

Perinatal mental health and illness

An overview, including management strategies, for the woman and her family

- Prevention; early intervention; health promotion
- Health <-----> Illness
- Comprehensive, integrated clinical care

Bryanne Barnett

Harvard commentary, 2010

- healthy child development provides a strong foundation for a vital and productive society
- early experiences lay a foundation for happy as well as unhappy development
- children's genes and experiences interact to create physiological adaptations or disruptions
- early experiences are biologically embedded in the development of the brain and other organ systems and have lifelong impacts on learning behavior, physical and mental health.

BMJ commentary, 2010 – genetics, epigenetics etc. . . .

- A growing body of scientific evidence shows that early influences – whether positive or negative - are critical to the development of children’s brains and their lifelong health
- The experiences of children (environments – relationships, physical etc; nutrition) interact with their genetic predispositions to create either physiological adaptations (when development is healthy) or disruptions (when it is not)
- the need to intervene early

The social determinants of health

"All health is inescapably social" Eisenberg, 1999

specific social conditions → problems:

- income - - - - low
- housing - - - - insecure
- education - - - limited
- employment - - not available
- work - - - - - high-demand or low-control
- parenting - - - child abuse or neglect
- neighbourhood - poor conditions
- social support - - low

mental health is a key factor

(Fisher and Baum, 2010)

Perinatal Psychiatric Problems

i.e. conception to 12 months postpartum

- formal diagnosis of illness – schizophrenia, anxiety and depressive disorders, Bipolar 1 and 2 etc
- ‘double depression’
- co-morbidity is the rule, not the exception
- personality difficulties and disorders
- the worried well
- the worried unwell

Perinatal Depression

Signs and symptoms:

low mood tearfulness irritability worry
phobias panic attacks
appetite, weight & sleeping problems
poor concentration forgetfulness
inability to cope poor self-care
(low libido) apathy fatigue
suicidal thoughts / ideas/plans.

Major Depressive Episode

A. 5 or more* of the following are present during the same two-week period:

1. depressed mood (observed or subjective) most of the day nearly every day
2. markedly diminished interest or pleasure in activities most of the day nearly every day
3. significant weight loss (or gain) when not dieting
4. insomnia (or hypersomnia) nearly every day

* 1. or 2. must be present

Major Depressive Episode

5. observable psychomotor retardation or agitation nearly every day
6. fatigue or loss of energy nearly every day
7. feelings of worthlessness or guilt
8. diminished ability to think or concentrate; indecisiveness
9. recurrent thoughts of death; suicidal ideas or plans or attempt

The symptoms cause significant distress or impairment of function

Women and anxiety - - mothers and anxiety – socially evolved?

need approval

shyness

loss of control

sensitivity to rejection

perceived lack of support

self-criticism

perfectionistic need to be in control

dependent

high trait anxiety – internalising (worriers)
externalising (bad tempered)

Anxiety Disorders (DSM-IV-TR)

- Panic Disorder plus or minus Agoraphobia
- Agoraphobia without history of Panic Disorder
- Specific (simple) Phobia
- Social Phobia (Social Anxiety Disorder)
- Obsessive-compulsive Disorder
- Post-traumatic Stress Disorder
- Acute Stress Disorder
- Generalized Anxiety Disorder
- etc

Comprehensive Psychiatry

Zambaldi et al, 2009

Postpartum OCD (400 women)

- 7% - depressive episode
- 38% had co-morbid depressive episode
- 36% - OCD
- Pp onset more frequent in multiples and those with prev psy disorder, somatic disease, complicated labour and delivery
- Commonest obsessions: aggression, contamination and miscellaneous, compulsion for washing, cleaning and checking
- Non-clinical samples 80 – 90%.

NB Implications for the mo-inf relationship – avoidance;
[frightened-frightening - > disorganised attachment]

Intrusions / Obsessions?

