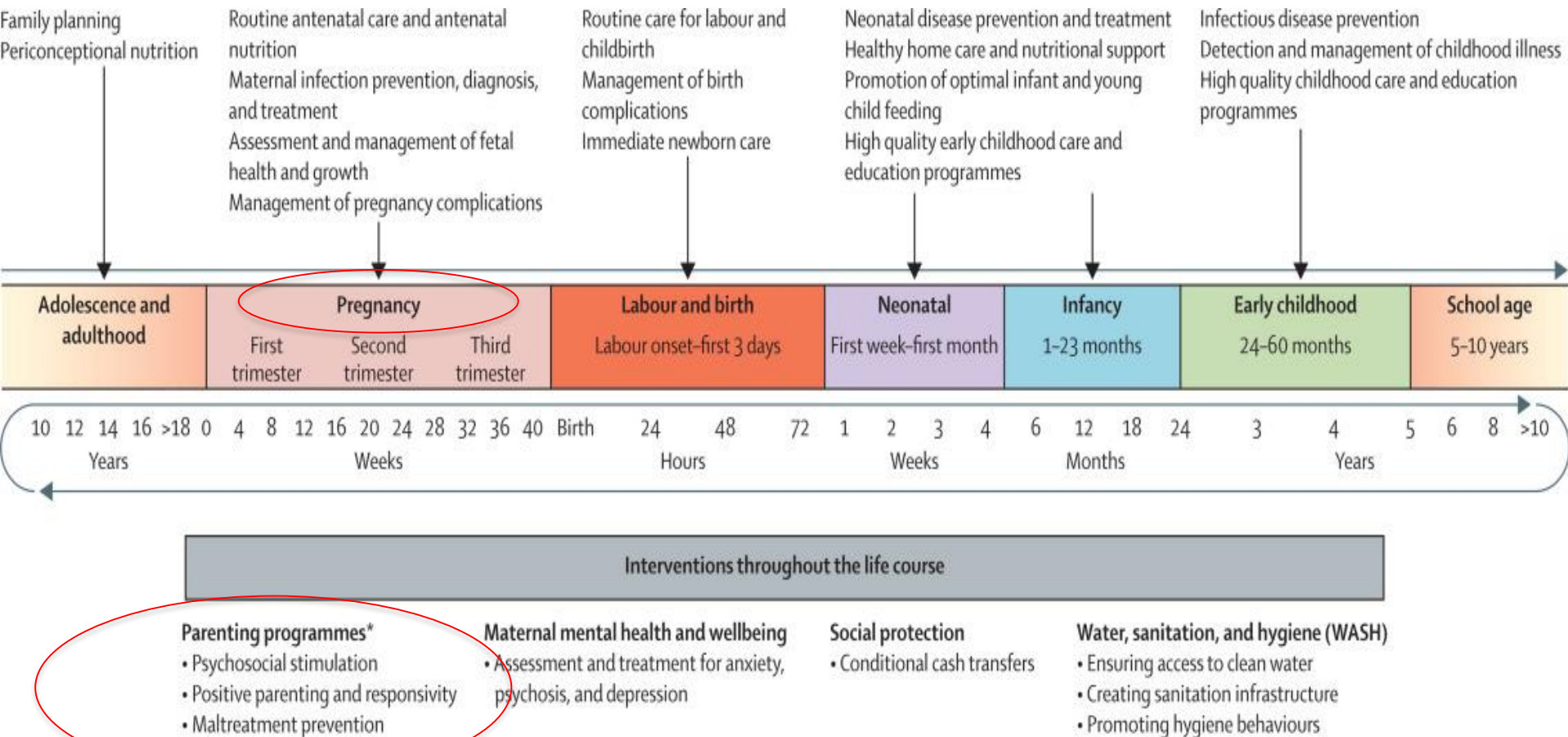
<http://www.thelancet.com/series/ECD2016>

Factors compromising early child development.



Bernadette Daelmans et al. BMJ 2015;351:bmj.h4029

Evidence based interventions that affect nurturing care



Lancet Series on ECD 4 October 2016

World Association Infant Mental Health World Congress May 2018

Key Recommendations:

*“Protect the development of child brain by
securing the wellbeing of the pregnant mother”*

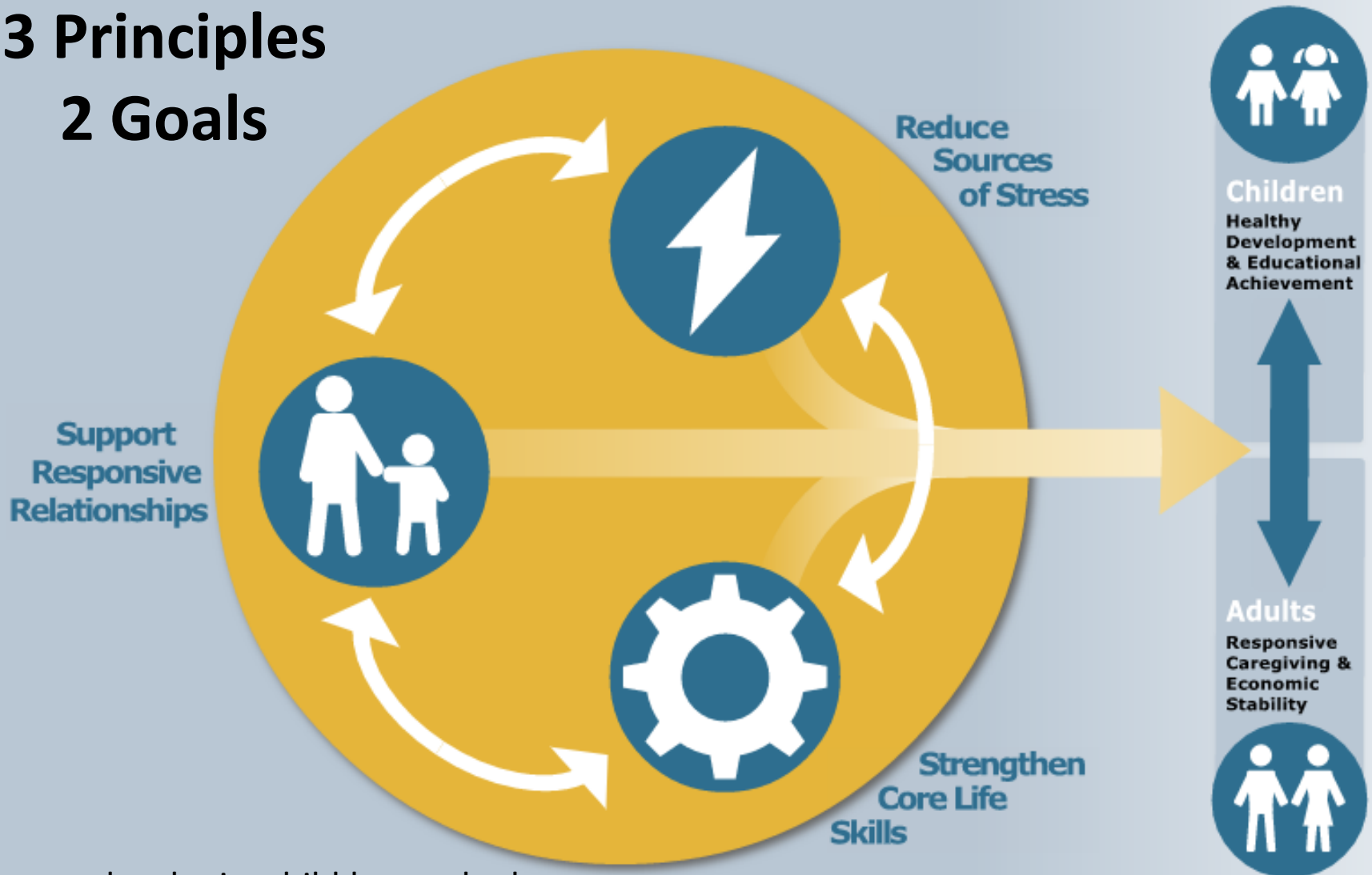
“Our greatest resource is Relationships”

