

6. CHILDREN, YOUNG PEOPLE AND THEIR FAMILIES

6.8 Perinatal Mental Health

Perinatal Mental Health disorders are those which occur during pregnancy and up to one year after birth. They include both conditions with their first onset during this period and pre-existing conditions that may relapse or recur during pregnancy or the post-partum year. Mental health problems are no less common in pregnancy than at other times in a woman's life and for some conditions there is an increased risk during pregnancy and postnatally.

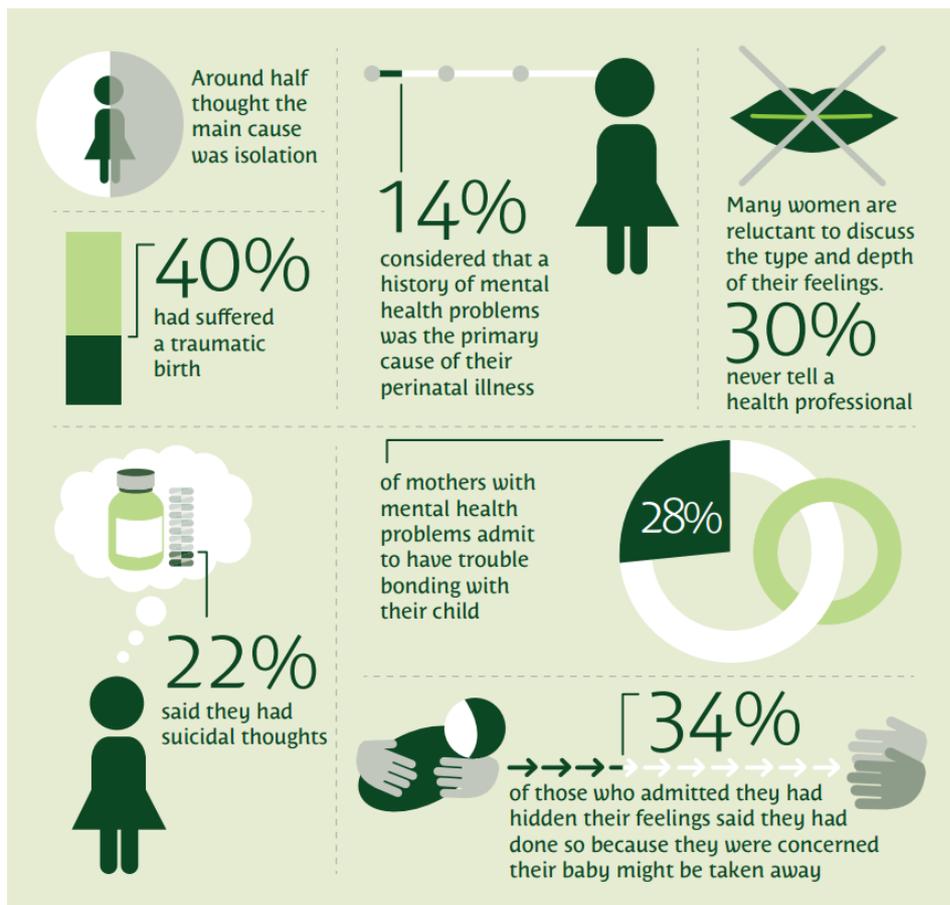
6.8.1. The importance of perinatal mental health

Perinatal mental health problems affect up to 20% of women. They can cause short-term problems including difficulties with attachment and caring for the baby, and in severe cases the risk of harm to the baby, or suicide, which is one of the leading causes of death for mothers during pregnancy and the year after birth¹. If left untreated they can have significant and long lasting effects on the woman, her baby and her family. One in two of all cases of perinatal depression go undetected in routine care and of those detected, many do not receive the evidence-based treatment they need².

