KING'S College LONDON

South London and Maudsley NHS
NHS Foundation Trust

Impact of perinatal mental ill-health on the children

Bromley Early Intervention Conference

Bromley Children's Safeguarding Partnership: October 16th 2019

Susan Pawlby
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Context

- **Parental mental ill-health is a major public health issue**
- **The costs of perinatal mental ill-health: LSE Report (2014)**
  - **Cost to UK is £8.1 billion annually**
  - **72% of cost due to adverse impacts on the child**

Estimated numbers of women affected by perinatal mental illnesses in England each year

1,380 Postpartum psychosis

Postpartum psychosis is a severe mental illness that typically affects women in the weeks after giving birth, and causes symptoms such as confusion, delusions, paranoia and hallucinations.

Rate: 2/1000 maternities

1,380 Chronic serious mental illness

Chronic serious mental illnesses are longstanding mental illnesses, such as schizophrenia or bipolar disorder, which may be more likely to develop, recur or deteriorate in the perinatal period.

Rate: 2/1000 maternities

20,640 Severe depressive illness

Severe depressive illness is the most serious form of depression, where symptoms are severe and persistent, and significantly impair a woman's ability to function normally.

Rate: 30/1000 maternities

20,640 Post traumatic stress disorder (PTSD)

PTSD is an anxiety disorder caused by very stressful, frightening or distressing events, which may be relived through intrusive, recurrent recollections, flashbacks and nightmares.

Rate: 30/1000 maternities

86,020 Mild to moderate depressive illness and anxiety states

Mild-moderate depressive illness includes symptoms such as persistent sadness, fatigue and a loss of interest and enjoyment in activities. It often co-occurs with anxiety, which may be experienced as distress, uncontrollable worries, panic or obsessive thoughts.

Rate: 100-150/1000 maternities

154,830 Adjustment disorders and distress

Adjustment disorders and distress occur when a woman is unable to adjust or cope with an event such as pregnancy, birth or becoming a parent. A woman with these conditions will exhibit a distress reaction that lasts longer, or is more excessive than would normally be expected, but does not significantly impair normal function.

Rate: 150-300/1000 maternities

* There may be some women who experience more than one of these conditions.

Source: Estimated using prevalence figures in guidance produced by the Joint Commissioning Panel for Mental Health in 2012 and ONS data on live births in England in 2011.

Perinatal mental health problems

What do they cost?

- **Perinatal depression, anxiety and psychosis together carry a total long-term cost to society of about £8.1 billion for each one-year cohort of births in the UK**
- **This is equivalent to £10,000 per birth for society as a whole**
- **Nearly three-quarters (72%) of this cost relates to adverse impacts on the child rather than the mother**
- **Over a fifth of total costs (£1.7 billion) are borne by the public sector, with the bulk of these falling on the NHS and social services (£1.2 billion)**
- **Other costs include loss of earnings/impact on someone's ability to work and quality of life effects**

LSE PSSRU: Bauer et al, 2014

THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

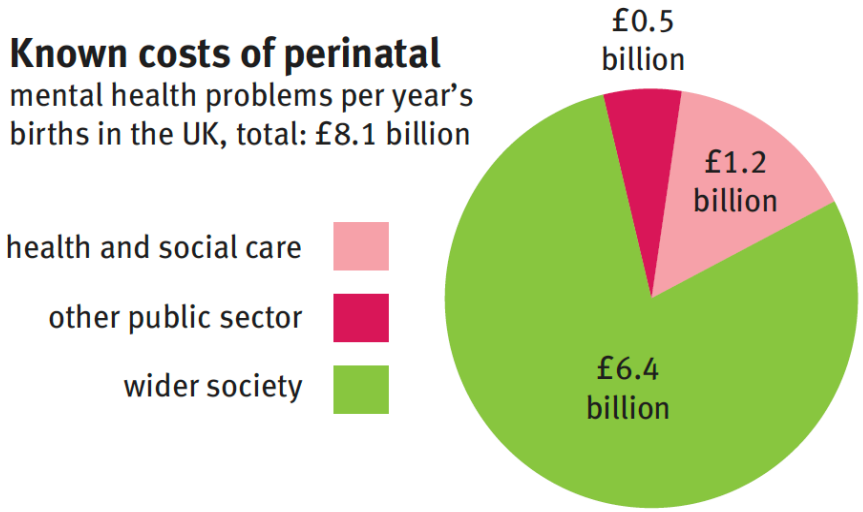
Cost if we don't act

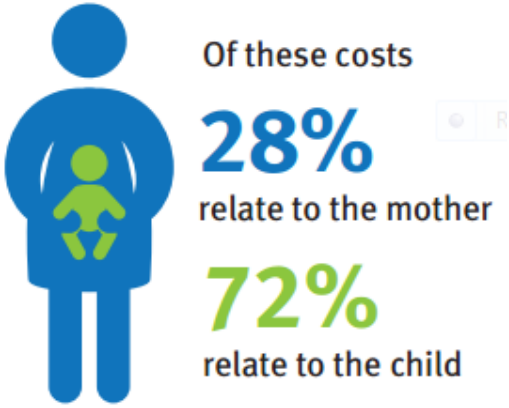
£8.1bn

£337m

Cost of taking action

Known costs of perinatal
mental health problems per year's births in the UK, total: £8.1 billion





Bauer, A., Parsonage, M., Knapp, M., Lemmi, V. & Adelaja, B. (2014). Costs of perinatal mental health problems.

Risk factors for antenatal depression

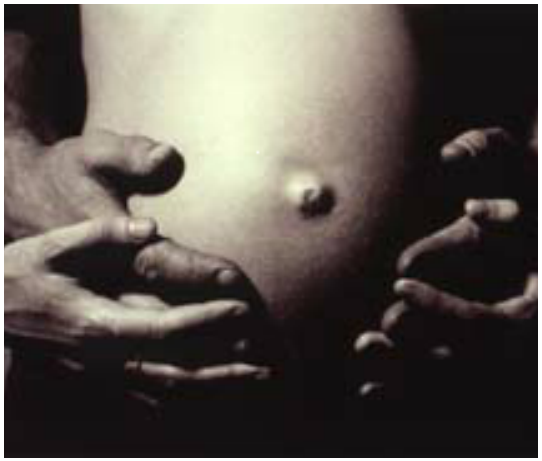
Previous history of depression
(50 % of women with a PH experience antenatal depression)