Science to Policy and Practice

Three Principles to Improve Outcomes for Children and Families

These principles, grounded in science, can guide policymakers and program developers as they design and adapt policies and programs to improve outcomes for children and families.

3 Principles 2 Goals



The global picture - May 2018 WHA launch

NURTURING CARE FOR EARLY CHILDHOOD DEVELOPMENT

A FRAMEWORK FOR HELPING CHILDREN **SURVIVE AND THRIVE** TO **TRANSFORM** HEALTH AND HUMAN POTENTIAL



Growing recognition that the early years are critical for human development

- Inclusion in the SDGs
- Global strategy for Women's, Children's and Adolescents' Health
- Nurturing care for ECD framework (WHO UNICEF, World Bank, ECDAN, The Partnership)

Emphasis on survive AND thrive

Nurturing care refers to conditions created by public policies, programmes and services. These conditions enable communities and caregivers to ensure children's good health and nutrition, and protect them from threats. Nurturing care also means giving young children opportunities for early learning, through interactions that are responsive and emotionally supportive.



Source: WHO, UNICEF, World Bank Group. Nurturing Care for early childhood development: a framework for helping children to survive and thrive to transform health and human potential. Geneva: World Health Organisation, 2018. License: CC BY-NC-SA 3.0 IGO.

Nurturing Care Framework

www.nurturing-care.org

5 components

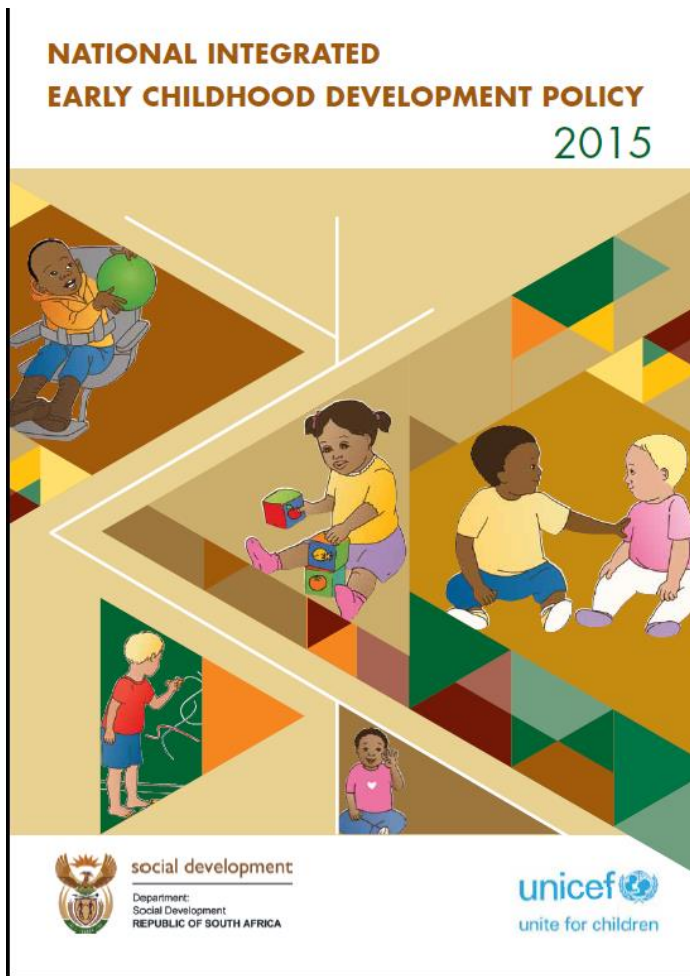
Parents,
caregivers,
family members
are the best
providers of
nurturing care



Source: WHO, UNICEF, World Bank Group. Nurturing Care for early childhood development: a framework for helping children to survive and thrive to transform health and human potential. Geneva: World Health Organisation, 2018. License: CC BY-NC-SA 3.0 IGO.