- 65% of parents of newborns experience unwanted intrusive thoughts of harm, injury or illness occurring to baby
Abramowitz 2004
- 41% of clinically depressed mothers have intrusive thoughts of harming their child
Jennings et al 1999
- Postpartum – thoughts were more violent Wisner et al, 1999
- Postpartum – high parenting stress and low social support predicted the intentional harm thoughts
Fairbrother and Woody, AWMH, July 2008

Antenatal Psychiatric Illness

- Significant anxiety /depression in 15% (+)
- Pregnancy does not protect against mental illness or suicide
- 68% of women with a history of recurrent major depression relapsed during pregnancy after discontinuing medication and
- 22% relapsed despite continuing medication and
- over 60% resumed medication later in pregnancy
(Cohen et al, 2006)
- 50% of women with untreated Bipolar Disorder will develop an episode in pregnancy (Viguera et al, 2000)

The Journal of Maternal-Fetal and Neonatal Medicine, 20,3,189-209. Alder et al, 2007

- Enhanced levels of depression and anxiety symptoms during pregnancy contribute independently of other biomedical risk factors to adverse obstetric, fetal and neonatal outcome.
- Note: most studies refer to sub-clinical levels of symptomatology e.g. associated with obstetric complications, pregnancy symptoms, preterm labor and requirement for pain relief

Depression and Pregnancy (Li et al, 2008)

- x 2 risk of pre-term delivery
- associated with poor education; high parity; fertility problems; obesity; stressful life events.
- presumed interference with neuro-endocrine pathways and placental function.

Note: pre-term delivery is a leading cause of infant mortality and morbidity as well as medical expenditure for infants

Postnatal Psychiatric Illness

- Significant anxiety /depression in 15% (+)
- Postpartum Psychosis 0.3%
- Recurrence of PPP 50-75%
- 2-3 x risk of onset of illness in early weeks postpartum
- Time of greatest risk of psychiatric hospitalisation*
- Risk is higher if any previous history of illness

- * psychosis; severe MDE; Personality Disorders

suicide and infanticide are not as rare as we used to think

Perinatal 'Mental Health & Illness'

- diagnosable illness is but one of the many problems . . .
- violence, sexual abuse, neglect, poverty, discrimination, anxiety, low self-esteem, low social status, lack of power in personal, economic, social, professional and political relationships, poor nutrition and poor physical health etc
- **enough to make anyone sick?**

Depression and Anxiety

- are inseparable companions – across the whole spectrum of mild to severe disturbance
- are very common, especially in women
- readily become chronic (if not already)
- affect those around the patient
- damage thinking, behaviour, attitudes
- damage relationships (partner, children)
- are amenable to a variety of interventions.

Who is vulnerable?

Psychological and social risk factors

Check* for:

- Personal or family history of poor mental health – especially diagnosed illness; any treatment
- Inadequate social support; esp. relationship with partner and mother, and including family violence
- Recent major stressors, including obstetric, financial, house move, loss of job etc
- Poor physical health – past and current
- Problematic personality traits and disorders

* verbally or use screener QQ or scales or a mixture; use routinely & on all patients

Psychological and social risk factors cont'd

- Adverse childhood experiences
- Drug and alcohol use, including cigarettes
- Child protection issues – past and present
- Social, geographic, cultural, language isolation, minority status
- Loss and grief issues, including bereavements, miscarriages, terminations, infertility, sick or handicapped child etc – recent or earlier in life
- Current distress / dysthymia/ depressive symptoms

then address these

Training is required:

what, why and how to ask and then what to do

- how to engage with clients
- how to manage (everyone's) anxiety
- how to offer immediate support or referral if required
- discussion at multi-disciplinary meeting
- referral made if required
- recognising and dealing with emergencies

advanced training:

- for professionals who want to do more intervention - -
e.g. counselling skills, group work, smoking reduction,
couple therapy, attachment; parent-infant Rx, anxiety Mx,
working with loss and grief etc etc

Where and when to ask

- prior to conception
- Assisted Reproduction services
- antenatally: first visit, last trimester, prn
 - primary care - GP
 - antenatal clinic
 - midwifery clinic
 - secondary obstetric services
- postnatally: first visit, 6-week check, infant immunisations / health consultations, opportunistic
 - primary care - GP
 - Early Childhood services
 - secondary – paediatrician; endocrinologist

Using or not using a scale

Identifying depression in different cultures

- what is the literacy/education level
- does the culture have a word for depression
- how is such a problem expressed
- are people used to filling in forms
- how do they feel about forms
- is a form more or less confronting than a direct question
- gender issues
- how to obtain informed consent