Relationship difficulties

Young parenthood < 22

Family history of mental illness

Juvenile conduct symptoms



Antenatal depression

Maternal childhood maltreatment a key predictor

Maternal history of maltreatment

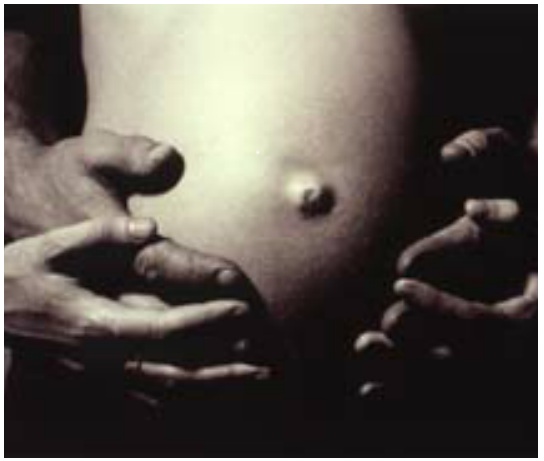
Juvenile conduct symptoms

Previous history of depression

Relationship difficulties

Young parenthood < 22

Family history of mental illness



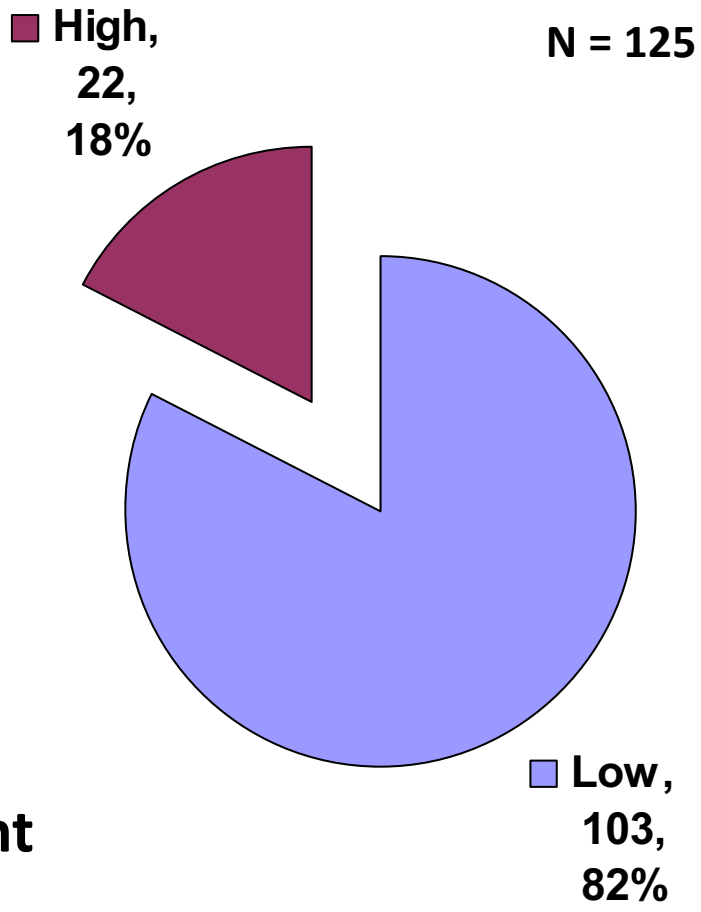
Antenatal depression

Domestic violence

- 31% of women (5m) and 18% of men (2.9m) have been victims of DA
- 12% children under age of 11 (977,000) and 17.5% aged between 11 and 17 years (927,000) exposed to DA in their homes
- Children exposed to DA are 15x higher than national average to be victims of abuse and neglect
- Children who suffer abuse and neglect have problems in cognitive, physical, social, emotional and behavioural development
- Violence costs upwards of £15.7 billion a year (2008) in the UK, including £1.7 billion in health costs

Prevalence of maternal childhood maltreatment

- Physical abuse
- Sexual abuse
- Physical neglect
- Emotional neglect



≤ 1 report = low maltreatment

≥ 2 reports = high maltreatment

		Maternal Antepartum Depression	
		No % (n)	Yes % (*n*)
Maternal Childhood Maltreatment	Low (103)	87% (90)	13% (13)
	High (22)	41% (9)	59% (13)

$\chi 2(1) = 23.76$, $p < .001$; OR = 10.00; CI: 3.57, 28.01

Mothers who experienced HIGH abuse were *10 times* more likely to suffer antenatal depression

		Maternal Antepartum Depression	
		No %	Yes %
Maternal Childhood Maltreatment	No (6,861)	85.4%	14.6%
	Yes (2,536)	70.7%	29.4%

$\chi 2(1) = 260.4, p < .01$

Plant, D. T., et al. (2017). Association between maternal childhood trauma and offspring childhood psychopathology: mediation analysis from the ALSPAC cohort. *The British Journal of Psychiatry*, *211*(3), 144-150.

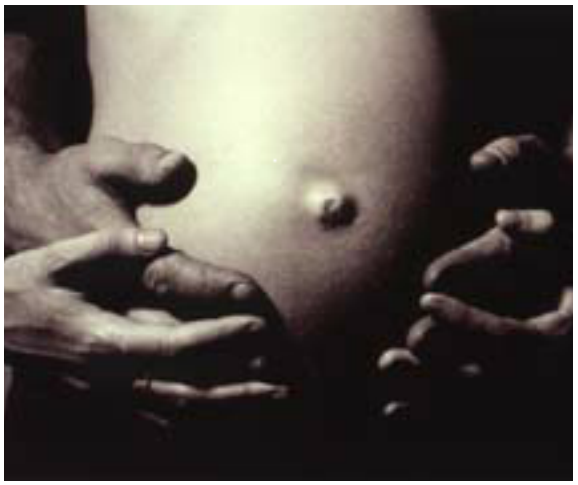
Controlling for other predictors

Predictor	*b*	EXP(*b*)	Wald statistic	*p*
Juvenile Antisocial Symptoms	.07	1.1	.21	.64
Previous Psychiatry History	.09	1.1	.02	.88
Maternal Childhood Maltreatment	2.12	8.35	11.70	.001

Maternal childhood maltreatment is the single most powerful predictor of antenatal depression