Postnatal depression has also been reported to be associated with depression in fathers and with high rates of family breakdown³. Depression in mothers appears to increase the risk of poor birth and child outcomes including higher rates of spontaneous abortion, low birth weight babies, developmental delay, retarded physical growth, and physical illnesses such as chronic diarrhoeal illness^{4,5,6,7}. There is also evidence that children born to depressed mothers do less well educationally, experience higher levels of behavioural problems and are more likely to develop psychological problems in later life^{8,9,10}. Prolonged, severe postnatal depression has been linked with higher rates of divorce, less strong bonding with the infant and reduced emotional adjustment and cognitive development among children^{11,12}.

Research² based on surveys of around 1,500 women and more than 2,000 health professionals found that depression alone can affect one in seven women, and that many women did not discuss their feelings for fear that their baby might be taken away (figure 1). Economic modelling of the costs of maternal perinatal mental health problems, including the adverse effects of maternal mental illness on the child as well as the mother, was published by the London School of Economics and the Centre for Mental Health in 2014¹³. This estimated the long-term societal cost of perinatal depression, anxiety and psychosis to be about £8.1 billion for each one-year cohort of births in the UK¹³. Of this total, the estimated cost to the NHS is around £1.2 billion.

Figure 1 Infographic showing the impact of perinatal mental health



Source: Boots Family Trust Alliance

Key risk factors¹⁴ for perinatal mental health problems include:

- **Vulnerability**: a history of early emotional trauma such as separation from their mother at an early age or poor mother–infant interaction; a history of depressive disorder (especially a previous episode of postnatal depression) or other mental illness; having a familial history of mental illness.
- **Material, social and emotional deprivation**: Social and emotional isolation (especially the absence of a close confidant); marital discord; recent adverse life events and on-going difficulties; unwanted pregnancy; low educational attainment, unemployment, and poverty are associated with perinatal mental ill-health. Single mothers have an increased risk, associated with a lack of emotional support and socioeconomic disadvantage. High levels of morbidity due to perinatal mental ill-health are seen among some Black and Minority Ethnic group women who also experience high levels of lone parenthood.

6.8.2. Information on perinatal mental health in Buckinghamshire

There are no local data on the actual prevalence of perinatal mental health problems in Buckinghamshire. However prevalence estimates based on research studies can be used to estimate the impact and determine necessary service provision locally. Some of these are summarised in the JCPMH Guidance for commissioners of perinatal mental health services (2012)¹⁵.

The most common perinatal mental health problem is postnatal depression, with rates ranging between 13% in the first few weeks to 20% of women in the first year after the birth of their child¹⁶. The incidence and prevalence of mild to moderate depression and anxiety (100-150 per 1000) are broadly similar during pregnancy and the postpartum period. However, there is an increased incidence of severe non-psychotic depressive illness (30 per 1000) in the early weeks following delivery. These conditions may initially present as anxiety and depression in the first two to six weeks following childbirth and can deteriorate rapidly^{17,18,19}. Post-traumatic stress disorder is estimated to occur in approximately 3% of maternities (pregnancy resulting in a birth) and 6% of women following emergency caesarean section. Women admitted to high dependency or intensive care units and those suffering pregnancy losses are at increased risk²⁰. Women previously abused, with sick infants in neonatal units and those with very serious medical disorders are at risk of perinatal mental illness.

Table 1 shows estimates of the number of women in Buckinghamshire by CCG localities, who are likely to suffer from perinatal mental health conditions. This is estimated using the number of live births in Buckinghamshire and reported national prevalence of perinatal mental illness^{21,17,22}. These estimates suggest that between 1,825 -2,988 women are likely to suffer from some form of perinatal mental health problem annually in Buckinghamshire (Chiltern CCG: 1,128–1,846 and Aylesbury Vale CCG: 697–1,142). An estimated 198 women each year in Buckinghamshire are likely to suffer from serious perinatal mental problems (postpartum psychosis, chronic serious mental illness, severe depressive illness).

The prevalence of depression ascertained by the 13-item Edinburgh Postnatal Depression Scale (EPDS), using a cut-off score for 'caseness' of 13 or more in an unselected postnatal sample, was 9.0% in fathers at six weeks postpartum, and 5.4% in fathers at six months postpartum²³. A large population-based study found the prevalence of postpartum depressed mood among fathers to be 4%²⁴. Using a pragmatic estimate of 5%, the estimated annual number of fathers suffering from postnatal depression could be around 291 in Buckinghamshire; around 111 in Aylesbury Vale CCG and 180 in Chiltern CCG. By CCG locality, the estimates would be 71 in AV Central, 65 in Wycombe, 41 in Wooburn Green, 38 in Southern, 36 in Amersham & Chesham, 23 in AV North and 17 in AV South.