“Screening” for depression, family violence, life events etc

- anxiety is commoner than depression – often precedes, accompanies and follows it
- formal scales – advantages and disadvantages
- PHQ-2 is shorter (Kroenke et al, Med. Care 41, 2003)
- also CMDQ; WHO-5 etc
- 2-item screener for child abuse experience
- simple questions will also work
- learn to ask the questions sensitively and
- make these part of your universal, routine, consultation

'Screening'

Thombs et al, Gen Hosp Psychiatry, 2007

- 2-item screener for child abuse experience (paper and pencil or verbal):
 1. When I was growing up, people in my family hit me so hard that it left me with bruises and marks
 2. When I was growing up, someone tried to touch me in a sexual way or tried to make me touch them.

The Edinburgh Postnatal Depression Scale

Cox J, Holden J, Sagovsky R, 1987 (Brit J Psychiat)

- Postnatal →→ Perinatal; EPDS; EDS; ES; EPDS
- Screening - yes
- Diagnostic - no
- Validated for use antenatally & at other times
- And in men
- May also screen for anxiety (cf 3,4,5)
- Wide international usage
- Many translations – many validated

Edinburgh Perinatal Depression Scale

- a short, 10-item, self-report scale
- indicates current distress/anxiety/depression – i.e. asks about the past 7 days
- each woman completes ES prior to or during consultation (partner too if he wishes)
- some items are reverse-scored
- Q10 is about self-harm

EPDS items

1. I have been able to laugh & see the funny side of things
2. I have looked forward with enjoyment to things
3. I have blamed myself unnecessarily when things went wrong
4. I have been anxious or worried for no good reason
5. I have felt scared or panicky for no very good reason
6. Things have been getting on top of me
7. I have been so unhappy that I have had difficulty sleeping
8. I have felt sad or miserable
9. I have been so unhappy that I have been crying
10. The thought of harming myself has occurred to me

The EPDS

- range of possible scores: 0 – 30
- very low scores (0,1,2) are problematic
- any total score of 10* or more requires further assessment (then or later); (lower threshold in men)
- score >12* = likely diagnosis of clinical depression
- score >0 on Q10 → exploration
- score > (18) 20 = complex – not just depression; likely history of unresolved loss and trauma; current #; esp. problematic if also scores high on Q10

* English-speaking population

Administering the Scale

- ensure the correct Preamble is on the EDS – i.e. antenatal or postnatal or other
- make sure it is sensitively handed out by you or the receptionist or . .
- read it out only if you think the person cannot read easily
- use a translation – or both, if unsure about language skills
- do not ignore the form when you get it back... but do not dissect the scale!
- **NB. Interpret the score in the context of your consultation.** (cf recent paed clinic paper)

Management

good Mx requires thorough assessment

Women's physical, social and emotional wellbeing can neither be understood nor improved without consideration of the past and present context of their lives

and no-one can provide everything required so

identify colleagues who provide medication, counselling, CBT, IPT, couple Rx, parent-infant Rx etc etc

Aim at P, P & EI:

Resilience

- **strengthen** the couple relationship
- **build** social support – emotional and practical
- **prepare** for childbirth and beyond
- **build** parenting skills

Risks and Illness

- **identify** illness or risk as early as possible
- **treat** established acute or chronic illness
- **teach** anxiety management strategies
- **address** loss, grief and trauma issues
- **link** with appropriate resources
- **support** and **monitor**

Potential Treatments

- No (additional) treatment
- Psychotherapy (individual, couple, group)
 - Supportive
 - Cognitive behavioural
 - Interpersonal psychotherapy (IPT)
 - Couple; group
 - Other psychodynamic
- Medication in severe or unresponsive illness
- ECT in life-threatening situations
- Medication alone is never enough
- Continuity of care and carer essential always

Treatment of perinatal depression and anxiety

e.g. Feucht, 2007; Lorenzo et al, 2011; Wisner et al, 2000, et al.....

medication:

- treatment requires weighing of risks and benefits
- medication can have adverse effects
- many other treatments are available
- untreated depression & anxiety also have adverse consequences
- medication data are extensive but not 'gold standard'
- psychotropics and psychiatry are viewed with suspicion