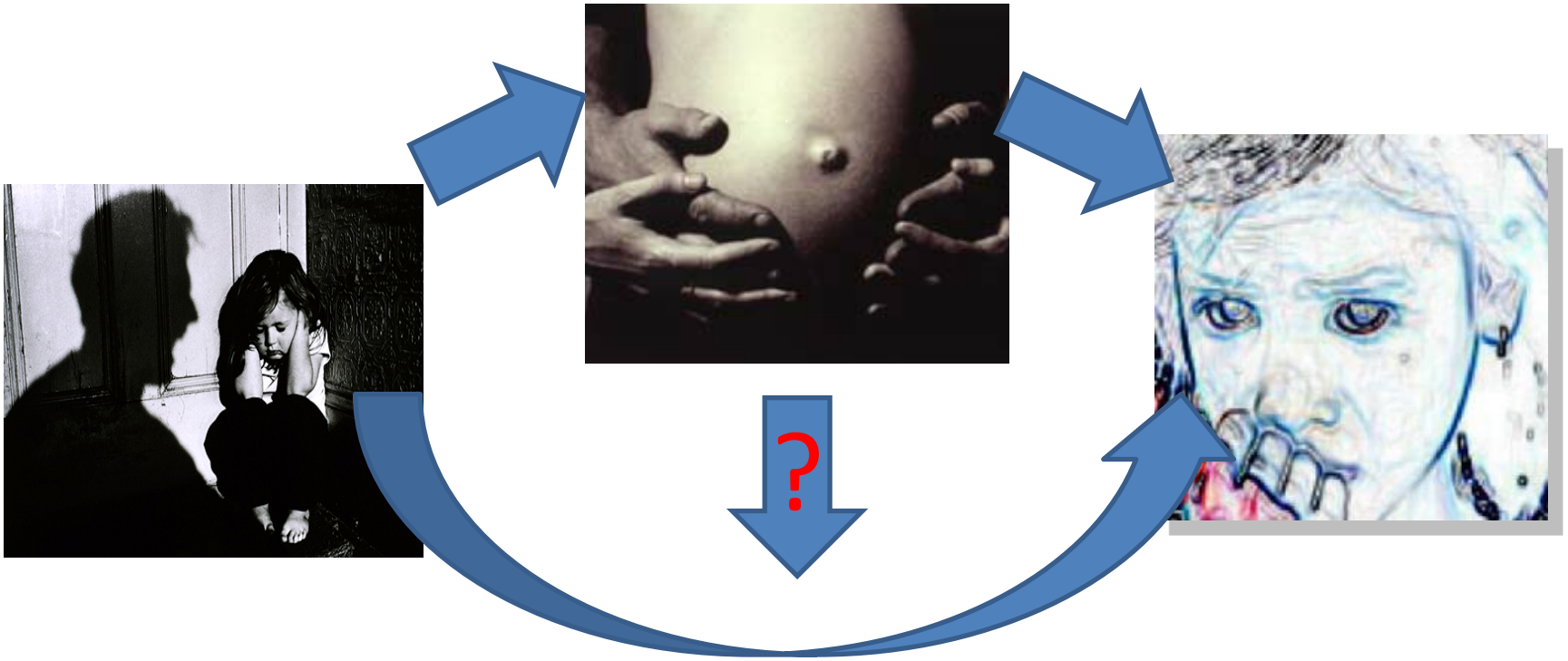
Maternal childhood maltreatment and antenatal depression

Maternal Childhood Maltreatment



Maternal Antepartum Depression

Does maternal antenatal depression influence the effect of maternal childhood maltreatment on offspring outcome?



Antenatal depression and offspring psychopathology: the influence of childhood maltreatment

BJPsych The British Journal of Psychiatry (2011) 199, 106–112. doi: 10.1192/bjp.bp.110.087734

Susan Pawlby, Dale Hay, Deborah Sharp, Cerith S. Waters and Carmine M. Pariante

Table 2 Exposure to maternal depression *in utero* and experience of childhood maltreatment

	Childhood maltreatment	
	No, % (*n*)	Yes, % (*n*)
Exposure to depression *in utero*		
No	84.2 (80)	15.8 (15)
Yes	60.0 (15)	40.0 (10)

χ^2 (1) = 7.03, P = 0.008.

Children exposed to maternal antenatal depression were **3.6 times** more likely to experience maltreatment

Abuse and neglect

- Over 50,000 children in England on child protection register (Department for Education, 2011)

- Physical abuse: hitting, kicking, punching, belt
- Sexual abuse: voyeurism, fondling, forced intercourse
- Emotional neglect: indifference, lack of support,
- Physical neglect: food, clothing, shelter
- Domestic violence: witnessing parental fighting

National Society for Prevention of Cruelty to Children (NSPCC), 2013

Maternal antenatal depression and offspring maltreatment & psychopathology

AND **Child Maltreatment** **Behaviour disorder and/or Depression**

Children who had been exposed to *both* maternal antenatal depression and to childhood maltreatment were *11.7 times* more likely to have psychopathology

Pawlby et al. 2011

BJPsych
The British Journal of Psychiatry (2015)
207, 213–220. doi: 10.1192/bjp.bp.114.156620

Maternal depression during pregnancy and offspring depression in adulthood: role of child maltreatment