National Integrated Early Childhood Policy: Department of Health mandate

Lead department
responsible for the
provision of
comprehensive services
for pregnant women,
new parents and
children younger than 2
years



Health + nutrition programmes **PLUS..**

Antenatal period:

- **To screen, support + make referrals for maternal mental health, substance abuse + exposure to domestic violence**
- **To provide preparation for parenting**

Birth to 6 years:

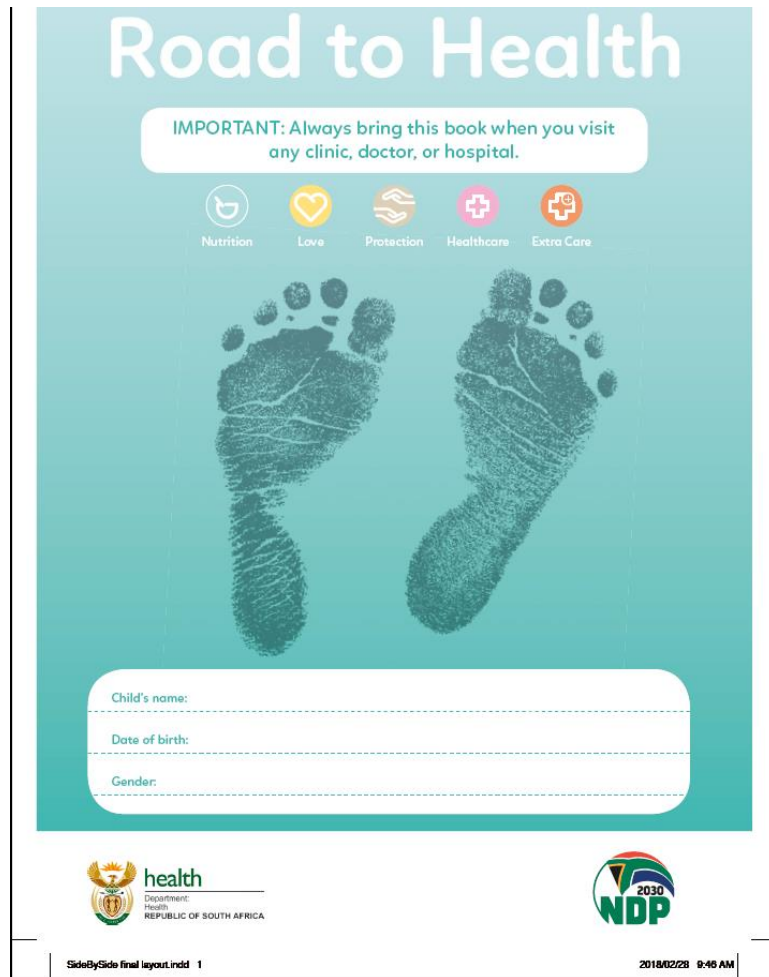
- **Provide parent support + skills building to promote children's healthy development + safety**
- **Promote secure attachments**
- **Provide parent support to prevent child abuse + neglect**
- **Identify children exposed to child abuse & neglect; provide support and referral**

NIECD Policy priority programme

Support for pregnant women, new parents + children younger than 2 years

- **- To counsel women on self-care, infant health, growth and learning during ANC and PNC visits**
- **- To provide supportive home visits by CHWs to vulnerable parents/caregivers + their infants, during pregnancy and infancy for up to 9m**
- **- To provide clinic-and CB support groups for women + women+babies that address self-care + infant health, nutrition, growth + learning**

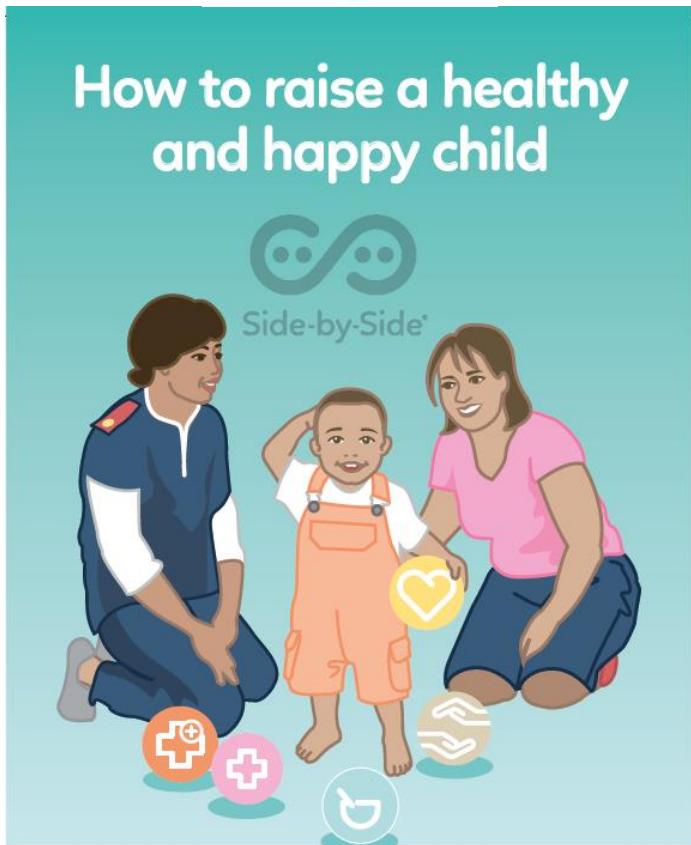
A revised Road-to-Health Booklet



A new RTHB...

- aligned to the framework of the NIECD policy and the expanded role of the department of health.
- The implementation of the revised booklet is considered **to be the DOH's strategic response** to their new mandate to promote early child development.

National Under 5 Side-by-Side campaign



Side-by-Side describes the **supportive relationship** between a child and their caregiver, as well as relationship between all those who help and advise the caregiver.

Side-by-Side conveys **partnership and togetherness**, reminding us that it takes a village to raise a child.

Side-by-Side speaks to the child-rearing **journey** that caregivers embark on with their children, and all those who help them. The journey on the Road to Health is shared.

THE 5 THEMES OF THE ROAD TO HEALTH BOOK ARE WHAT CHILDREN NEED TO DEVELOP



NUTRITION Good nutrition is important for you and your child to grow and be healthy. It starts with breastfeeding.



LOVE Your child learns from looking at you when you hold them close to you and love, play and talk to them.



PROTECTION Your child can be protected from disease and injury by getting immunised and by playing in safe places.



HEALTHCARE Your child needs help from you or a health worker when they are sick or injured.



