PERINATAL MENTAL HEALTH & PERINATAL MENTAL ILLNESS

- Rational of Perinatal Mental Health Services
- MBBRACE (confidential enquiry into maternal death)
- Admitted and non-admitted perinatal mental health care
- Pan London Perinatal Mental Health Network

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St Mary’s Hospital – CNWL
Imperial College Healthcare NHS Trust
PREGNANCY: A FITNESS TEST FOR LIFE

• Gestational syndromes: *pre-eclampsia*, *post–partum thyroid disease*

• Subclinical autoimmune illnesses flare-up in pregnancy: *SLE*

• Pre-existing medical conditions exacerbated by pregnancy: *diabetes*

• Maternal diseases identified by effects on the foetus: *thyroiditis*

• Pregnancy outcomes predict future maternal health (Smith et al, 2001 Lancet 357: 2002-6). Pre-eclampsia increases the risk of hypertension (RR3.70), IHD (RR 2.16), stroke (RR1.81), VTE (RR 1.79) (Bellamy L.et al. BMJ 2007, 335:974)

PREGNANCY: A MENTAL HEALTH FITNESS TEST FOR LIFE

• Postnatal depression (13%), puerperal psychosis (0.2%)

• Pregnancy can unmask subclinical psychiatric symptoms e.g. eating disorders, obsessive compulsive disorders.

• Relapse of pre-existing mental illness in remission e.g. bipolar affective disorder

• Infant may present with disturbances indicative of the presence of a mental illness in mothers

• Perinatal mental illness increases the risk of future mental illness (McMahon et al. J Affect Disorders 2005;84: 15–24)
Antenatal and Newborn screening timeline does not consider mental health
Joint Commissioning panel for Mental Health [www.jcpmh.info](http://www.jcpmh.info)

- Requiring assessment 20%
- Severe or complex disorders who may require admission 4%
- Requiring specialist service input 16%
- Requiring psychological treatment 8%
Maternal Mortality in the UK

1952-54


90 per 100,000 maternities

2010-12

Maternal, Newborn and Infant Clinical Outcome Review Programme

10 per 100,000 maternities

2011-13

Maternal, Newborn and Infant Clinical Outcome Review Programme

Saving Lives, Improving Mothers’ Care
Lessons learned to inform future maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2009-2012

9 per 100,000 maternities
Maternal Deaths - Definitions

• **Direct:** As a consequence of a disorder specific to pregnancy
  – E.g. Haemorrhage, pre-eclampsia, genital tract sepsis
• **Indirect:** Deaths resulting from previous existing disease, or diseases that developed during pregnancy, and which were not due to direct obstetric causes but aggravated by pregnancy
  – E.g. Psychiatric causes (suicide and substance misuse), cardiac disease, other causes of sepsis
• **Coincidental:** Incidental/accidental deaths not due to pregnancy or aggravated by pregnancy
  – E.g. Road traffic accident
• **Late:** Deaths occurring more than 42 days but less than one year after the end of pregnancy
Causes of maternal death 2011-13

*Rate for genital tract sepsis shown in pale and rate for indirect sepsis (influenza, pneumonia, others) in dark bar

Dark bars show indirect causes, pale bars direct causes
Mental health-related deaths

Almost a quarter of women who died between six weeks and one year after pregnancy died from mental-health related causes

1 in 7 women died by Suicide
Method of suicide

• 83/101 (82%) violent deaths
• 64% general female population violent suicide
• 62% mentally ill female population violent suicide
• Violent deaths are more common in all time periods throughout pregnancy and postpartum
## Method of violent suicide

<table>
<thead>
<tr>
<th>Method</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hanging</td>
<td>46</td>
</tr>
<tr>
<td>Fall from a height</td>
<td>15</td>
</tr>
<tr>
<td>Railway line</td>
<td>7</td>
</tr>
<tr>
<td>Drowning</td>
<td>4</td>
</tr>
<tr>
<td>Self-strangulation/asphyxiation</td>
<td>2</td>
</tr>
<tr>
<td>Stabbing</td>
<td>2</td>
</tr>
<tr>
<td>Intentional RTA</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
</tbody>
</table>
Timing of suicide