Dominic T. Plant, Carmine M. Pariante, Deborah Sharp and Susan Pawlby

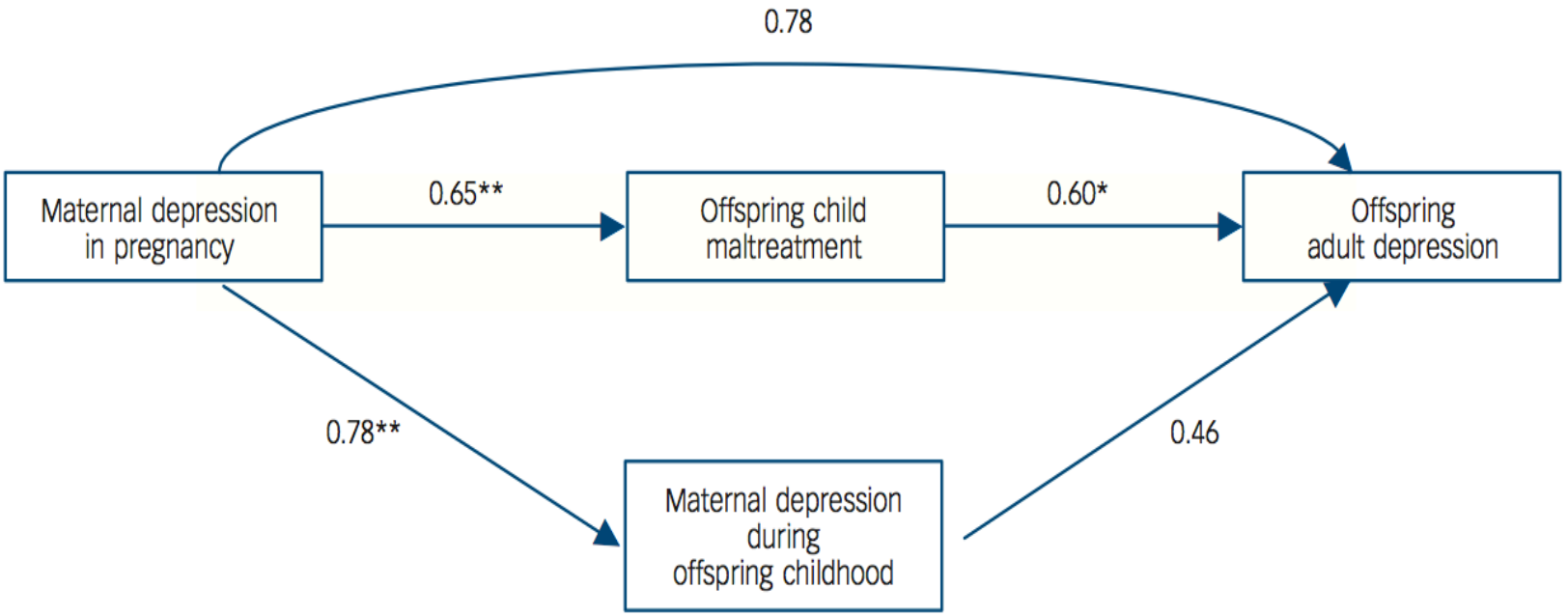


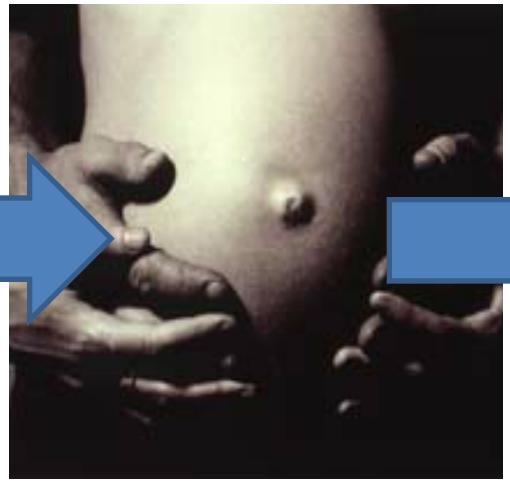
Fig. 2 Path estimates for the multiple mediation model of the effect of maternal depression in pregnancy on offspring adulthood depression mediated by childhood risks.

Note. Estimates are presented as unstandardised B coefficients. All path estimates were calculated whilst controlling for associated covariates. *$P<0.05$, **$P<0.01$.

Path analytic model

Generation 1 to 2

Maternal Childhood Maltreatment



Generation 2 to 3

Perinatal Depression

Generation 3

Offspring Childhood Maltreatment

Generation 3

Offspring Adolescent Psychopathology

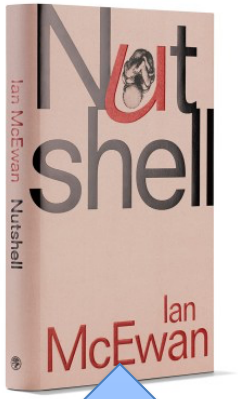
Conclusions

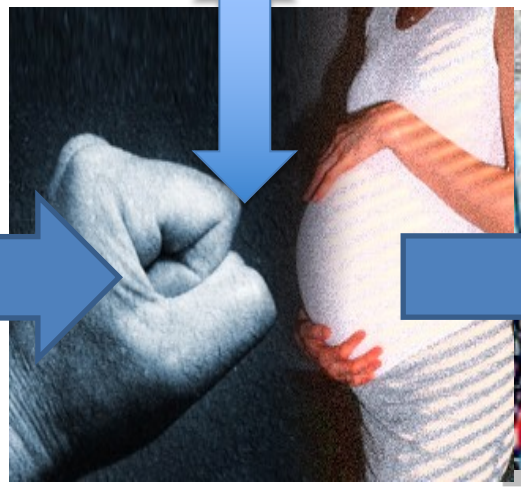
- **A woman's adverse childhood experience (ACE) increases her risk of depression in pregnancy**

- **Antenatal depression increases the risk for child psychopathology through increasing the risk for both postnatal depression and child maltreatment**

- **Maladaptive parenting is not in itself a predictor of child psychopathology but is part of the pathway from postnatal depression to child psychopathology**

Emerging model





Generation 1 to 2

Parental child maltreatment

Generation 2

Domestic abuse and antenatal depression

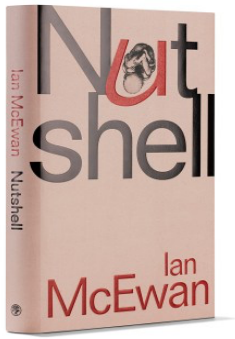
Generation 2 to 3

Offspring child maltreatment
Witness to violence

Generation 3

Offspring young adult affective disorders

An impetus to intervene!



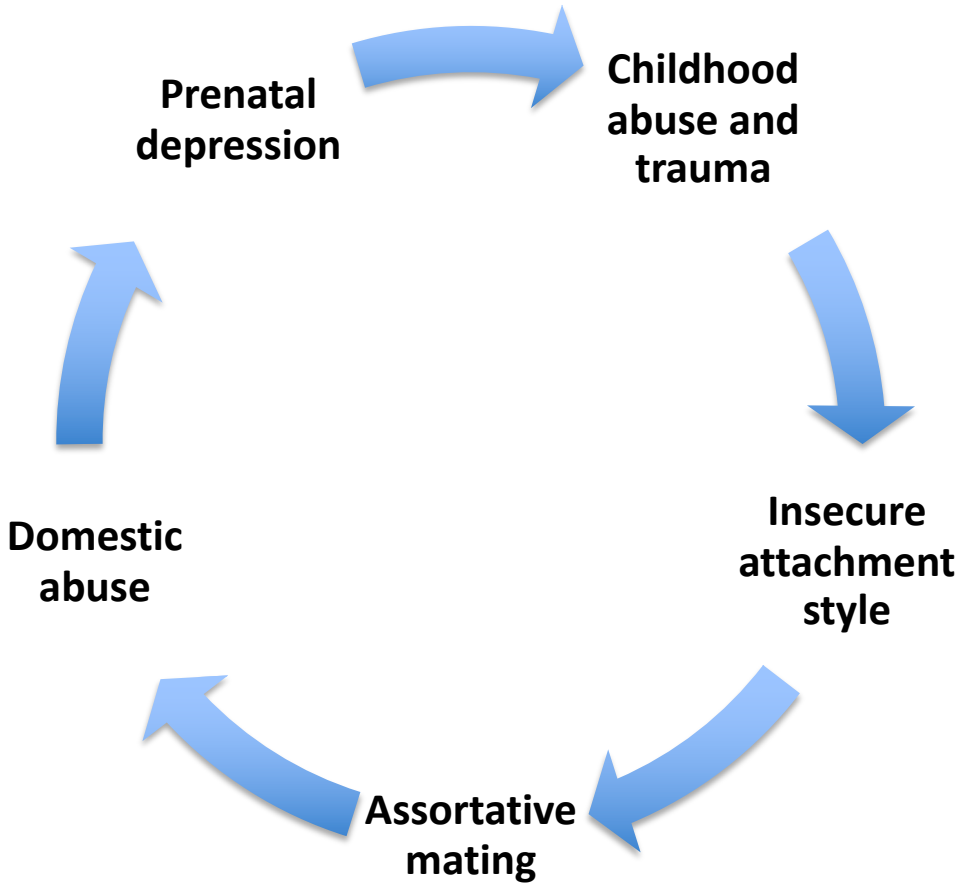
Generation 2

Generation 1 to 2

Generation 2 to 3

Generation 3

Why intervene in pregnancy?



The good news is that the perinatal period is a window of opportunity

- Parents are highly motivated to mitigate the effects of their own mental health problems on their babies
- Desire to break the cycle of intergenerational abuse
- Motivated to be the best parent they can be
- New life = new hope
- How can we support them?