EXTRA CARE Your child may need special care or support and knowing what to do and where to go will help both of you.

Caregiver messages: Love - Play - Talk



There are some basic things you can do to help your child to develop and learn:

- **Be there for your child.** You are the most important person in your child's life. All children want to feel safe, loved and cared for.
- **Bond with your child.** Keep your baby close to you as much as possible in the first weeks of life. This will help to calm them and help them to sleep, grow and feed well.
- **Be responsive.** Pay attention to your child's interests, emotions and their likes and dislikes and respond to them – this will help you to understand them better and to best meet your child's needs
- **Your baby learns from birth.** Hold, hug, sing, and talk to your baby, especially during feeding, bathing and dressing
- **Children learn through playing, exploring and interacting with others.** Give your child the chance to explore and play in a safe space and to play with clean household objects or toys.
- **Tell stories and read to your child.** Talk about the pictures, let them ask questions, allow them to tell you a story or what happened in the storybook as you go along.



Risk Factors



Are risk factors present?

Low birthweight
(less than 2.5kg) ☐

Mother has died or is ill ☐

Known congenital or
neurological problem ☐

Infant not exclusively breastfed ☐

Social deprivation ☐

Teenage caregiver ☐

Other

List newborn problems
(list if resolved or on-going)

Follow-up required

Preterm ☐

Low birthweight (< 2.5kg) ☐

ICU admission ☐

Birth defects ☐

Birth asphyxia ☐

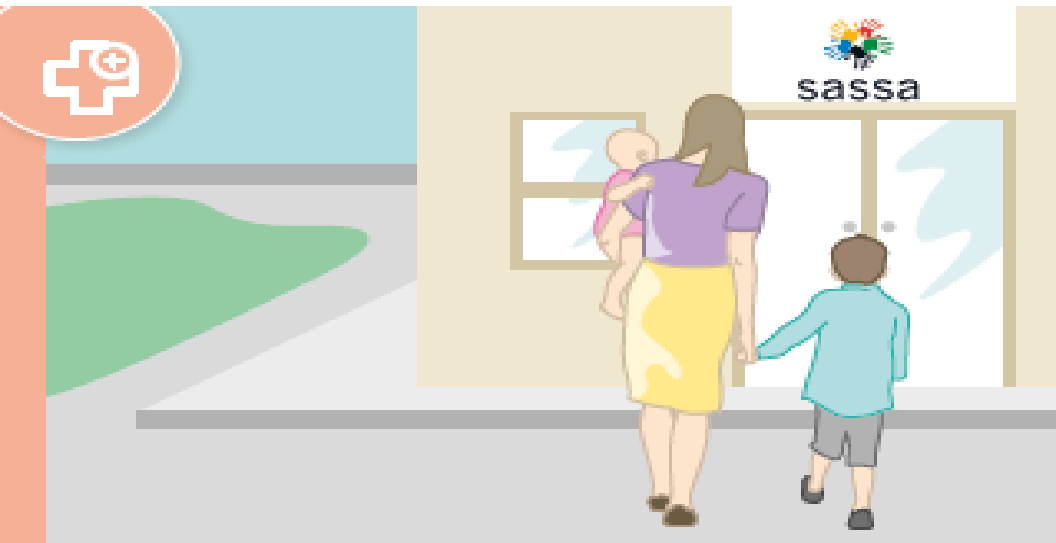
Encephalopathy ☐

Hypoxic brain injury ☐

Convulsions/fits ☐

Jaundice ☐


Risks to your Child's Development



- Build relationships with caregivers that encourage to seek help
- Offer EXTRA CARE and SUPPORT to;
 - Teen mothers
 - Grandparents looking after children
 - Clients exposed to violence and abuse in homes
 - Partners using drugs and alcohol that may place a baby at risk
 - If individuals feel they are not coping, are stressed, depressed for long periods

Risks to your child's development

There are some home circumstances that create a risk to the health and wellbeing of your child. This is because they may limit your ability to care for, and protect your child. If you are experiencing any of the following circumstances, tell your community health worker, nurse or doctor and they will give you advice and refer you to the right support provider.

- If you are a teen mother or a grandparent looking after a young child it is important to tell your health worker so that they can refer you for extra support if you need it.
- If you are exposed to violence or abuse in your home, you must let your health worker know. They can refer you to a social worker and the police if necessary to protect you and your baby from physical harm.
- If you or your partner, use drugs or alcohol, this is a risk to your baby. Tell your health worker so that they can refer you for support.
- If you are feeling that you are not coping, you are stressed or have been sad for a long period of time (depressed) , talk to your health worker so that they can advise you on what to do or refer you for extra care and support.



For health workers:

This table incorporates key social risks for children. Complete this table at the 6 or 14 week visit.

Are social risk factors present?	Notes (include details of risk, referral and/or extra care provided)
Child has a birth certificate <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
Mother has died or is ill <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
Teenage parent or caregiver <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
Child receives a child support grant <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
Child receives a care dependency grant <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
Child receives a foster care grant <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	

SPECIAL CARE FOR CHILDREN WHO NEED A LITTLE MORE HELP

Mother has died or is ill <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
Teenage parent or caregiver <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	

This list of social risks was included to assist Community Healthcare Workers to identify children who may need extra care.

A list of useful contact numbers on the inside back cover of the book has also been included. This is shown below:

Birth registration and identity documents	
Home Affairs Toll Free helpline	0800 601 190
Child protection and safety	
Police emergency number	10111
Childline toll free	0800 055 555 0800 123 321
Grants	
SASSA Toll Free helpline	0800 601 011 0800 600 160

Overview

- The 1st 1000 days window of opportunity
- Nature and nurture
- Impact on public health
- Global and National mandate
- **Key interventions (and W Cape initiatives)**
- Critical role of Family Physicians

W Cape First 1000 Days Initiative

www.westerncape.gov.za/first-1000-days/

The first 1000 days is the period from **conception to the child's second birthday**. Optimizing opportunities in this phase of life provides the window of opportunity for a brighter, healthier and prosperous future.



