Cynulliad Cenedlaethol Cymru / National Assembly for Wales Y Pwyllgor Plant, Pobl Ifanc ac Addysg | Children, Young People and Education Committee

lechyd Meddwl Amenedigol | Perinatal Mental Health

**PMH 06** 

Ymateb gan: lechyd Cyhoeddus Cymru Response from: Public Health Wales

#### 1 Introduction

- 1.1.1 Public Health Wales welcomes the focus being given to mental health through this inquiry and the opportunity to provide evidence for consideration by the Committee. Mental health and well-being are fundamental to our collective and individual ability as humans to think, emote, interact with each other, earn a living and enjoy life (World Health Organization, 2016).
- 1.1.2 In seeking to improve long term mental health and well-being Public Health Wales supports adopting a preventative approach built on a holistic view of perinatal, parental and infant mental health. If we frame our work to improve population level outcomes around a focus on improving infant mental health and supporting the development of secure parent child attachment we have the opportunity to improve the mental health of a generation. Improving perinatal mental health and well-being has a role to play in achieving this aim, but must be supplemented by wider preventative, population level interventions which consider the family as a whole.
- 1.1.3 Perinatal mental health problems are defined by a spectrum of mental health issues, including anxiety, depression, and postnatal psychotic disorders which have their onset in pregnancy or the year after birth. They also include pre-existing conditions that may relapse or recur in pregnancy or the postpartum year.
- 1.1.4 This definition, which is focussed around the specific event of child birth, has traditionally provided the framework for structuring specialist mental health services for mothers and babies. However mental health is more than the absence of mental disorders and good mental health is an integral part of our health and it is often said that there is no health without mental health (World Health Organization, 2016). Too focussed a view on services targeted on the perinatal period can lead to artificial boundaries developing. If we are to achieve the improvements in outcomes we seek to

make at a population level we must think more broadly than specific services delivered within this relatively short time period. We must focus on preventative approaches and the promotion of good mental health, thinking about families holistically and acknowledging the impact that our early childhood experiences can have on our future mental health and resilience.

- 1.1.5 Many of the inequalities in health and well-being that persist in Wales have their origins in early childhood and before birth. A range of international evidence has shown that when mothers suffer from perinatal mental health illnesses it increases the likelihood that children will experience behavioural, social or learning difficulties and fail to fulfil their potential (Hogg, 2013). Poor parental (including perinatal) mental health can have a significant impact on children's health and development. Even relatively mild or moderate mental health problems can impact on a parent's ability to parent, particularly their ability to develop a strong bond and ensure optimal attachment to the infant (HSC & Public Health Agency, 2016). Given that 1 in 4 of the population will experience mental health problems at some point, this is an issue which requires us to support the de-stigmatisation agenda, supporting parents at the right time in the most appropriate way.
- 1.1.6 In recognition of the importance of this early period of our lives in reducing long term inequalities the First 1000 Days Collaborative Programme is the first initiative of Cymru Well Wales. The Collaborative is focussing on driving system change to amplify the collective impact of our activity and resources for families in the 1000 days from conception to the second birthday.
- 1.1.7 The First 1000 Days Collaborative Programme approaches improving the populations long-term health and well-being outcomes through the lens of our earliest experiences. The interrelationship between perinatal, parental and infant mental health outcomes has led to infant mental health and secure parent-child attachment being identified as priorities for action by the Collaborative.
- 1.1.8 In 2015, Public Health Wales ran the Adverse Childhood Experiences (ACEs) study. ACEs are stressful events occurring in childhood such as suffering neglect and child abuse (physical, sexual and/or emotional) or

growing up in a household in which there are adults experiencing alcohol and drug use problems, mental health conditions, domestic violence or criminal behaviour resulting in incarceration. Evidence from the Welsh ACE survey and ACE surveys internationally has demonstrated a strong and cumulative association between exposure to ACEs and the adoption of health harming behaviours such as smoking, excessive alcohol consumption and violence (which are often adopted as coping mechanisms), poor mental health, early diagnosis of chronic disease and high levels of health service use across the life course (Public Health Wales, 2015).