Table 1 Estimated annual number of women suffering from various perinatal mental problems in Buckinghamshire by CCG locality based on births, 2013

Type of mental illness	Estimated prevalence per 1000 births [‡]	Estimated number of women suffering from this condition									
		Bucks total	Aylesbury Vale CCG				Chiltern CCG				
			Central	North	South	CCG total	Amersham & Chesham	Southern	Wooburn Green	Wycombe	CCG Total
Number of total births, 2013[^]	-	5,812	1,415	466	341	2,222	715	751	816	1,308	3,590
Postpartum Psychosis	2	12	3	1	1	4	1	2	2	3	7
Chronic serious mental illness	2	12	3	1	1	4	1	2	2	3	7
Severe depressive illness	30	174	42	14	10	67	21	23	24	39	108
Post-traumatic stress disorder	30	174	42	14	10	67	21	23	24	39	108
Mild-mod depressive illness & anxiety states	100 - 150	581 - 872	141 - 212	47 - 70	34 - 51	222 - 333	72 - 107	75 - 113	82 - 122	131 - 196	359 - 539
Adjustment disorders & distress	150 - 300	872 - 1,744	212 - 425	70 - 140	51 - 102	333 - 667	107 - 215	113 - 225	122 - 245	196 - 392	539 - 1,077
Total severe illness (PP, CSMI, SDI)	-	198	48	16	12	75	23	27	28	45	122
Total	-	1,825 - 2,988	443 - 727	147 - 240	107 - 175	697 - 1,142	223 - 366	238 - 388	256 - 419	411 - 672	1,128 - 1,846

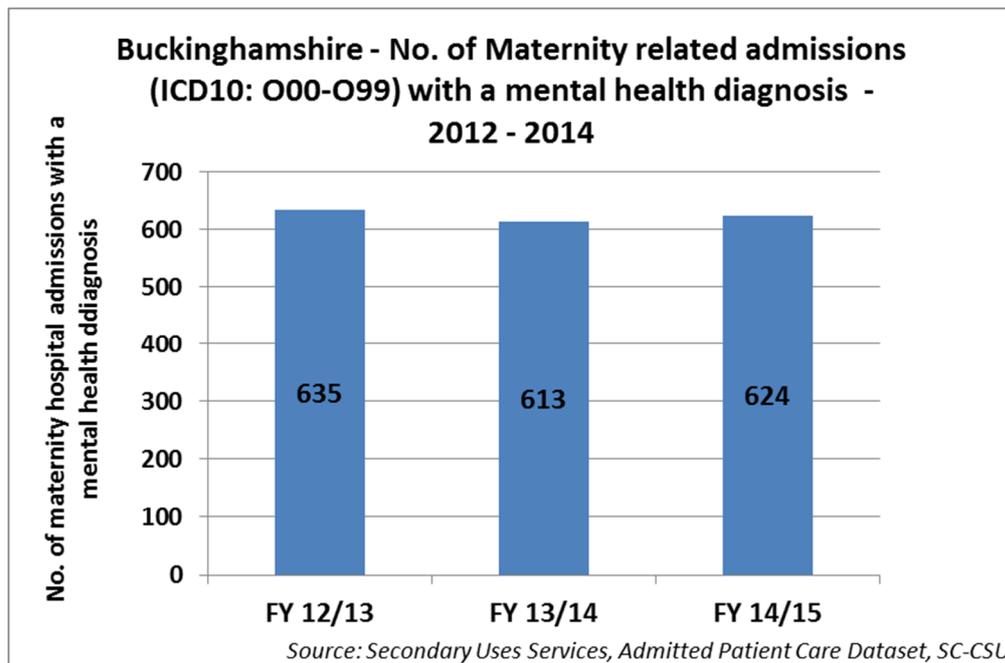
[^]source: ONS, Public Health Birthfiles 2014; [‡]based on a series of references within the JCPMH Guidance for Commissioners 2012¹⁵

Note: Numbers may not add up due to rounding.