GROW: Health and nutrition



LOVE: Nurture, care & support



PLAY: Safety, protection & stimulation

Right start. Bright future

Recognition of infant and child care contexts

“start caring for your baby before birth”



*It takes
a whole
village
to raise
a child*



Western Cape DOH 1st 1000 Days Rapid Situational Analysis

FIRST 1000 DAYS RAPID SITUATIONAL ANALYSIS FOR THE WESTERN CAPE DECEMBER 2016

*Survive, Thrive,
Transform*

Prepared by the Perinatal Task Team

Western Cape Department of Health



THE GLOBAL STRATEGY FOR WOMEN'S, CHILDREN'S AND ADOLESCENTS' HEALTH (2016-2030)

**SURVIVE
THRIVE
TRANSFORM**

Enhancing Existing MCH Services

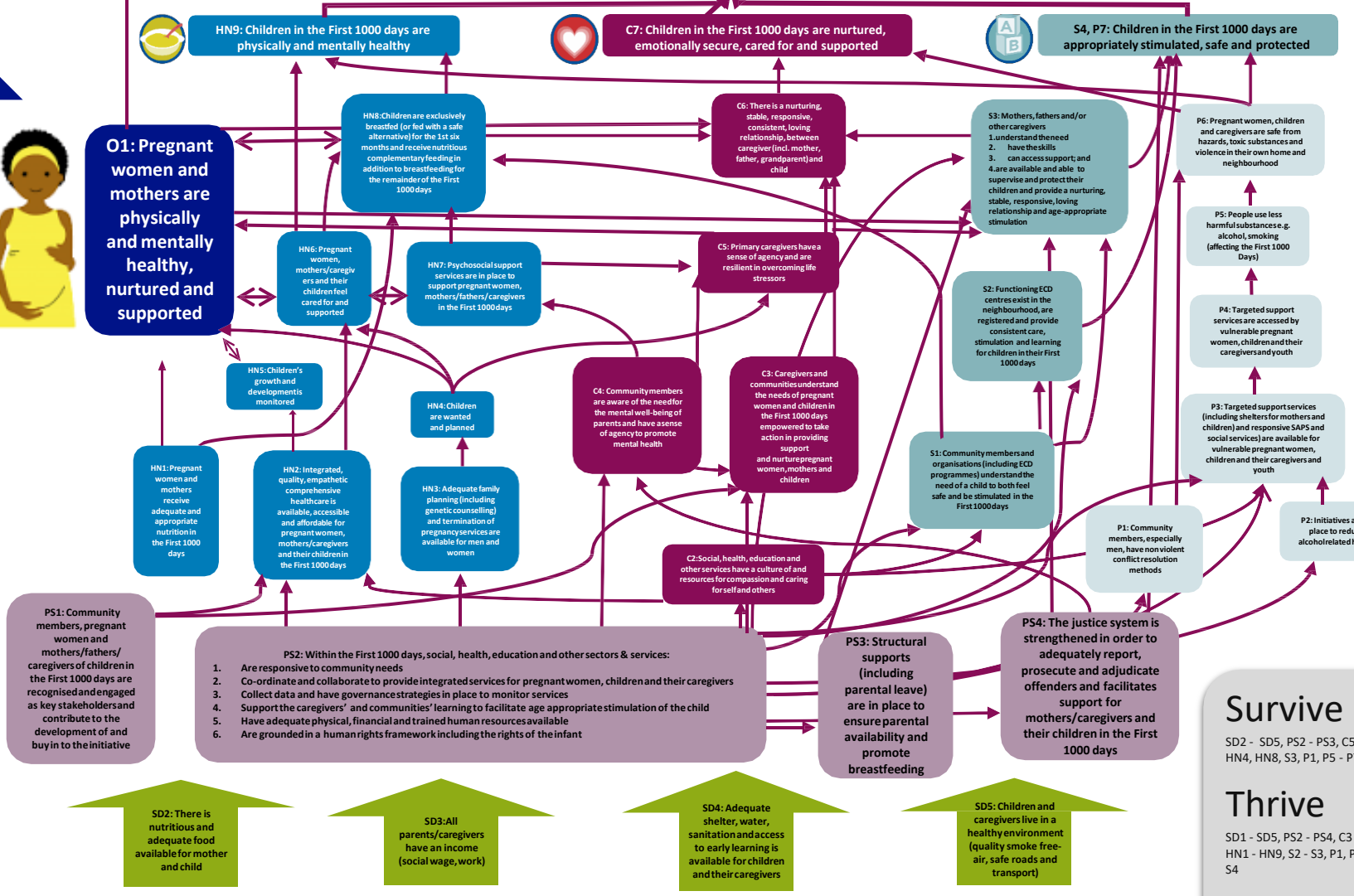
	Antenatal	Birth to 6 months	7 months to 2 years
General Health & wellness	Booking < 20weeks; 4 ANC visits; PMTCT Educate, screen / refer problems of alcohol, tobacco, drugs; Psychosocial risk screen & mental health screen	Postnatal care Safe Family Planning PMTCT Immunisations Management of disease (pneumonia /diarrhoea) Developmental screening Hand washing & hygiene Danger Signs	Immunisations Management of disease (pneumonia / diarrhoea) Developmental screening Hand washing & hygiene De-worming Danger Signs
Adequate nutrition	Balanced diet Micronutrients Optimal weight Breastfeeding counselling	Support Exclusive breastfeeding Growth monitoring Prevent malnutrition	Breastfeeding Complementary feeding Micronutrients Growth monitoring Prevent malnutrition Supplementary feeding
Stimulation & Support	Psychosocial support Parental Preparedness Parenting information Promotion of caregiving practices	Parenting information Promotion caregiving Early learning (home) Birth registration, Child Support Grant (CSG)	Promotion caregiving Early learning (home) Parenting information CSG



First 1000 Days Theory of Change

O3: Ensure that every pregnant woman and child is nurtured and parents are supported from conception onwards, especially the most vulnerable, through a whole society approach, so that children can achieve their full potential throughout the life course

O2: Children at 2 years are resilient and are able to meet their full potential



SD 1: There are adequate resources which are fairly distributed in the community
C1: A culture of compassion, caring and nurture exists within our society