- 1.1.9 Evidence demonstrates that ACEs experienced from birth, and even adverse experiences experienced by the mother whilst baby is still in the womb e.g. maternal use of drugs or alcohol and chronic and severe mental stress, matter significantly to children's long-term emotional and psychological health. The stress hormone Cortisol can be passed to the developing foetus in the womb and can have a toxic and detrimental effect upon its brain and cognitive development (Bergman, Sarkar, Glover, *et al.*, 2010). International evidence has demonstrated a range of cost effective approaches to preventing and mitigating ACEs.
- 1.1.10 There are also significant economic costs associated with perinatal depression, anxiety and psychosis. The total long-term cost to society as a whole has been calculated at about £8.1 billion for each one-year cohort of births in the UK. The costs to the NHS in the UK from perinatal mental illnesses are estimated at around £1.2 billion for each annual cohort of births. In comparison, it is predicted that it would cost an extra £280 million a year to bring the whole pathway of perinatal mental health care up to the level and standards recommended in national guidance (Bauer, Parsonage, Knapp, *et al.*, 2014).
- 1.1.11 We have responded to each of the areas highlighted within the inquiry below, outlining the current position in Wales; evidence where it is available on the effectiveness of current programmes and where appropriate make suggestions for future improvement.
- 1.2 Systems for the accountability and funding of perinatal mental health services across Wales (including the prevention, detection and management

# of perinatal mental health problems)

## Accountability

- 1.2.1 The 1000 Lives Mental Health and Learning Disabilities Improvement Team, based within Public Health Wales and led by its national clinical lead for perinatal mental health services, have supported the development of a National Steering Group (NSG) and Perinatal Community of Practice (COP).
- 1.2.2 The All Wales Perinatal Mental Health Steering Group is chaired by Professor Ian Jones from the National Centre for Mental Health and Dr Sue Smith, Cardiff & Vale University Health Board; it has representation from all key stakeholders including those with lived experience. The commitment of practitioners in the field has been evident in both the NSG and Perinatal COP.
- 1.2.3 Further information on the work of the National Steering Group is provided in the relevant sections of our response.

# **Funding**

- 1.2.4 In 2016 Welsh Government announced £1.5M for the provision of community perinatal mental health services across Wales (Welsh Government, 2016a). Based on the proposals that each health board provided to Welsh Government funding was allocated in 2016 with the expectation that perinatal mental health services would be available in each health board by November 2016.
- 1.2.5 It will be essential that health boards are able to demonstrate that services have been provided in line with the proposals made to Welsh Government within the expected timeframe. It is often the staff who provide front line services that can provide useful intelligence about the initiation, development and implementation of services that are available in their areas.

#### 1.3 Perinatal Mental Health Services in Wales

1.3.1 It is widely accepted within policy documents from across the UK that perinatal mental illnesses affect at least 10% and up to 20% of women. There

were 33,279 live births in Wales in 2015 (Office for National Statistics, 2016) and application of these prevalence estimates would suggest that in Wales for each annual birth cohort between 3,328 and 6,656 new mothers will experience a perinatal mental health issue. If untreated they can have a devastating impact on both the mother and their families.

- 1.3.2 Although maternal deaths are generally low in the UK, perinatal mental illness is associated with maternal mortality. Between 2011 and 2013 across the UK 10% of women who died in the perinatal period died as a result of completed suicide while 23% of women who died in the postnatal period (6 weeks 12 months postpartum) had a mental disorder (Maternal, Newborn and Infant Clinical Outcome Review Programme & MBRRACE-UK, 2015).
- 1.3.3 The onset and escalation of perinatal mental illnesses can often be prevented through early identification, expert management of a woman's condition, and prompt and informed choices about treatment. Even if the illness itself is not preventable, it is possible to prevent many of the negative effects of perinatal mental illness on families (Public Health Network Cymru, 2017).
- 1.3.4 A range of guidance is available outlining best practice in the provision of perinatal mental health services. NICE have published clinical and service guidelines for antenatal and postnatal mental health covering evidence based practice in recognising, assessing and treating mental health problems in women who are planning to have a baby, are pregnant, or have had a baby or been pregnant in the past year. The guidance promotes early detection and good management of mental health problems (NICE, 2015) and Public Health Wales supports the delivery of services in line with these principles.
- 1.3.5 Similar guidelines have been developed in Scotland (Scottish Intercollegiate Guidelines Network, 2012) and a 2015 NSPCC publication (Galloway & Hogg, 2015) provides a review of where current practice in Scotland lies in relation to these guidelines three years after their publication. The NSPCC are currently undertaking a similar review in Wales.