The 1001 Critical Days

The Importance of the Conception to Age Two Period

A CROSS-PARTY MANIFESTO:

Andrea Leadsom MP • Frank Field MP • Paul Burstow MP • Caroline Lucas MP

Introduction by **MPs**

As politicians from across the political spectrum, we have come together for the first time to acknowledge the importance of the 1001 critical days from when a baby is conceived until the age of two.

This period of life is crucial to increase children's life chances, and we pledge to work to ensure all babies have the best possible start in life.

We are missing an opportunity if we don't prevent problems before they arise. It is vital that a focus on the early years is placed at the heart of the policy making process, and in this manifesto we outline why this period of life is so critical, and how we intend to propel our objectives forward.

Mark Durkan MP
SDLP

Frank Field MP
Labour

Norman Lamb MP
Liberal Democrats

Tim Loughton MP
Conservative

Caroline Lucas MP
Green

Liz Saville-Roberts MP
Plaid Cymru

Jim Shannon MP
DUP

Philippa Whitford MP
SNP

Special thanks to the **WAVE Trust**, the **NSPCC** and **PIPUK** for their support and contributions to produce the *1001 Critical Days Manifesto*.

wave TRUST
Tackling the roots of violence

NSPCC

PIPUK
Parent Infant Partnership United Kingdom

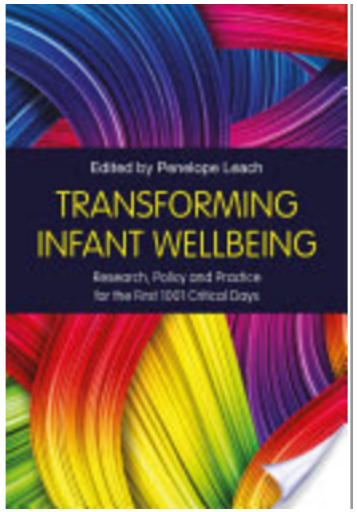
All Party Parliamentary Group for Conception to Age 2 – The First 1001 Days

Building Great Britons

Conception to Age 2:

First 1001 Days All Party Parliamentary Group

February 2015



The vision of the 1001 Critical Days Manifesto spans not only the period from conception to 2 years: it stems from the evidence-based premise that the wellbeing of the mother in pregnancy and of the intrauterine environment is crucial for the development of the newborn, through childhood, adulthood and into old age

NICE National Institute for Health and Care Excellence

NICE quality standard

Antenatal and Postnatal Mental Health, 2014

Promote optimal mother-infant interaction

Evidence is clear that there *can be* a deleterious effect of a mother's mental health on her child

(SLCDS (1986-2018): Pawlby, D. Sharp, Hay et al.; ALSPAC (1990-2018: Pearson, Stein et al.; Wirral CHADS (2006-2018): H. Sharp, Hill et al.)

All these studies began in pregnancy

Fetal programming hypothesis (D. Barker, 1986)

Importance of the antenatal period – prevent stress

Importance of the postnatal period

Focus on parenting quality, social (including partner) and material support, and duration of the parental disorder

Need to treat the parent's disorder and help with associated caregiving difficulties

What is good enough care?

- **Good emotional care provides the holding environment in which the child can develop a secure attachment relationship**
- **The infant is the best testimony as to whether the care received is good enough**
- **As perinatal health professionals, we provide the holding environment in which the mother or father with a mental illness can provide that care for their child**
- **Perinatal psychiatry provides the bridge between adult and child psychiatry**
- **By caring for the dyad we have the opportunity to promote a secure relationship between mother, father and baby and to stem the transmission of intergenerational psychopathology**

What can babies do?

- **Sight**
  - **focal distance 20-25 cms**
  - **prefers moving, self-deforming, three-dimensional qualities of the human face**

- **Sound**
  - **prefers pitch and intensity of the human voice**
  - **turns head to sound r**

- **Smell**
  - **prefers mother's smell**
- **Facial expressions**
  - **smile, sober expression, frown, grimace**
- **Vocalisations**
  - **gurgle, fret, cry**

The Brazelton Centre UK

- **Understanding baby behaviour**
  - **Neonatal Behavioural Assessment Scale (NBAS)**
    - **Provides detailed information about the individual's self-regulatory abilities and how the infant manages crying, sleeping, alert states and feeding**
    - **For babies from birth to 2 months**
  - **Neonatal Behavioural Observations (NBO)**
    - **Relationship-building tool between practitioner and parent, supporting the developing parent-infant relationship**
    - **For babies from birth to 3 months**

info@brazelton.co.uk

What do babies need?

- **Awareness of**
  - **physical state and needs**
  - **emotional state and needs**
  - **social needs**

Physical needs

- **Food, warmth and shelter**
- **Safe handling**
- **Safe environment**
- **Physical health needs recognised and responded to**

Emotional needs

- Positive expression and affection
- Empathy
- Mind mindedness
- Consistency
- Responsiveness
- Sensitivity
- Acceptance and regulation of emotional states