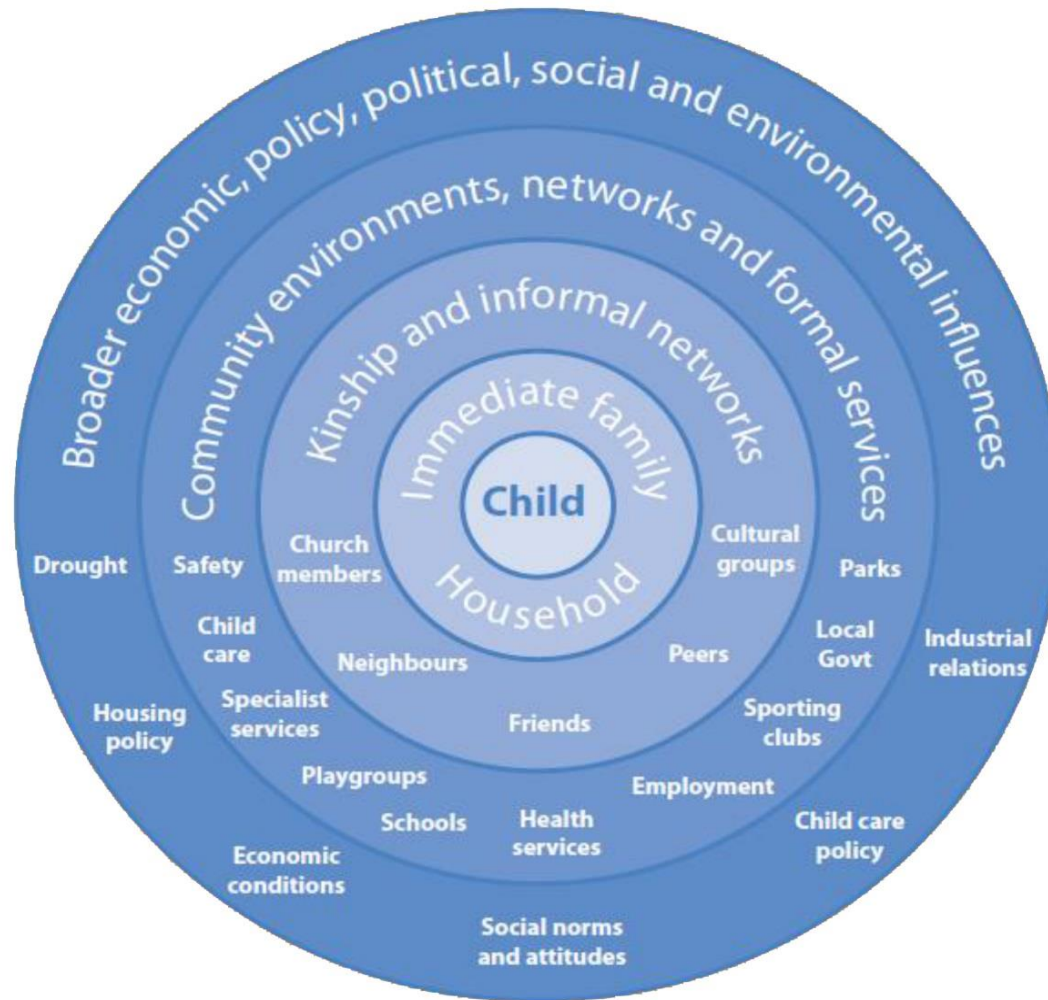
Health and Nutrition (HN) **Responsive caregiving (C)** **Stimulation for early learning (S)** **Safety and protection (P)**
(nurture, care and support)

Survive
SD2 - SD5, PS2 - PS3, C5, HN1 - HN4, HN8, S3, P1, P5 - P7, S4

Thrive
SD1 - SD5, PS2 - PS4, C3 - C7, HN1 - HN9, S2 - S3, P1, P3 - P7, S4

Transform
C1, SD1, SD3 - SD5, PS1 - PS4, C2 - C4, C6, HN2 - HN4, HN6 - HN7, S1 - S3, P1 - P7, S4

Manifesto: *“Relationships Matter Most”*



Building Children/Brains is Everyone's Responsibility

What should we focus on?

Maternal Mental Health

- Feeding practices
- Sensitive caregiving
- Responsiveness to infant care seeking
- Attachment

Protective Factors

- Maternal ante and post natal care
- Relationships – especially partners & fathers
- Access to care and support
- Parenting

Entry point redesign: antenatal care record

Psychosocial Risk assessment & Parental Preparedness

MEDICAL & GENERAL HISTORY

Hypertension	Epilepsy	Diabetes	Cardiac	TB	HIV	Psych
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Other (specify) _____

If yes to any of the above give further details, e.g. duration: _____

Medication: _____

Operations: _____

Allergies: _____

TB symptom screen: _____

Psycho-social risk factors:

Referral: _____

Family History:

Twins	Diabetes	TB	Congenital	Other
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Details: _____

Estimated date of delivery

d	d	m	m	y	y
---	---	---	---	---	---

According to

COUNSELLING

	Date 1	Date 2
Labour companion		
Infant feeding		
Parental preparedness		
Nutrition		
HIV		
Mental health		
Alcohol/ substances/ tobacco		
Domestic violence		



FUTURE CONTRACEPTION (provide dual protection)

<input type="button" value="Injectable"/>	<input type="button" value="Oral"/>	<input type="button" value="Intra-uterine device"/>	<input type="button" value="Tubal ligation"/>	<input type="button" value="Implant"/>
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Booking visit and assessment of risk done by:

Name & Title

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



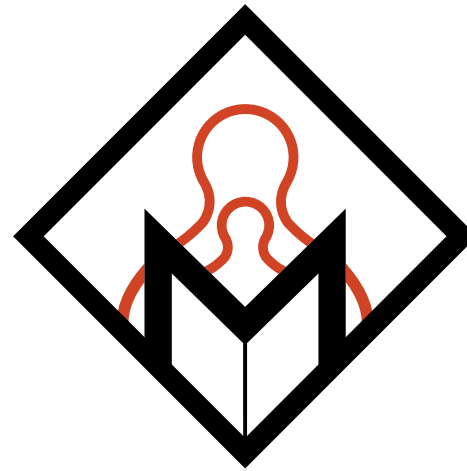
Screening pregnant women for referral

(all the information is already collected in the Maternity Record)