Inpatient care for mothers with severe mental illness

1.3.6 The Welsh Health Specialised Services Committee is currently reviewing the provision of inpatient services for mothers and babies, the national steering group and community of practice supported by 1000 Lives Improvement has contributed to the ongoing work. A core issue identified by those with lived experience has been the importance of being able to be in close proximity with their babies whilst an inpatient as well as having access to the support of family and friends. As with other specialist services the model of provision proposed will need to balance these preferences with the need to maintain the minimum levels of service activity required to ensure services are delivered safely and effectively.

## Specialist community perinatal mental health provision

- 1.3.7 Local health boards in Wales have responsibility for the provision of community perinatal mental health services. Whist all health boards in Wales have or are in the process of developing their community perinatal mental health services, there remains variation across areas and this will need to be addressed by health boards to ensure equity of access and parity of provision.
- 1.3.8 The individual responses to this inquiry provided by local health boards will provide the Committee with details of individual boards current positions.

Clinical care pathways and the timeliness of primary care services to meet the emotional well-being and mental health needs of families (including mothers, fathers and the wider family during pregnancy and the first year of a baby's life)

#### Clinical care pathways

1.3.9 Clear, transparent evidence based pathways are essential for the prevention, early identification and treatment of perinatal mental health issues. To ensure that all women are supported by services that are proportionate to their level of need pathways need to be integrated, running across service boundaries. This requires all staff in contact with mothers, fathers and the wider family during pregnancy and the first years of a baby's

life to be aware of perinatal and parental mental health problems. Such an approach recognises the importance of those working directly with families understanding the importance of good infant mental health from conception to three when brain development is in its optimal phase

- 1.3.10 It also requires effective communication between services that are in contact with a family. This can be particularly important where GPs may be aware of historical mental health issues that have not been disclosed to the midwife. Similarly an effective handover of care between midwife and health visitor after the birth of a baby is vital for ensuring mental health concerns are monitored and acted on promptly.
- 1.3.11 The majority of perinatal mental health issues experienced by mothers are classed as mild to moderate. To ensure these women get effective support pathways should run across the spectrum of need from mild to severe. Where support for mothers experiencing mild to moderate perinatal mental health issues is provided in the home or community pathways should be supported by effective training to ensure those providing care have the competence and skills to provide proportionate and evidenced based assessments and interventions.
- 1.3.12 The National Steering Group has initiated a task and finish group focussing on the development of a unified perinatal mental health information, referral, assessment and intervention pathway, involving all relevant health and social care staff. It is expected that all health boards in Wales will agree to a commonality of approach to ensure both consistency and improved outcomes.

## Timeliness of primary care services

- 1.3.13 A 2013 review commissioned by Welsh Government on the access and delivery of psychological therapies across Wales highlighted variations in access and service quality and the absence of an agreed minimum data set for psychological therapies across health boards (Welsh Government, 2014). Improving access to psychological therapies is an objective of the Together for Mental Health Delivery plan 2016–19 (Welsh Government, 2016b).
- 1.3.14 Monthly data on waiting times within local primary mental health

support service (LPMHSS) for therapeutic interventions is collected by local health boards and a target of 80% adherence to up to 28 days waiting time for assessment and treatment respectively has been established (StatsWales, n.d.). Monitoring data suggests varied performance in meeting the waiting times targets across Wales. It should be noted that this performance data relates to all referrals to therapeutic interventions (which includes psychological therapies) not specifically those made in the perinatal period.