Teratogenesis

Abnormal development:

- death, malformation, growth retardation, functional impairment
- which may be dose dependent

Susceptibility depends on:

- the maternal-foetal genotype
- their interaction with the environment
- the time during which exposure occurs

NB. Incidence of major malformations in the general population is 1-3%

Teratogenesis and embryotoxicity

some drugs do not cause physical defects per se but have deleterious health effects following long-term exposure in utero

alcohol is both teratogenic (early pregnancy) and embryotoxic (heavy use throughout pregnancy)

Perinatal Medication?

- assume everything will cross the placenta
- avoid in the first trimester if possible
- (reduce prior to delivery if possible)
- assume everything will reach the breast milk
- and appear in the infant's serum
- the level in the serum will vary – depending on the drug, the time of day, the stage of feeding, the age of the infant, the health of the infant, any other medication (including OTC), maternal compliance
- try non-medication strategies first in milder depressive and anxiety states
- ascertain the partner's attitude to medication

e.g. Bipolar Disorder in Pregnancy

Mx

- Plan ahead and discuss risks – high relapse rate; both the disease and the treatment are hazardous
- Avoid abrupt discontinuation of medication
- Reduce medication(s) if possible; folate +
- Consider ECT (good safety data in pregnancy)
- Monitor pregnancy closely with ultrasound
- Consider options for postpartum prophylaxis (sedation)
- Work with a psychiatrist
- Written care plan
- Alert re possible admission

Benzodiazepines

- Avoid first trimester → possibly teratogenic in early pregnancy (e.g. cleft palate) - ???
- Short acting PRN doses may be acceptable later in pregnancy
- Neonatal sedation likely, especially if used IM or IV before birth
 - → Floppy Baby Syndrome
 - → Neonatal withdrawal syndrome
 - → Respiratory depression

Antidepressant use in pregnancy

- information available on >20,000 women
- many studies report conflicting outcomes
- methodology variable
- cannot be gold standard
- where potential for harm is documented, odds ratio is low
- no convincing evidence of increased risk for adverse outcomes
- careful discussion with each woman is essential

Lorenzo, Byers & Einarson (2011) Expert Opin. Drug Saf.

Antidepressants and Foetus/infant

Because of

- (i) maternal physiological changes and
 - (ii) the effect of the placental-foetal compartment,
- only the free fraction of a drug crosses the placenta

In late pregnancy there is a substantial increase in the clearance rate of various drugs* due to increased function of different cytochrome P450 enzymes

*drugs such as nicotine, fluoxetine, citalopram & sertraline

Tricyclic Antidepressants

e.g. Einarson – many publications

- extensive data: no major structural abnormalities
- low incidence of perinatal syndromes
- Nulman (2002): No negative behavioural sequelae up to 6 years
- nortriptyline and desipramine have fewer anticholinergic side effects
- the data are reassuring but avoid doxepin
- dothiepin is widely used in this situation in Australia - - the sedation is helpful, as anxiety and insomnia are so common; and the dose can be increased and decreased gradually.

SSRI's

sertraline, fluoxetine, citalopram; escitalopram:

No convincing evidence of increased risk for major malformations

paroxetine:

now exonerated?

fluvoxamine:

insufficient data

?? cardiovascular but, CVD is common in the general population – 1:100 babies

SSRI's - Other outcomes

- spontaneous abortion – small increased risk
- probably no increase in SGA or LBW
- small increase in prem birth (one week)
- PNAS (poor neonatal adaptation syndrome) ← SSRIs
not dose-responsive; monitor closely for 3 days +
- PPHN (persistent pulmonary hypertension of the newborn) small risk???
- long-term neurodevelopment – no adverse effects found
- - in contrast to effects of untreated parental depression

More research is required and it should describe severity of maternal mental illness

Other antidepressants

- bupropion/venlafaxine/mirtazapine/reboxetine
 - limited evidence to date
- high dose venlafaxine is a problem?
- avoid MAOI's

Patients taking mood stabilisers or anti-psychotics for their mood disorders should be managed in collaboration with their psychiatric team. Relapse is likely. Folate and extra ultrasound scans required.

quetiapine

- widespread use in mood and anxiety disorders
- high dosage in Bipolar 1 Disorder
- low dosage otherwise, thus not too expensive

- if patient is also taking lamotrigine, the serum level may be significantly lowered

Andersson et al, 2011, Br J Pharmacol, 72 (1) 153

- N.B. with polypharmacy there is always this risk . . .