6.8.2.1 Hospital Admissions

Figure 2 shows maternity related hospital admissions where a mental health diagnostic code (ICD10: F00-F99) was recorded in any field for patients registered with a Buckinghamshire GP. There were more than 600 maternity related hospital admissions where there was also a mental health diagnosis each year in the three years 2012/13–2014/15. These women are admitted for reasons other than giving birth and not primarily for a mental health problem in pregnancy, for which the number of admissions is very small. Therefore, these admissions provide an indicator of the burden of mental health problems in pregnancy.

Figure 2 Total number of maternity related admissions (ICD10: O00-O99) with mention of Mental ill-health in any diagnosis position (ICD10: F00-F99), Buckinghamshire, 2012/13 – 2014/15



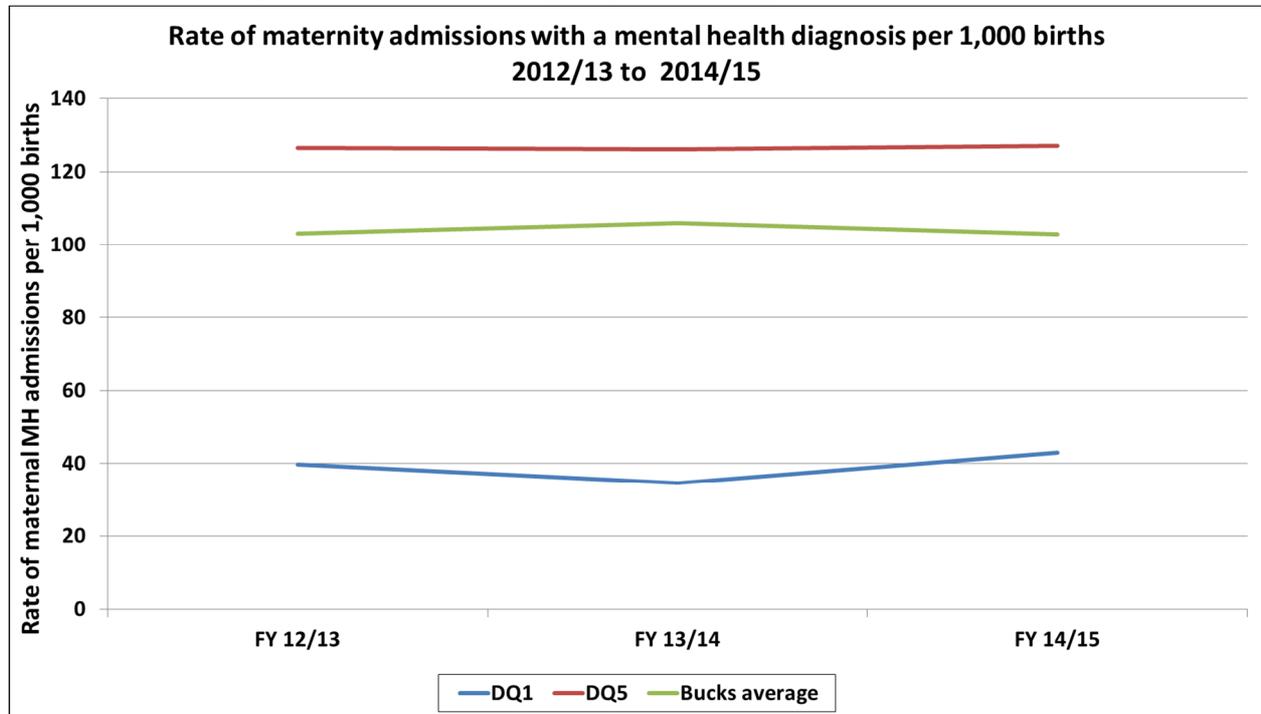
Source: SUS data from the admitted patient care (APC) dataset, CSCSU
(note: admitted not primarily for a mental health problem in pregnancy)