Integrated perinatal mental health support (including antenatal education and preconception advice, training for health professionals, equitable and timely access to psychological help for mild to moderate depression and anxiety disorders, and access to third sector and bereavement support)

1.3.15 A multi-disciplinary and multi-service approach to working should be encouraged to ensure the delivery of integrated perinatal mental health support. This includes the contribution of third sector organisations, communities, women's families and their social support networks.

# Antenatal education and preconception advice

1.3.16 Pregnancy and the transition to parenthood is a major developmental period with important implications for parents, for the infant-parent relationship and the infant's development. Research carried out in the United States and UK has demonstrated that it is often a stressful event and brings about more profound changes than any other developmental stage of the family lifecycle. Women report massive changes to lifestyles and routines, easy adaptation is not usual, is uniformly problematic and is not bound by any timeframe (Deave, Johnson & Ingram, 2008). De-stigmatising and normalising mother's experiences, and encouraging them and their families to seek support at the earliest stage, is key to a preventative approach and will improve outcomes for mothers, and babies (Centre for Mental Health, Royal College of General Practitioners (RCGP) & Boots Family Trust, 2015). To do this will require a culture change in our communities and workforce, allowing talking about our mental wellbeing to become the norm. With conversations supported by a greater understanding of the issues, barriers and help available.

- 1.3.17 Routine assessment of mental well-being in line with NICE guidance should be a core part of early antenatal assessment. Currently, maternal mental health is discussed routinely in pregnancy but the focus is on identifying those with a diagnosis of a serious mental health problem rather than establishing general well-being. Public Health Wales through the work of the National Steering Group and the First 1000 Days programme recognises the importance of a broader focus on prevention and promotion of secure attachment the provision of support and information for all mothers and families about mental health.
- 1.3.18 To further develop our understanding of what information and support parents in Wales would find most helpful during pregnancy and up until their child's second birthday the First 1000 Days programme has commissioned a piece of parental insight work. It is intended that the findings from this insight work will be used to inform future service improvements in a range of topics including promoting positive mental wellbeing and secure parent-child attachment.

# Training for health professionals

- 1.3.19 The All Wales Perinatal Mental Health Steering Group has established a forum for sharing best practice and agreed the standards of care which services will provide. It has supported the development of services in all health boards across Wales and identified the training needed, which includes the Mother and Infant Mental Health accredited training offered through MIND.
- 1.3.20 It has also supported the training of staff from across Wales in an interactive approach to building secure and positive attachments between parents and infants. It is anticipated the staff already provided with training will be able to share their knowledge and skills with a broader audience.
- 1.3.21 In addition psychiatrists from each health board in Wales have been provided with specialist perinatal training facilitated by the Royal College of Psychiatrists.
- 1.3.22 Future work of the NSG includes a training task and finish group to

develop and agree the essential competencies for all staff involved in perinatal healthcare as well as an understanding of the competencies required for more specialist practice.

## Psychological help for mild to moderate depression and anxiety disorders

1.3.23 An improvement strategy for Psychological Therapies in Wales has been initiated by Welsh Government. The Welsh National Psychological Therapies Management Committee has developed detailed guidance for the provision of evidence based psychological therapies in Wales, Matrics Cymru (1000 Lives Improvement, 2016). The guidance, due to be published in Summer 2017, has been developed as a result of collaborative working between service user and carers representatives, each of the 7 Local Health Boards' Psychological Therapies Management Committees (PTMCs), Welsh Government, the National Psychological Therapies Management Committee (NPTMC) and Public Health Wales. The purpose of the Matrics Cymru guidance is to assist in building effective, equitable and accessible psychological therapy services. The Committee will be supporting implementation and this includes workforce development and data collection.