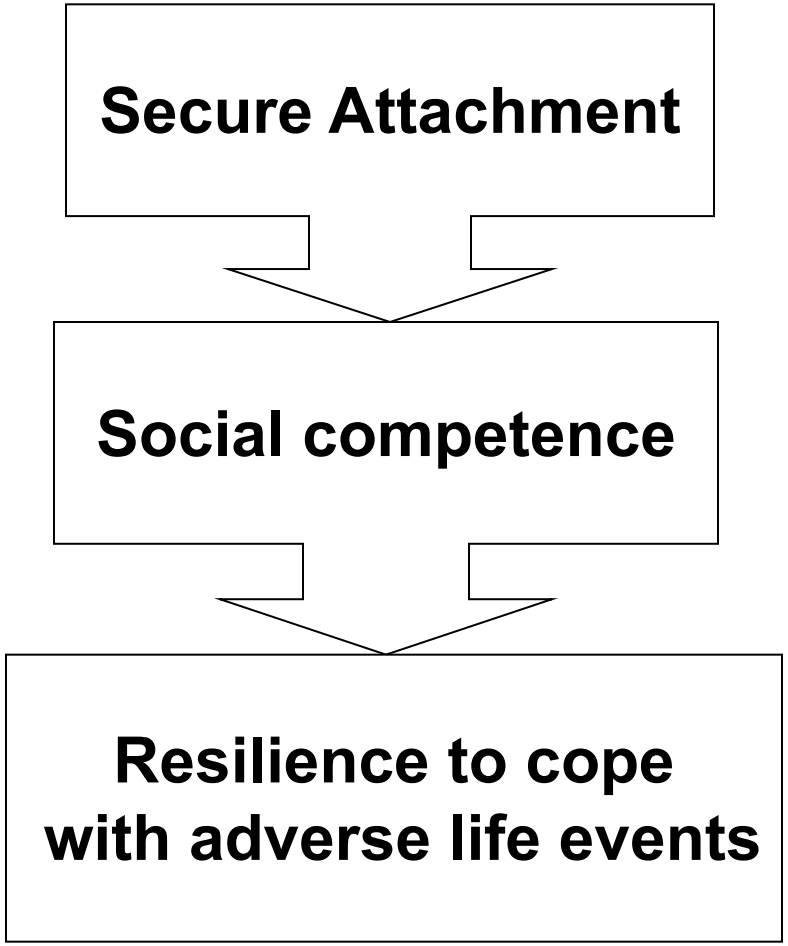
Social needs

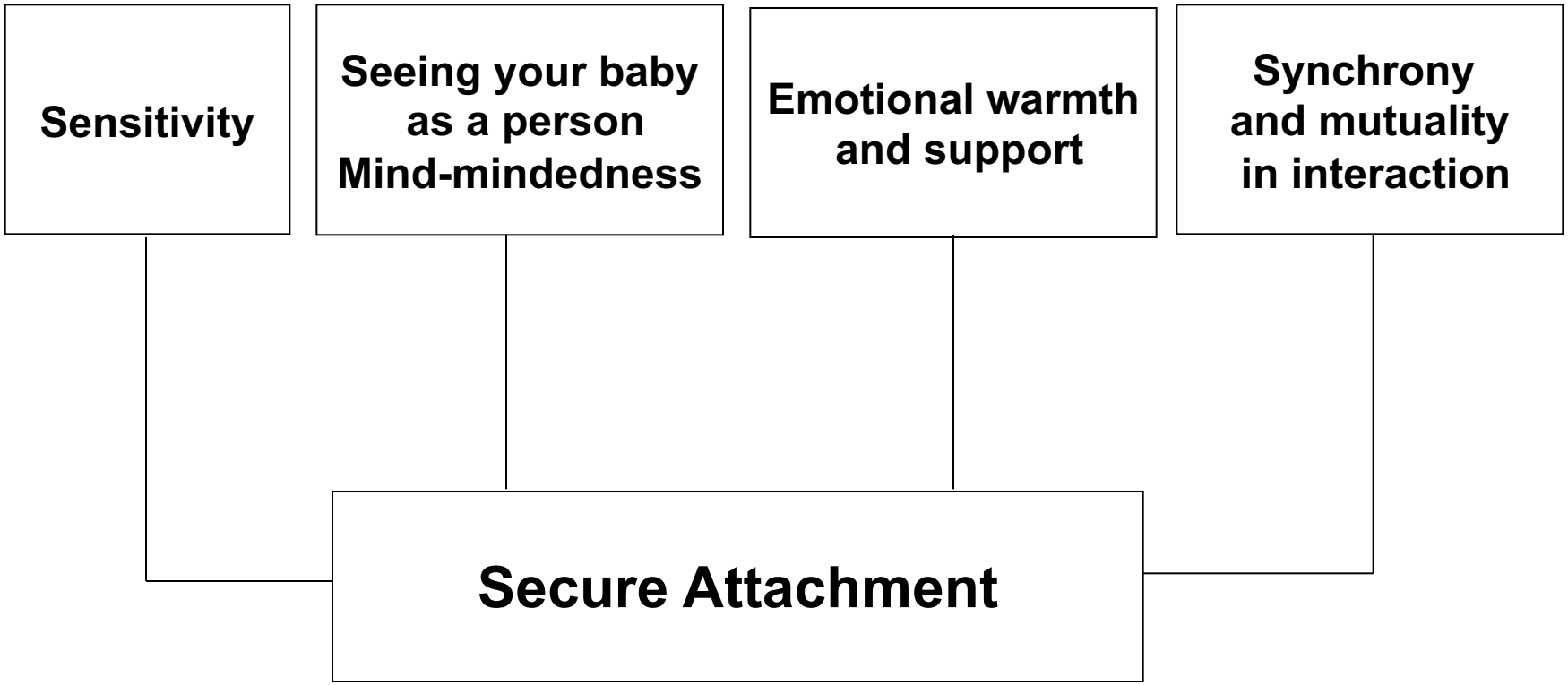
- **Awareness of the need to use eye and verbal contact in building the relationship**
- **Timing and appropriate use of such contact**
- **Turn-taking**
- **Involvement in three person interactions**

Cognitive needs

- **Age-appropriate stimulation**

- **Play**


Secure Attachment
Social competence
Resilience to cope
with adverse life events



Jay Belsky, 1995; Elizabeth Meins, 2006

Intervention based on ‘mind-mindedness’

- **Concept developed by Elizabeth Meins**
- **Mother’s ability to see her baby as a person, with a mind, thoughts, feelings**
- **Focus on what the baby brings to the interaction What is the baby trying to tell you? Remember that the baby’s cues can be vocal, facial, body movements**
- **Sometimes difficult to know – attuned/non-attuned**

- **Ask mothers questions designed to attune them to their infants' mental states**

  - ***What might your baby be thinking here?***
  - ***What do you think his crying means about how he's feeling?***
  - ***Does your baby normally prefer that?***
  - ***What would s/he say right now if s/he could talk?***
  - ***Tell me about a time when you were really tuned into what your baby was thinking or feeling.***