<table>
<thead>
<tr>
<th>Time period</th>
<th>Number of women who died</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenatal 0-42 days</td>
<td>12</td>
</tr>
<tr>
<td>Postnatal 43-84 days</td>
<td>16</td>
</tr>
<tr>
<td>Postnatal 85-126 days</td>
<td>8</td>
</tr>
<tr>
<td>Postnatal 127-168 days</td>
<td>14</td>
</tr>
<tr>
<td>Postnatal 169-210 days</td>
<td>18</td>
</tr>
<tr>
<td>Postnatal 211-252 days</td>
<td>6</td>
</tr>
<tr>
<td>Postnatal 253-294 days</td>
<td>12</td>
</tr>
<tr>
<td>Postnatal 295-365 days</td>
<td>12</td>
</tr>
</tbody>
</table>
## Characteristics of the women

**2009-2013**

<table>
<thead>
<tr>
<th></th>
<th>Suicide</th>
<th>Substance misuse</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Median age</strong></td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td><strong>Nulliparous (%)</strong></td>
<td>36.1</td>
<td>31.0</td>
</tr>
<tr>
<td><strong>Ethnicity (% white)</strong></td>
<td>80.6</td>
<td>89.7</td>
</tr>
<tr>
<td><strong>Employed (woman/partner) (%)</strong></td>
<td>76.3</td>
<td>47.8</td>
</tr>
<tr>
<td><strong>Known to social serv. (%)</strong></td>
<td>27.3</td>
<td>74.1</td>
</tr>
<tr>
<td><strong>Late bookers (% &gt; 12/40)</strong></td>
<td>30.0</td>
<td>59.3</td>
</tr>
<tr>
<td><strong>Received minimal level of antenatal care (%)</strong></td>
<td>63.6</td>
<td>30.4</td>
</tr>
<tr>
<td><strong>Received recommended level of antenatal care (%)</strong></td>
<td>24.7</td>
<td>20.8</td>
</tr>
</tbody>
</table>

*% excluding missing information*
Admitted perinatal mental health care: Mother & Baby Units

Centrally Funded by Specialist Commissioning Board: Low Volume/High Cost

http://everyonesbusiness.org.uk
Non-admitted perinatal mental health care

Funded by Clinical Commissioning Groups: High Volume/Low Cost

http://everyonesbusiness.org.uk
Commissioning non-admitted perinatal mental health care

St Mary’s Hospital – Imperial College Healthcare NHS Trust: two Maternity Units (St Mary’s and Queen Charlotte & Chelsea), delivery rate of 9,000/year, serving a large geographical. Tertiary services (high risk obstetric care, recurrent miscarriage service etc.) attracting out-of-area service users

- Reconcile the antenatal care “borough blind” arm with the postnatal care “borough based” arm of the service
- Acute trust vs Mental Health Trust Commissioning
- Principle of distributive justice
Pan London Perinatal Mental Health Clinical Network: Geographical Divisions

North East Perinatal Mental Health Network

South Perinatal Mental Health Network

North West Perinatal Mental Health Network
Pan London Perinatal Mental Health Network: aims

• Mapping of pre-existing provisions and identification of gaps.
• Development of perinatal mental health care pathways and service specifications
• Education and training in promoting perinatal mental health and in the identification and management of perinatal mental illness
• Perinatal Mental Health Network “cloud”
Perinatal Life Span

Preconception
Antenatal
Birth
Postnatal (up to 12 months)

Maternity & Neonatology

Maternal Mental Health Psychiatry

Maternal Mental Health Psychological Therapies

Parent-Infant Mental Health (Early Years)

Social Care

Maternity & Neonatology

Standard Care

Enhanced

High Risk

154,830 adjustment disorders and distress, rate 150-300/1,000 maternities

TIER 0 (generic supportive measures via family, friends, self-help, online resources including social media)

86,020 mild to moderate depressive illness and anxiety states, rate 100-150/1,000 maternities