6.8.3. Information on perinatal mental health in different population groups

Figure 3 shows the above data on maternity admissions (ICD10: O00-O99) with mention of a mental ill-health diagnostic code (ICD10: F00-F99) as a rate per 1000 births by deprivation quintile in Buckinghamshire. Over the last 3 years, the rate of admissions in the most deprived quintile (DQ5) was significantly higher than in less deprived quintiles, and the rate in the least deprived quintile (DQ1) was significantly lower than in more deprived quintiles. It should be noted that as hospital admissions data is based on GP registered population and ONS births data is based on resident population some caution

is required in interpreting these findings, but the differences between these populations are unlikely to account for the differences found between Deprivation Quintiles.

Figure 3 Trend in maternity-related admissions (ICD10: O00-O99) with mention of Mental ill-health in any diagnosis position (ICD10: F00-F99), Buckinghamshire, 2012/13–2014/15, rate/1000 births by deprivation quintile



Source: hospital admission data as figure 2. Births data by deprivation quintile: ONS Birth files.

Note: hospital admissions data is based on GP registered population while ONS Births data is based on resident population.

Deprivation quintile (DQ) 5= most deprived quintile. Deprivation quintile (DQ) 1 = least deprived quintile

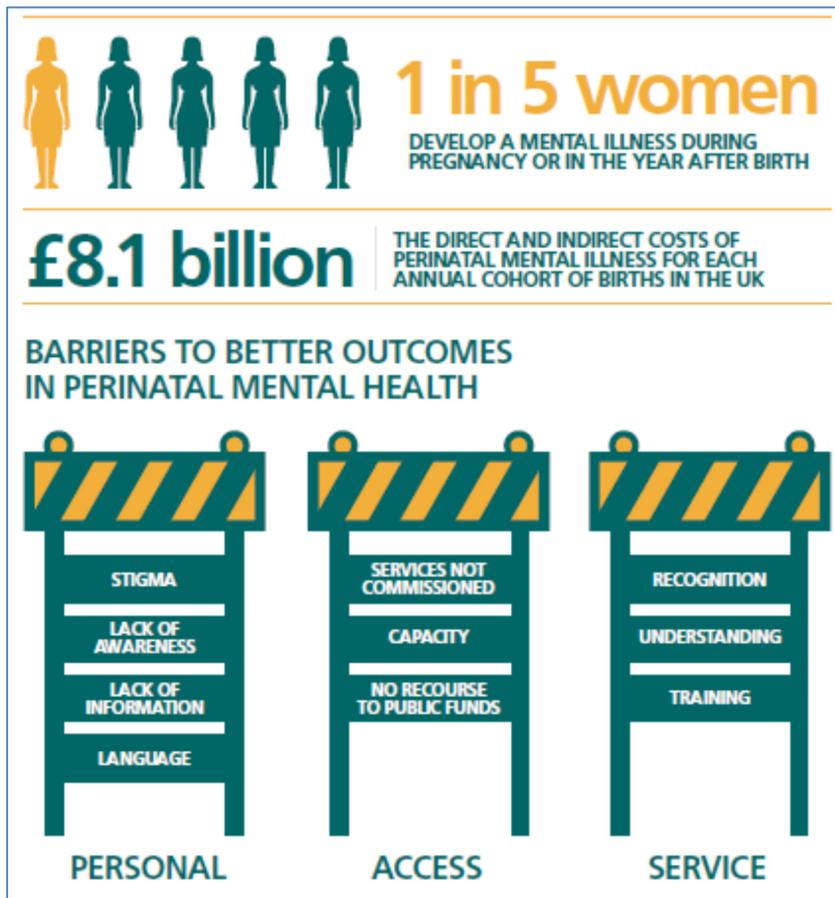
6.8.4. Demand

Based on national estimates of prevalence, between 1,825 -2,988 women and 291 men are estimated to suffer from perinatal mental ill-health annually in Buckinghamshire. Of the women, almost 200 are likely to suffer from a severe mental health disorder, including around 12 with postpartum psychosis and another 12 with other serious and complex disorders requiring access to Specialist Mother and Baby Units each year²⁵. These numbers could increase in the future because of possible increases in the Buckinghamshire population associated with housing developments and inward migration. increase in pregnancies / births in the last two years after a drop and other factors. If these problems are not prevented, identified and managed effectively, they will also lead to increased demands on public services due to the long-term impact of mental health problems on women, children, families and wider society.