## Access to third sector and bereavement support

- 1.3.24 The third sector has an important role to play in contributing to successfully promoting positive parental mental health in pregnancy and the first year of life.
- 1.3.25 Social isolation is a key factor in perinatal mental illness (Jones, Jomeen & Hayter, 2014) and there is a need to increase social support for socially excluded mothers and to strengthen their connection to their community (Morgan & Eastwood, 2014; Eastwood, Jalaludin, Kemp, *et al.*, 2012). A small UK based survey conducted on behalf of the charity Family Action found that 1 in 5 mothers in the UK lack support networks to help them through pregnancy and are unaware of the services available to help with depression. Among mothers in low income households the proportion is greater, at 1 in 3 (Mahadevan, 2012; Durcan & Bell, 2015).

- 1.3.26 The third sector, community based resources such as local play groups, accessible opportunities for physical activity, opportunities for family learning and development, and self help and peer support, through face to face and online peer support (Jones, Jomeen & Hayter, 2014) all play a vital role in reducing the social isolation of new parents and in the overall prevention of and recovery from perinatal mental health problems.
- 1.3.27 The third sector in Wales is also crucial in developing and delivery innovative interventions that are able to reach disadvantaged groups of parents and deliver effective interventions for those who are at higher risk of perinatal mental health problems (Wrexham Glyndŵr University, 2014; Mental Health Foundation, 2017; Home-Start, n.d.).

#### Bereavement

- 1.3.28 The effects the loss of a baby has on maternal mental health are well recognised. The Royal College of Midwives have called for the increased need of specialist bereavement midwives to support families. Wales have established roles for bereavement specialist midwives/officers in all units across Wales. The role of these midwives is to provide expert knowledge, insight and support to staff, women and families. There is a link between bereavement specialist midwives and perinatal mental health teams as they offer the potential to signpost those women whose grieving process may be complicated and needing additional perinatal mental health support both now and in the future.
- 1.4 Support mothers to bond and develop healthy attachment with her baby during and after pregnancy (including breastfeeding support)

# **Parent Child Attachment**

1.4.1 Focussing our efforts on improving infant mental health and supporting the development of secure parent – child attachment provides us with an opportunity to improve the mental health of a generation. Such an approach could prevent problems from arising in the first place, delivering a shift in the population's mental health and wellbeing and leading to the promotion good mental wellbeing becoming the norm across the life course.

- 1.4.2 A securely attached infant will have the social and emotional confidence to build relationships and explore the world around them. When secure attachments are not established early in life children can be at greater risk of a number of detrimental outcomes including poor physical and mental health, relationship problems, low educational attainment, emotional difficulties and conduct disorders (HSC & Public Health Agency, 2016).
- 1.4.3 A strong bond between an infant and a primary caregiver is developed though positive and responsive behaviours from the care–giver. As a result poor parental mental health can have a significant impact on children's health and development. Even relatively mild or moderate mental health problems can impact on a parent's ability to parent, particularly their ability to develop a strong bond and ensure optimal attachment to the infant. A 2009 review of current evidence of effective infant mental health interventions in a UK context concluded approximately 35–40% of infants are less than securely attached (HSC & Public Health Agency, 2016).
- 1.4.4 The key timeframe for healthy attachment and hence healthy social and emotional development is considered to be between 0 and 3 years, when brain development is in its optimal phase.
- 1.4.5 Development starts during pregnancy and the choices and experiences of the mother during this period can have a significant impact on maternal and infant social and emotional health. Promotion of antenatal bonding with the bump, preparation for parenthood and early detection of antenatal depression are all crucial, and the midwife can play a key role in this (HSC & Public Health Agency, 2016). After birth, key factors such as feeding, skin to skin contact, mirroring behaviours, responsive parenting, and a stimulating play environment can also contribute positively to overall healthy development and relationship building between infant and caregiver. All parents/carers play a critical role in ensuring good mental health development for their children and in preventing poor developmental outcomes (HSC & Public Health Agency, 2016). Healthy Child Wales is a universal surveillance programme includes routine assessment of 'attachment' and infant mental health; which if fully implemented should offer opportunities for early intervention using evidence based interventions. It is not clear currently whether the full range of interventions to address

poor attachment are in place in each local area. There has been investment in perinatal mental health services which is to be welcomed, however, this is likely to support only the most serious of cases and further investment and a more co-ordinated and strategic approach is needed which encourages system working and builds on a universal base to begin to meet people's needs in a proportionate fashion. Public Health Wales is working with the Together for Children and Young people Programme and the First 1000 Days Programme, to identify actions in this area.