- **Informally encouraged and supported to be mind-minded by unit staff**

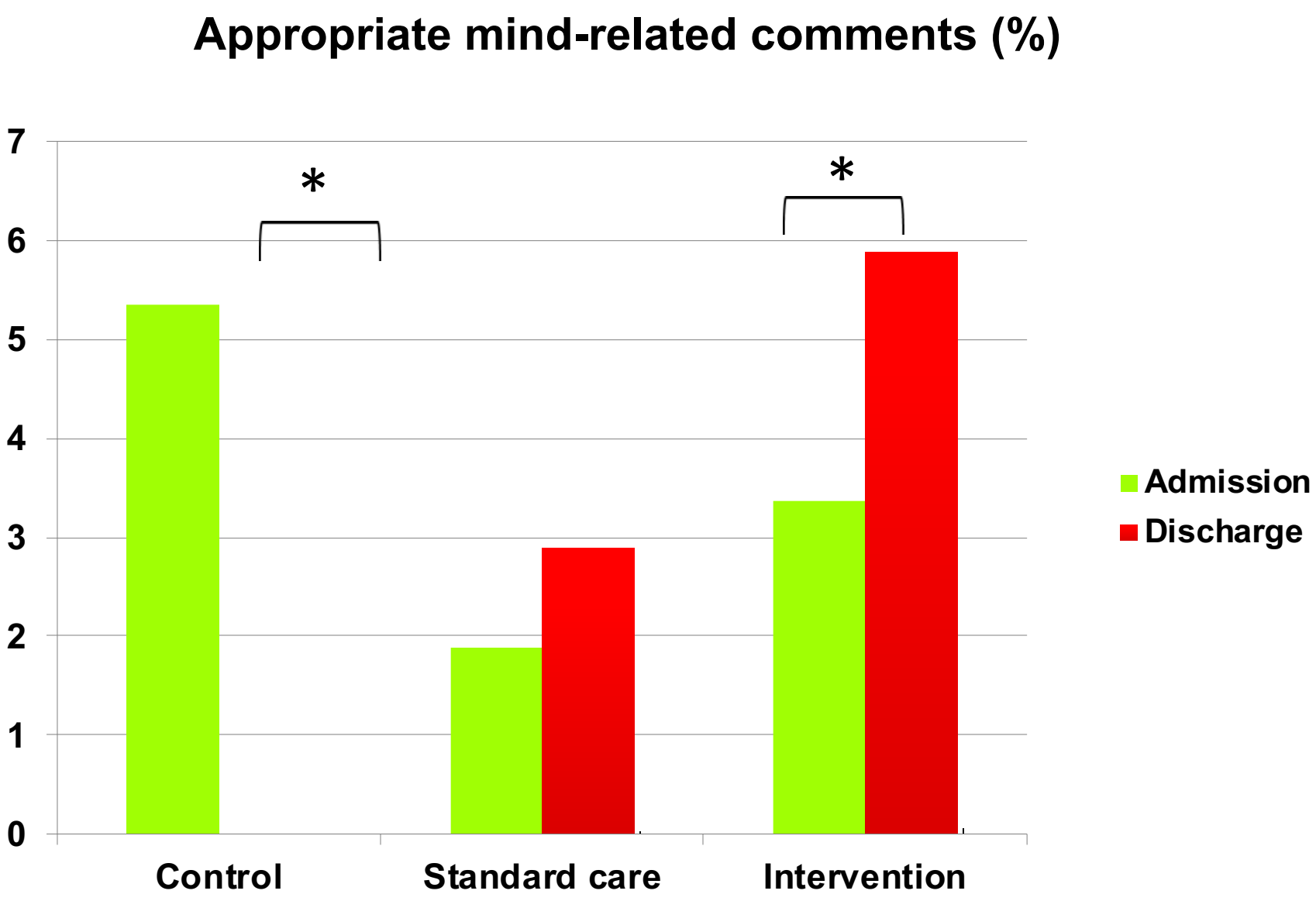
Longer term effects? A Mind-Mindedness Intervention

Schacht et al., 2017, Development and Psychopathology, 29 (2) 555-564

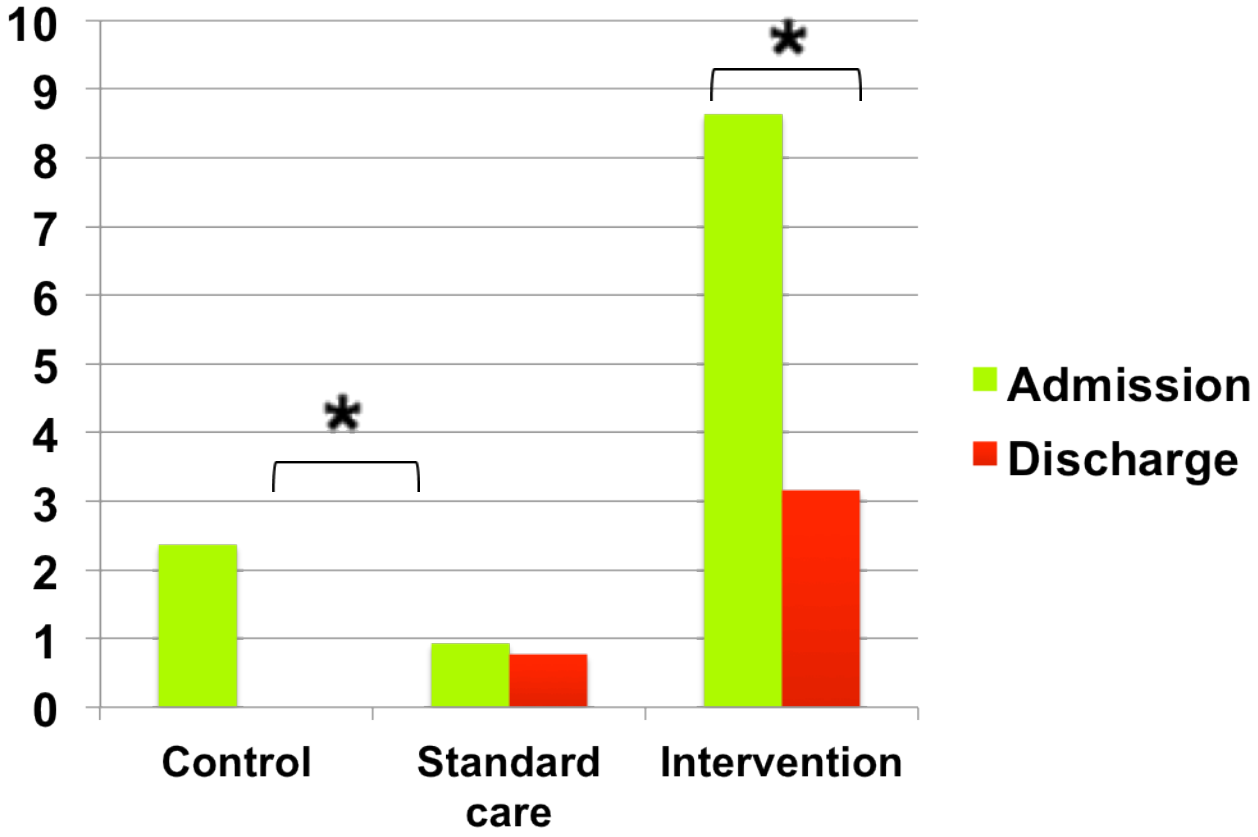
- **Intervention group participants were 22 women**
- **Standard care group participants were 32 women**
- **Intervention and standard care groups all hospitalised on a mother-and-baby unit**

- **Control group of 49 psychologically well mothers**

- **All groups filmed in a 3-minute face-to-face interaction on admission and discharge. Infants were 1-7 months at the time of the admission video**
- **Both groups reviewed their admission videos individually with a psychologist on the unit at a later date**
- **Admission and discharge observations coded for appropriate and non-attuned mind-related comments**


Appropriate mind-related comments (%)
7
6
5
4
3
2
1
0
*
*
Control
Standard care
Intervention
Admission
Discharge

Non-attuned mind-related comments (%)



Attachment relationship: Strange Situation

- **Secure (B) infants explore the environment when not threatened, are affected by the separation, seek comfort and are comforted by the parent when distressed**

- **Insecure avoidant (A) infants do not seek proximity to the parent, appear not to acknowledge the separation and ignore the parent upon return**

Attachment relationship: Strange Situation

- **Insecure ambivalent (C) infants are distressed on separation, and not easy to settle on reunion, e.g. remaining cross / upset / fussy / clingy for protracted period of time**

- **Insecure disorganised/disoriented (D) infants combine elements of A and C: eg approaches the parent then turns away, stilling or freezing behaviours, may appear dazed or frightened**