6.8.5 Horizon scanning

Recent national reports have highlighted serious deficiencies in perinatal mental health services in many parts of England. The CMO recently identified barriers to better outcomes in perinatal mental health which must be overcome if outcomes are to improve in the future (figure 4)²⁶. The barriers identified in this report are grouped broadly under personal factors, those relating to access to services, and those relating to the services themselves. Local Government, local health commissioners and providers, providers of services for families, and partner agencies should ensure that all women across Buckinghamshire, who are at risk of or experience perinatal mental health problems are identified early and receive the care they and their families need, wherever and whenever they need it.

Figure 4 Prevalence and costs of perinatal mental illness, and barriers to better outcomes



Source: CMO annual report, 2014

6.8.6. Conclusions

Around one in five women develop mental ill-health during pregnancy or within a year after birth. This can cause short-term problems including difficulties with attachment and caring for the baby, and can also have significant and long lasting effects on the woman, her baby and her family. It is known that many women with perinatal mental health problems do not receive the care and treatment they need. The long-term societal cost of perinatal depression, anxiety and psychosis for each one-year cohort of births in the UK are estimated to be about £8.1 billion.

There are no data on the prevalence of perinatal mental health problems in Buckinghamshire but it is estimated that between around (rounded to the nearest 100s) 1,800-3000 women and 300 men suffer from perinatal mental ill-health annually. Of the women, around 12 are likely to suffer from postpartum psychosis and another 12 women from other serious and complex disorders requiring access to Specialist Mother and Baby Units each year.

A number of factors increase women's vulnerability to perinatal mental health problems including social isolation, a lack of emotional support and socioeconomic disadvantage. Rates of hospital admission during pregnancy where a mental health problem was also identified were significantly higher among women from the most deprived socioeconomic quintile of the population in Buckinghamshire compared to the rest of the population.

A number of recent reports have highlighted serious deficiencies in perinatal mental health services in many parts of England. The CMO's annual report in 2014 identified a number of barriers which will need to be overcome to improve outcomes in perinatal mental health, including limited availability of and access to services, and improvements needed within services in recognising and understanding when women have problems, and in the provision of appropriate treatment and care. Effective prevention, early identification and appropriate management of perinatal mental health problems could have a positive impact on the lives of thousands of families in Buckinghamshire, and could improve the health, wellbeing and achievement of children across the county.