1.4.6 As part of its aim to bring about improved long term outcomes for future generations of Welsh children the First 1000 Days programme has identified improving infant mental health and promoting secure parent—child attachment as priorities for action. The programme is currently looking at best practice nationally and internationally to identifying successful approaches to shifting the system towards focusing on fostering secure parent—child attachments and a sense of good mental wellbeing in all mothers and mother to be. Leads for the First 1000 Days programme have made links with partners in Northern Ireland and Scotland to learn about the approaches they have taken to improve outcomes for children at this vital stage of the lifecourse. Some local health boards have also begun to look at infant mental health specifically as an issue and priority. The individual responses to this inquiry provided by local health boards will provide the Committee with details of individual board's current positions.

## Breastfeeding

- 1.4.7 As outlined above promoting and supporting good attachment between mother and child is vital. Supporting breastfeeding has a role to play in achieving this. However breastfeeding is only one of a number of actions, including skin to skin contact, mirroring behaviours and responsive parenting that parents can take to support developing good attachment. To deliver the greatest possible improvements in outcomes for children, as quickly as possible, the First 1000 Days programme is taking a holistic approach to the promotion of good attachment which includes but is not defined by breastfeeding.
- 1.4.8 Breastfeeding has an important role in improving a range of health

outcomes for mothers and babies alongside its role in building good attachment. For this reason supporting women to make better informed choices about how they feed their infant in the first 6 months of life remains a priority for Public Health Wales.

- 1.4.9 Wales, like the rest of the UK, has some of the lowest breastfeeding rates in the world and these have not changed significantly in more than a decade despite our best efforts. A different approach is needed which helps to create a society where breastfeeding is seen as the norm. This involves a move away from interventions which focus solely on breastfeeding being the responsibility of the woman, to a more societal approach to ensure population level improvement. This requires a concerted effort by society as a whole to enable mothers to breast feed wherever they choose to do so.
- 1.4.10 Currently strategic action focuses on acute and community settings achieving UNICEF UK Baby Friendly status. Across Wales there is a variable picture within and across health boards and for those that have achieved positive results, sufficient resource is needed to sustainably maintain and progress beyond the set of minimum standards.
- 1.4.11 Evidence indicates that the biggest improvements in breastfeeding rates come when a multi-faceted approach is taken that considers the parents' whole journey from pregnancy to new parenthood. Sensitive conversations during pregnancy, skilled support in the immediate post-birth period, ongoing guidance and social support are all needed to enable mothers to feel confident and breastfeed successfully for as long as they wish. In addition, the wider community needs to welcome and support breastfeeding. We are working closely with academic partners; infant feeding leads within health boards and the third sector to develop a renewed approach to improving breastfeeding rates that draws on the best available international evidence and where necessary develops innovative solutions supported by evaluation. Ultimately, our collective success is judged on whether we have made any improvements in the outcomes for mothers, infants and families.

## **Inequalities**

- 1.4.12 The Making a Difference Report published by Public Health Wales in 2016 has highlighted the substantial economic evidence for early intervention in reducing inequalities and in improving outcomes (Public Health Wales, 2016).
- 1.4.13 Inequality is a key determinant of mental ill-health, and mental ill-health leads to further inequality. Social disadvantage is known to increase the likelihood of suffering poor mental health postnatally and there is a well- established link between social disadvantage and poor self-rated health among mothers with newborn infants (Scottish Intercollegiate Guidelines Network, 2012; Morgan & Eastwood, 2014; Eastwood, Jalaludin, Kemp, *et al.*, 2012).
- 1.4.14 A mother who is economically deprived, has inadequate social networks or is depressed is disadvantaged in the degree to which they can provide a good start in life for their child. Depression and help-seeking for depression are also patterned by ethnic group (Gater, Tomenson, Percival, *et al.*, 2009; Redshaw & Henderson, 2013; Byatt, Biebel, Friedman, *et al.*, 2013). Women from deprived areas and from some ethnic minority groups are more at risk of antenatal depression, which is a risk factor for postnatal depression (Redshaw & Henderson, 2013).
- 1.4.15 Evidence suggests that universal service provision should be the starting point for action to address inequalities, with further support delivered proportionate to need. In the first 1000 days of life the universal service is the NHS through its midwifery and health visiting services. While we would not advocate that all action needs to be delivered by health professionals, they are uniquely placed to identify need for additional support and to co-ordinate care.
- 1.4.16 Currently, the Healthy Child Wales programme is being implemented and health boards are challenged to resource the minimum universal contacts and assessment. Enabling Health Visitors and Midwives to make additional visits (enhanced universal provision) can often result in early intervention and prevent problems developing. Outside of Flying Start areas this kind of enhanced universal service is not possible within current resources. We would propose that Flying Start and similar programmes would have a greater impact at population level if the additional NHS services