Anticonvulsants – "mood stabilisers"

e.g. valproate, carbamazepine, lamotrigine

- The most dangerous psychotropic medication
- Discuss before using in women of reproductive age
- 5 times higher rate of malformations or pregnancy complications
- Neural tube defects incr. from 0.3% to 1-2% valproate and 0.5-1% carbamazepine
- may be reduced by folate supplementation (?)
- Increases defects in heart/limbs/genitals/CNS and face; also developmental delay and behavioural disorders

cf EURAP study group; observational cohort study – 42 countries

Tomson, Battino, Bonizzoni et al Lancet 2011 – 10(7), 609-617

anticonvulsants

- risk of malformations greater with a parental history of major congenital malformations
- lowest rates of malformation with:
 - <300 mg per day lamotrigine
 - <400 mg per day carbamazepine
- risks of malformation were significantly higher with:
 - valproic acid and phenobarbital at all investigated doses
 - and carbamazepine at doses > 400 mg per day
- use the lowest effective dose

Pregnancy and newer anticonvulsants

Among live-born infants in Denmark

- first-trimester exposure to lamotrigine, oxcarbazepine, topiramate, gabapentin, or levetiracetam

compared with

- no exposure
- was not associated with an increased risk of major birth defects.

Molgaard-Nielsen and Hviid, JAMA. 2011;305(19):1996-2002

ECT in pregnancy.

(Review: Anderson & Reti, 2009)

- 339 cases – most treated for depression
- partial remission in 78%
- 25 fetal or neonatal complications
- 11 (incl. two deaths), probably related to ECT
- 20 maternal complications reported (18 probably ECT)
- precautions essential

Conclusions:

- limited available data in the literature
- ECT effective for severe mental illness
- risks to fetus and mother are low

Antipsychotics

- major tranquillisers cf minor (benzodiazepines)
- atypical (e.g. risperidone, olanzapine)
- cf typical (e.g. haloperidol, chlorpromazine)
- side effects in all but the smallest doses
- with newer agents, weight increase and diabetes risk

Mx / Rx – preconception and antenatal

Multi-faceted approach recommended

- discuss prior to conception, including medication, and, if nec .,
- change medication, plus folate supplement >3 months prior
- offer explanation and information to patient, partner and family
- offer referral if appropriate – but review regularly & maintain your interest in the patient as continuity of care(r) is critical
- offer options if available – individual, marital, group, mother-infant, parent-child, self-help psychotherapies; medication; respite; exercise; relaxation etc
- know what resources are available – including self

Mx / Rx, late pregnancy & postpartum

- Pharmacokinetics change over the pregnancy and doses may need to be altered
- There is no substitute for careful monitoring
- ? Consider gradual reduction of medication and cessation prior to delivery to
 - avoid neonatal withdrawal or toxicity
- Monitor neonate for >3 (preferably 7) days
- Breast-feeding can be helpful
- Medication needs a healthy full-term infant
- Ensure adequate rest for mother after delivery
- Avoid polypharmacy
- Help the partner to plan for post-discharge

Management Summary

- identify problems (large or small) early,
- and address them (by referral if necessary)
- universal, routine use of, for example, the EPDS
- ongoing support, interest and information
- collaboration plus continuity of care/ carer
- individual, group, family counselling as necessary; women's groups are invaluable
- add medication if indicated (websites)
- caution and consultation

Perinatal mental health problems

Conclusions

Where possible:

anticipate

discuss

prevent

obtain advice**

minimise exposure to risk

consider and support the whole family

Always:

listen

Websites and contacts for perinatal psychiatry information and discussion

www.motherisk.org (re medication)

www.otispregnancy.org

www.beyondblue.org.au

www.blackdoginstitute.org.au

www.whatwerewethinking.org.au

Marce Society (International and Australasian branches)

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