Ravi Balakrishnan
Public Health Consultant
June 2016

April Brett
Public Health Principal
June 2016

References

- 1 Lewis G. Why Mothers Die 2000-2002: The Sixth Report of the Confidential Enquiries Into Maternal Deaths in the United Kingdom. London: CEMACH, 2004
- ² Boots Family Trust Alliance (2013) Perinatal Mental Health Experiences Of Women And Health Professionals. http://www.tommys.org/file/Perinatal_Mental_Health_2013.pdf. (accessed 17/2/2016)
- 3 Ballard CG, Davis R, Cullen PC, Mohan RN, Dean C. (1994) Prevalence of postnatal psychiatric morbidity in mothers and fathers. *British Journal of Psychiatry* 1994; 164: 782-788
- 4 Baker-Henningham H, Powell C, Walker S, Grantham-McGregor S. (2003) Mothers of undernourished Jamaican children have poorer psychosocial functioning and this is associated with stimulation provided in the home. *European Journal of Clinical Nutrition* 2003; 57: 786-792
- 5 Rahman A, Bunn JEG, Lovel H, Creed F. (2006) Maternal depression increases infant risk of diarrhoeal illness – a cohort study. *Archives of Diseases in Childhood* 2006; 92: 24-28
- 6 Weissman M, Feder A, Pilowsky D, Olfson M, Fuentes M, Blanco C, Lantigua R, Gameroff M, Shea S. (2004) Depressed mothers coming to primary care: maternal reports of problems with their children. *Journal of Affective Disorders* 2004; 78: 93-100(8)
- 7 Patel V, Prince M. (2006) Maternal psychological morbidity and low birth weight in India. *British Journal of Psychiatry* 2006; 188: 284-285
- 8 Lees M. (2002) Gender, ethnicity and vulnerability in young women in local authority care. *British Journal of Social Work* 2002; 32: 907-922
- 9 Righetti-Veltema M, Bousequet A, Manzano J. (2003) Impact of postpartum depressive symptoms on mother and her 18-month-old infant. *European Child & Adolescent Psychiatry* 2003; 12: 75-83
- 10 Oates MR. (2002) Adverse effects of maternal antenatal anxiety on children: causal effect or developmental continuum? *British Journal of Psychiatry* 2002; 180: 478-479
- 11 Murray L and Cooper PJ, (2003) The impact of postpartum depression on infant development. In I Goodyer (ed) *Aetiological Mechanisms in Developmental Psychopathology*, Oxford: Oxford University Press
- 12 Sharp D, (1994) The effect of depression on the development of the child. Postnatal depression symposium. London: Royal Postgraduate Medical, School, Institute of Obstetrics and Gynaecology.
- 13 Bauer A, Parsonage M, Knapp M, Lemmi V & Adelaja B. (2014) The costs of perinatal mental health problems. Published by Centre for Mental Health and London School of Economics, Oct 2014
- 14 DH (2011) National Perinatal Mental Health Project Report: Perinatal Mental Health of Black and Minority Ethnic Women: A Review of Current Provision in England, Scotland and Wales. National Mental Health Development Unit, DH, Mar 2011.
- ¹⁵ Joint Commissioning Panel for Mental Health (2012) Guidance for Commissioners of Perinatal Mental Health Services <http://www.jcpmh.info/resource/guidance-perinatal-mental-health-services/> (accessed 1/3/2016)
- 16 Priest S R, Henderson J, Evans S F, Hagan R (2003) Stress debriefing after childbirth: a randomized controlled trial. *Med J Aust*, 178, 542-5
- 17 Cox J, Murray D, Chapman G. (1993). A controlled study of the onset, prev and duration of postnatal depression. *Br J Psychiatry*. 163:27-41
- 18 Cooper C, Jones L, Dunn E, Forty L, Haque S, Oyebode F, Craddock N, Jones I. (2007). Clinical presentation of postnatal and non-postnatal depressive episodes. *Psychological Medicine*. 37(9):1273-80
- 19 Oates M, Cantwell R. (2011). Chapter 11: Deaths from psychiatric causes in Saving Mothers' Lives. Reviewing maternal deaths to make motherhood safer: 2006-2008. The Eighth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom (CMACE)
- 20 NICE (2011): Guidelines on Caesarean Section.
- 21 Kendel RE, Chalmers KC, Platz C. (1987). Epidemiology of puerperal psychoses. *Br J Psychiatry*. 150:662-73.
- 22 O'Hara MW, Swain AM. (1996). Rates and risk of postpartum depression – a meta-analysis. *Int Rev Psychiatry* 8:37-54.
- 23 Ballard CG, Davis R, Cullen PC et al. (1994) Prevalence of postnatal psychiatric morbidity in mothers and fathers. *Br J Psychiatry*. 1994 Jun;164(6):782-8.
- 24 Ramchandani P, Stein A, Evans J, O'Connor (2005) Paternal depression in the postnatal period and child development: a prospective population study. *Lancet* 2005;365 (9478) 2201- 2205
- 25 NHS England. Clinical reference Group 06. Perinatal Mental Health. <https://www.england.nhs.uk/commissioning/spec-services/npc-crg/group-c/c06/> (accessed on 10/12/2015).
- ²⁶ CMO (2014) Annual Report of the Chief Medical Officer, 2014, The Health of the 51%: Women. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/484383/cmo-report-2014.pdf (accessed on 14/12/2015)