No.	Antenatal Information	Refer if
1	Age	< 20 years
2	Gravida	Primigravida
3	Address	Lives in an informal settlement or is a backyard dweller
4	Single versus married/stable partner	Single
5	Occupation	Unemployed
6	Medical Problem (including HIV+ve)	Any problem
7	Obstetric Problem	Any problem
8	Psychiatric problem	Any problem
9	Tobacco/Alcohol/Drugs	Yes, to any of these
10	Any other reason thought relevant for referring*	Any relevant reason



**This could include (but is not limited to) experience of violence, abuse or psychological trauma, unwanted pregnancy, being a refugee, experienced difficult life events such as recent bereavement, food insecurity and lack of social support.*



Our journey in parent support

Proposed pilot project
Drakenstein

June 2018



Communication key messages in waiting areas



**Breastfeeding
is best for
babies and
moms.**



**Let's support mothers
to breastfeed anywhere
and anytime.**



A long and Healthy life for all South Africans



Parent & Caregiver support: antenatal touch points



1st visit
(14/20 wks)

*Issue RTHB Parent pamphlet with MCR
explain Side by Side and icons*

24wks



Nutrition

28wks



Love

30wks



Protection

32wks



Healthcare

34wks



Extra Care

36wks

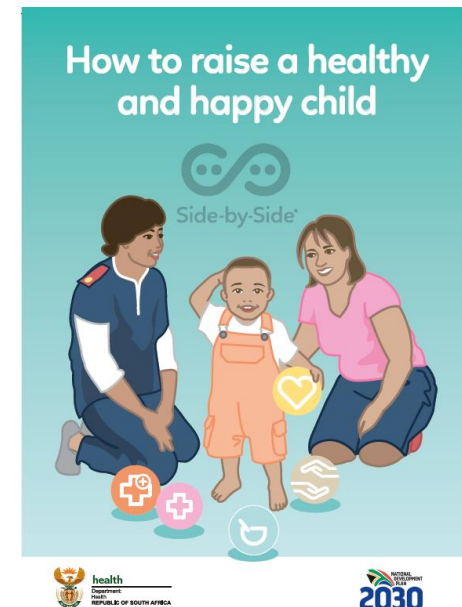


Child growth

38wks



Responsive care



Relationship matters:

How are you?

- How is mother and baby?
- Changes over time as child develops = ages and stages
- A mother's well being impacts her baby's well being
 - Content mother
 - Depressed mother



Me And My Baby In Pregnancy



You are important.



Talking about support.



Emotions and Pregnancy.



Our First 6 Months



Our relationship.



Love, Play, Talk.



Emotions, soothing and coping



Supporting my baby's growing independence: 12-24 months



The adventure of learning.



Learning in the home and everywhere.



Our journey over the first 1000 days.



Our Circle of Support: 6-12 Months



Making toys.



Play and safety.



Our first year together.

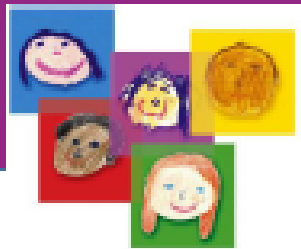


Overview

- The 1st 1000 days window of opportunity
- Nature and nurture
- Impact on public health
- Global and National mandate
- Key interventions (and W Cape initiatives)
- **Critical role of Family Physicians**

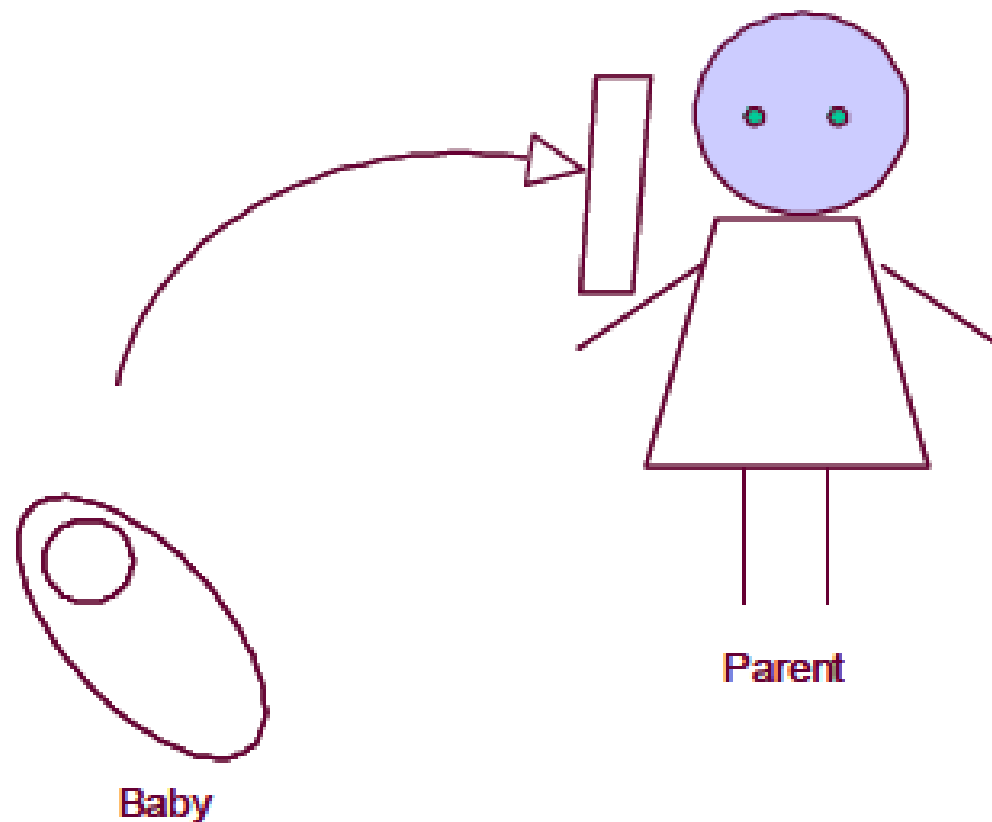
Be mindful of the principles of Responsive Caregiving