Primary Care TIER 1 & 2

20,640 post-traumatic stress disorder, rate 30/1,000 maternities

Secondary Care TIER 3

20,640 depressive illness, rate 30/1,000

Tertiary Care TIER 4

1,380 chronic serious mental illness, rate 2/1,000 maternities

1,380 post-partum psychosis, rate 2/1,000 maternities
PERINATAL MENTAL HEALTH CARE PATHWAYS: INTEGRATIVE INTERFACE WITH MATERNITY & NEONATOLOGY
SERVICE LINE STRAND

**TIER 0**
- Weekly supervision of Mental Health Lead Midwife, Child Safeguarding Midwife and neonatal nurses
- Midwives to shadow specialist midwife and specialist perinatal psychiatric nurse to improve skills in detection and awareness of care pathways.

**TIER 0**
- Midwifery (and neonatal nursing) training in mental health and referral pathways

**TIER 1 & 2**
- Multidisciplinary referral meeting
  - Perinatal Psychiatrist
  - Perinatal Mental Health Nurses
  - Mental Health Obstetric lead
  - Mental Health Lead Midwife
  - Child Safeguarding Midwife
  - Psychologist

**TIER 2**
- Antenatal and Psychiatric Clinics co-located in hospital and community settings.
  - Joint Obstetric/Neonatal/Psychiatric Academic events
  - Cross disciplinary training placements for Obstetric, Psychiatry, and Psychology Trainees

**TIER 3**
- Joint high risk obstetric-psychiatric clinics for women with Severe Mental Illness
- Multidisciplinary management of irrational fear of childbirth
- Pre-birth planning meeting
- Intra-partum care planning involving obstetric anaesthetist
- Joint review of maternity inpatients and multidisciplinary postnatal review and pre-discharge meetings for complex cases
Perinatal Mental Health Care Pathways

**Maternal Mental Health Psychiatry**

**Primary Care Tier 1 & 2**
- Primary Care Liaison (based in GP surgery) – Psychiatric Nurses/Social workers – triage, may hold low risks cases
- Maternal Mental Health
- Psychiatry
- Primary Care Liaison (based in GP surgery)
- Psychiatric Nurses/Social workers – triage, may hold low risks cases
- Perinatal Psychiatric teams can work jointly with Adult General Mental Health Services (AMHS) or CAMHS for adolescent pregnancies,
- Drug & Alcohol services,
- General Liaison Psychiatry,
- Eating Disorders and Learning Disability services.
- Perinatal Psychiatric teams can work jointly with Adult General Mental Health Services (AMHS) or CAMHS for adolescent pregnancies,
- Drug & Alcohol services,
- General Liaison Psychiatry,
- Eating Disorders and Learning Disability services.

**Secondary Care Tier 3**
- Accredited Perinatal Psychiatric Service led by an adult psychiatrist with capacity for community outreach, obstetric liaison, case management and coordination of admission to MBU when indicated.
- The service offers on going advice, regular training and supervision to all tier 1,2,3 services, including midwives, health visitors.

**Tertiary Care Care Tier 4**
- MOTHER & BABY UNIT
- The Perinatal Psychiatric Team works in partnership with: Obstetricians, Specialist Mental Health Midwife, Child Safeguarding Midwife, Hospital Liaison Health Visitor, Social Workers (Children’s Social Care).
- Also with Maternal Mental Health psychological therapies and Early Years’ services when these are separated from the perinatal mental health teams.

**MOTHER & BABY UNIT**
- The Perinatal Psychiatric Team works in partnership with: Obstetricians, Specialist Mental Health Midwife, Child Safeguarding Midwife, Hospital Liaison Health Visitor, Social Workers (Children’s Social Care).
- Also with Maternal Mental Health psychological therapies and Early Years’ services when these are separated from the perinatal mental health teams.
PERINATAL MENTAL HEALTH CARE PATHWAYS. MATERNAL MENTAL HEALTH: PSYCHOLOGICAL THERAPIES SERVICE LINE STRAND

Maternal Mental Health Psychological Therapies

- Recognition and referral by GP
- Psychoeducation
- Raising awareness maternity services
- Contributing to psychological informed antenatal classes and care
- Maternity counsellor
- Perinatal Mental Health Midwife
- Health Visitor: Listening Visits, groups, cognitive counselling
- Self-help material