Disorganised Attachment

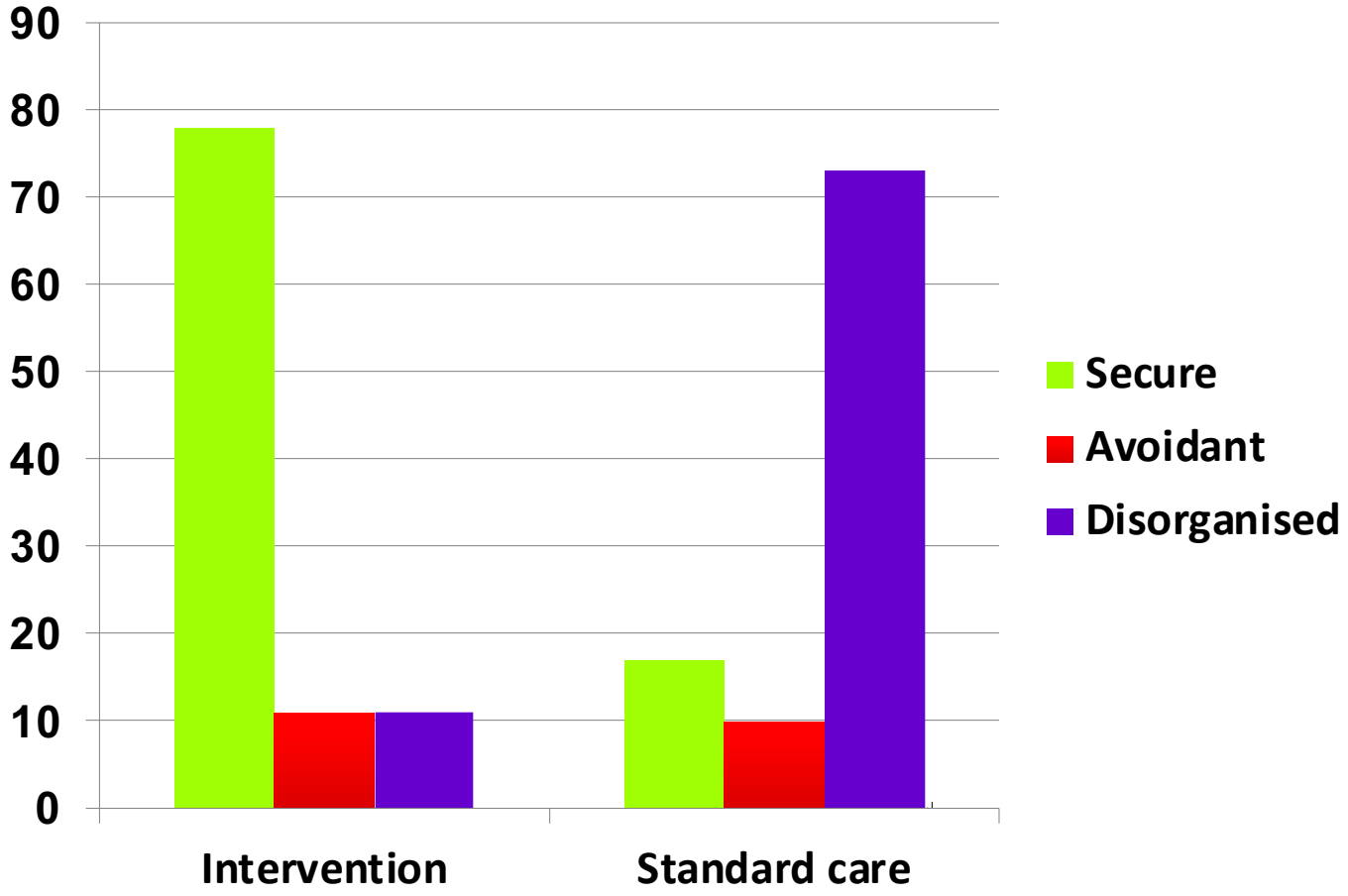
15% of children

Disorganised Attachment

- Mental Illness
- Children into Care
- Poor Relationships
- Disruptive Behaviour in Pre-School
- Aggression
- Violence

wave TRUST

% in attachment groups at follow-up in 2nd year of life



62% Secure in non-clinical middle class samples
15% Disorganised in non-clinical middle class samples
19% in depressed samples
43% in drug/alcohol abusing samples

Insecure parental attachment linked to high social costs

- **Young people with insecure attachments to their mothers cost a third more than those with secure attachments, an average difference of £3,500 per year**

- **The cost difference for insecure attachments to fathers was much larger, at £12,700 per year**

- **The increased social costs were due to more meetings at school, more referrals to social services, and more appointments with NHS Child and Adolescent Mental Health Services**

Bachmann, C. J., Beecham, J., O'Connor, T. G., Scott, A., Briskman, J., & Scott, S. (2019). The cost of love: financial consequences of insecure attachment in antisocial youth. ***Journal of child psychology and psychiatry, and allied disciplines***

Guidelines for promoting the baby's emotional development

1. **Encourage mothers to hold their babies; this will promote a secure attachment and later independence.**

2. **Encourage mothers to look at their babies – in the first six weeks the caregiver's face is the baby's best toy.**

3. **Encourage mothers to watch their babies and talk to them, commenting on what they are doing; this will promote language development. Understanding comes before speech.**

4. **Encourage mothers to respond to their babies' cues – vocalisations, looking, smiling, imitation, reaching, offering objects; this will promote turn-taking and a conversational style.**

5. **Encourage mothers to see their baby as a person - ask mothers what the baby might be thinking or feeling. What would s/he say if s/he could talk?**

Guidelines for promoting the baby's emotional development

6. Help mothers to hold their babies securely so that they feel contained. If they are very restless, fretting and waving their arms around, suggest containing them by restraining their arm movements

7. Babies calm themselves by putting their hands to their mouths, sucking on their fists or thumbs, staring, or changing their position slightly. Encourage mothers to let their babies put their hands/fingers in their mouths

8. Encourage mothers to respond to their babies when they cry. Crying means that they are distressed and need attention. Begin by observing the baby to see if s/he will self-quiet, then suggest that the mother begins a graded set of responses until the baby quiets - look at the baby, talk to the baby, put hand on the baby's stomach, pick up the baby, hold and rock the baby. By helping the baby to regulate his/her emotion when very young s/he will be able to do it alone later on

Guidelines for promoting the baby's emotional development

9. **Remember that babies can easily become bored especially as they become older and they enjoy being carried, talked to and played with. They will indicate if they have had enough by looking away, vocally protesting, regurgitating, hiccoughing, yawning**

10. **Remember that each baby is an individual and that it is important to monitor the baby to understand him/her. Encourage the mothers to do this with you and discuss together**

Channi Kumar Mother and Baby Unit

Deborah.Griffin@slam.nhs.uk

All in the Mind

with Claudia Hammond

e-Learning for Healthcare Hub

e-learning platform run by Health Education England
portal.e-lfh.org.uk

https://goo.gl/Q1WSgS

Module on Supporting Infant Mental Health