- The **mother or caregiver is central** to responsive care *which means a failure in responsive care can easily be conceived as a failure in caregiving*
- Interventions for responsive care are often baby focused *but in high risk settings this often leads to “rescue and/or blame type” responses*
- Talking and telling responsive care is different to **demonstrating and supporting** responsive care
- “connect” and “support” are as critical as “communicate” and “play”
- Be the relationship you want to see



Containment and the brain

- Head full (stress; cortisol; fright, flight, freeze)

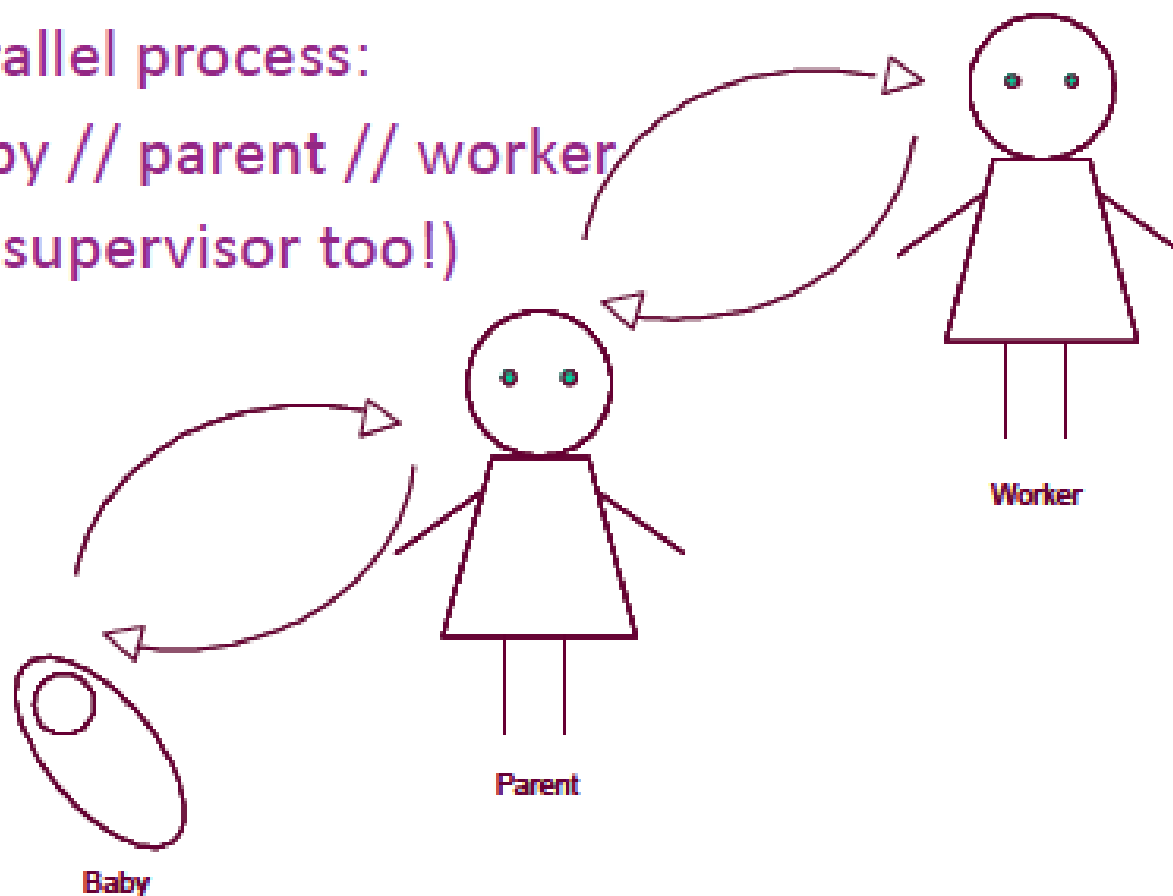




Containment and the brain

Parallel process:

Baby // parent // worker
(// supervisor too!)

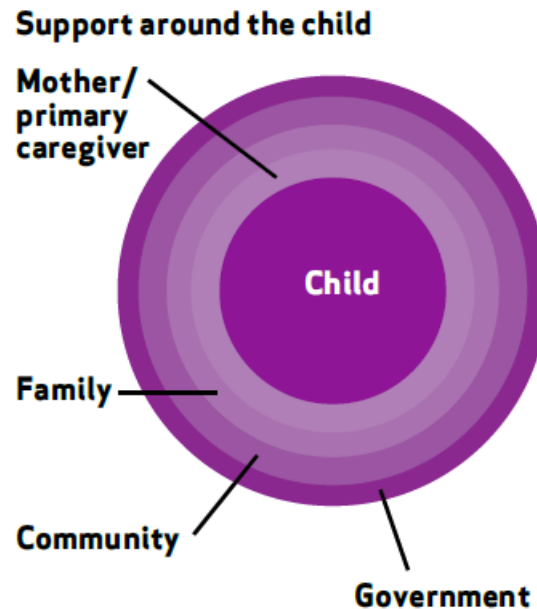


What can you do?



- Screen the mental state of the mum/carer (depression, domestic violence, stress)
- Assess the care-givers attitudes and perceptions of and interactions with the child
- Efforts to promote **nurturing care** of young children built onto existing services for maternal and child health impact this critical period Richter et al, Lancet 2016
- Don't underestimate the pressure experienced via social media, unrealistic standards of mothering and negative cognitions
- Support pregnant mothers and parents & caregivers of young children.

Recognise, support, advocate for supportive environments



*While the **pregnant woman** is the environment of the developing fetus,
the **community** is the environment of the mother.*

Make the most of the 1st 1000 days of life



Provide care across the life course continuum

Screen for risk and provide support, *including home visits!*

Always see the relationships: *relationships matter most!*

Advocate for relationship support of pregnant women

Honour and protect the mother /caregiver - baby dyad

Respect and support the cycle of life

Honour the infant's journey...

A CHILD

*A river is a thing
Of joy and pleasure
Where
does it go?
Where
does it come from?
We do not know
A child is a river*



- MANTAG

(from: Splinters from the Fire", Coral Fourie (SOUTH AFRICAN ARTIST) & Edouard J Maunick)

THANK YOU!