IAPT step 2 with fast-tracking referral pathway
- Individual or group interventions e.g. anxiety management
- Online CBT modules
- Guided self-help
- Telephone intervention
- Workshops
- Counselling services in GP practices

IAPT Step 3 with fast tracking referral pathway offering evidence based individual (e.g. CBT or IPT) or group therapy (e.g. Milgrom’s CBT group for PND)

Perinatal Psychological Therapy Service Led by Consultant Clinical Psychologist Or Consultant Psychiatrist in Psychotherapy. Provides a direct and indirect treatment including supervision of specialist psychological assessment, formulation and evidence-based treatment plans for individuals, groups and couples. Rapid access to a range of approaches including CBT, DBT, family and psychodynamic psychotherapy adapted it to the perinatal period. Provides contributes to psychological informed of risk assessments.

The service also offers ongoing advice, regular training and supervision to all tiers 1,2,3 services, including midwives, health visitors and IAPT

Perinatal Psychological Therapists work in partnership with Obstetricians Specialist Mental Health Midwife, Child Safeguarding Midwife, Hospital Liaison Health Visitor, Social Workers (Children’s Social Care). Also with Maternal Psychiatry and Early Years’ services when these are separated from the perinatal mental health teams. Liaison with NICU & CAMHS psychology services

Perinatal Psychological Therapies services can work jointly with Adult General Mental Health Services (AMHS), Drug & Alcohol services, General Liaison Psychiatry, Eating Disorders and Learning Disability services. Named perinatal mental health champion in these teams is responsible for liaising with perinatal psychiatry for preconception advice and at pregnancy recognition.

Perinatal Psychological Therapies within a Mother & Bay Unit
PERINATAL MENTAL HEALTH CARE PATHWAYS INFANT MENTAL HEALTH SERVICE LINE STRAND

Parent-Infant Mental Health (Early Years)

Healthy Child Programme
Children’s Centre Programmes e.g. infant massage groups, parenting classes
National Childbirth Trust Postnatal Classes
Brazelton approach/Neonatal Behavioral assessment scales
Peer support

Parent-infant relationship
Global Assessment Scale (GAS) scores
91-100 Well Adapted
81-90 Adapted
71-80 Perturbed

PIR-GAS scores
71-80 Perturbed

Partial Evidence

• Home Start Bump Start Program
• Mellow Babies
• Health Visitor Listening Visits
• Baby Steps
• Solihull Approach

Evidence-Based

• Family Nurse Partnership
• The Maternal Early Childhood Sustained Home –visiting program
• Circle of Security
• Parent Under Pressure
• Targeted Infant Massage
• Minding the Baby

Evidence-Based

Video feedback for positive parenting (ViPP)
ViPP Sensitive discipline
Mindfulness based parenting
Mentalisation based parenting
Cognitive Behavioural Therapy and Interpersonal Therapy

Training & Supervision of other early years professionals
Infant development (e.g. Brazelton)
Screening and identification of parent and infant mental health difficulties
Attachment approaches

Partial Evidence

Video Interactive Guidance
Watch, Wait, Wonder
Parent Infant Psychotherapy
Systemic Couple & Family Therapy

Specialist Residential and Day Mother & Baby Day Units
Multidisciplinary Parenting Assessment Teams (funded by social care)

PIR-GAS scores
61-70 Significantly perturbed
51-60 Distressed
41-50 Disturbed
31-40 Disordered

Evidence-Based

Video feedback for positive parenting (ViPP)
ViPP Sensitive discipline
Mindfulness based parenting
Mentalisation based parenting
Cognitive Behavioural Therapy and Interpersonal Therapy

Consultancy

Training & Supervision of other early years professionals
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Parent Infant Psychotherapy
Systemic Couple & Family Therapy

Specialist Residential and Day Mother & Baby Day Units
Multidisciplinary Parenting Assessment Teams (funded by social care)

Acknowledgment: Camilla Sanger
Project Lead NSPCC
Screening for parent-infant relationship problems:

**Parent-Infant Interaction Observation Screen**


Domains

1. Infant positioning
2. Eye contact
3. Vocalisation
4. Affective engagement and synchrony
5. Warmth and affection
6. Holding and handling
7. Verbal commenting about baby; Mind-mindedness (if care-giver’s language is not English it may be necessary to infer the answer from the non-verbal interaction)
8. Attunement to distress
9. Bodily intrusiveness, looming in
10. Expressed expectations of baby
11. Empathic understanding
12. Responsive turn taking
13. Baby self soothing strategies

<table>
<thead>
<tr>
<th>Scale Score</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 17</td>
<td>No concerns</td>
</tr>
<tr>
<td>18 – 25</td>
<td>Some concerns</td>
</tr>
<tr>
<td>26+</td>
<td>Significant concerns</td>
</tr>
</tbody>
</table>

Every item can have a score of 0-2-4

Warwick Infant & Family Wellbeing Unit
[http://www2.warwick.ac.uk/fac/med/about/centres/wifwu/](http://www2.warwick.ac.uk/fac/med/about/centres/wifwu/)
PERINATAL MENTAL HEALTH CARE PATHWAYS. SOCIAL CARE SERVICE LINE STRAND

LEVEL 1
1. Low Risk or Need
2. No Looked After responsibility
   Risk/need unlikely to escalate

LEVEL 2
1. Moderate risk/need
2. Unlikely to escalate to high risk/need

LEVEL 3
1. Moderate risk/need
2. May escalate to high risk/need
3. Legal duty to assess
4. Risk of Family Breakdown
5. Referred (but not assessed) more than 3 times in last 3 months or in the case of domestic violence, 3 referrals over any period.
6. More than 3 Assessments in the last 12 months

LEVEL 4
1. High risk/need
2. Risk/actual significant harm
3. Partnership not established/accepted
4. Serious family dysfunction/breakdown/ collapsed family network
5. No person has parental responsibility or parent is prevented from exercising parental responsibility
6. Very challenging behaviour
7. Early response required
   Legal intervention possible

LEVEL 1 & 2
• On line directory of relevant agencies offering general supportive measures.
• Social Media: e.g. metmums
• Universal interventions via children’s centres e.g. baby massage
• Generic Parenting Classes
• Family Nurse Partnership
• Befriending services offered by NGOs: e.g. Home Start.
• Health Visitors Listening Visits and signposting

LEVEL 3
• Child protection enquiry
• Planned multidisciplinary interventions e.g. domestic violence pathway

LEVEL 4
• Multidisciplinary Specialist Intervention
• Multidisciplinary Parenting Assessment Teams in residential or community settings when indicated

4 Level Service Model
• Your Community
• Universal
• Universal Plus
• Universal Partnership Plus

5 Mandatory Elements
• Antenatal health Promoting Visits
• New baby review
• 6-8 weeks assessment
• 2 to 2½ years review

6 High Impact Areas
• Transition to parenthood and early years
• Maternal Perinatal Mental Health
• Breastfeeding
• Healthy weight (healthy diet and being active)
• Managing minor illnesses & reducing accidents
• Health, wellbeing & development at 2 years and support to be ready to school

Social Care & Health Visiting
• Antenatal health Promoting Visits
• New baby review
• 6-8 weeks assessment
• 2 to 2½ years review
Perinatal Mental Health Network: Challenges

- The increase of the much needed in-patient specialist provisions (specialist commissioning board) should be paralleled by an expansion of non admitted perinatal mental health care - gate-keeping and step down role – (CCGs)
- Outcomes, metrics and data collection – mental health dashboard
- Agreement on service specifications
- Commissioned services should factor in adequate workforce capacity & skills mix to work in partnership with other services without increasing pressure on resources (e.g. IAPT, crisis services)
- Cultural shift from commissioning services to commissioning care-pathways
Conclusions

• Perinatal Mental Health Care Pathways (the operating system)
• Premises and managerial infrastructure (the hardware): expand and upgrade pre-existing provisions and build new provisions.
• Perinatal Mental Health Disciplines & Workforce (the apps)
• The killer app?

*any computer program that is so necessary or desirable that it proves the core value of some larger technology*

*and intentionally or unintentionally gets one to make the decision to buy the system the application runs on*