funded through these programmes were flexible enough to provide more intensive preventative interventions to all families where this level of need has been identified regardless of where they live.

#### 2 Conclusions

2.1.1 Public Health Wales welcomes the attention the committee is giving to this important issue. There are a number of positive policy initiatives and programmes on which to build. Perinatal mental health issues represent a significant issue for mothers and families in Wales. The established national and international evidence for the long term impacts that poor maternal mental health can have on children suggests we are yet to invest sufficient resources in prevention. A failure to invest in evidence based prevention that promotes positive mental health for families, particularly within the first 1000 days, will impact on children and families and result in significant longer term costs across Health, Social Care and wider public services.

#### 3 References

1000 Lives Improvement (2016) *1000 Lives Improvement – Matrics Cymru Draft Consultation*. [Online]. 15 September 2016. 1000 Lives Improvement. Available from:

http://www.1000livesplus.wales.nhs.uk/matrics-cymru-draft-consultation/. Bauer, A., Parsonage, M., Knapp, M., Iemmi, V., et al. (2014) *Costs of perinatal mental health problems*. [Online]. Available from: http://eprints.lse.ac.uk/59885/1/\_\_lse.ac.uk\_storage\_LIBRARY\_Secondary\_li

bfile\_shared\_repository\_Content\_Bauer%2C%20M\_Bauer\_Costs\_perinatal\_%20 mental\_2014\_Bauer\_Costs\_perinatal\_mental\_2014\_author.pdf.

Bergman, K., Sarkar, P., Glover, V. & O'Connor, T.G. (2010) Maternal Prenatal Cortisol and Infant Cognitive Development: Moderation by Infant-Mother Attachment. *Biological Psychiatry*. [Online] 67 (11), 1026–1032. Available from: doi:10.1016/j.biopsych.2010.01.002.

Byatt, N., Biebel, K., Friedman, L., Debordes-Jackson, G., et al. (2013) Patient's views on depression care in obstetric settings: how do they compare to the views of perinatal health care professionals? *General Hospital Psychiatry*. [Online] 35 (6), 598-604. Available from: doi:10.1016/j.genhosppsych.2013.07.011.

Centre for Mental Health, Royal College of General Practitioners (RCGP) & Boots Family Trust (2015) *Falling through the gaps: perinatal mental health and general practice*. [Online]. Available from:

https://www.centreformentalhealth.org.uk/Handlers/Download.ashx?IDMF=9c9ea879-a7bf-4f0a-9ee8-e32ee697d265.

Deave, T., Johnson, D. & Ingram, J. (2008) Transition to parenthood: the needs of parents in pregnancy and early parenthood. *BMC Pregnancy and Childbirth*. [Online] 8 (1), 30. Available from: doi:10.1186/1471-2393-8-30. Durcan, D. & Bell, D.R. (2015) *Local Action on Health Inequalities: Reducing social isolation across the lifecourse. Practice resource summary*. [Online]. Available from:

http://www.instituteofhealthequity.org/projects/reducing-social-isolation-a cross-the-lifecourse-Full/local-action-on-health-inequalities-reducing-soci al-isolation-across-the-lifecourse.pdf.

Eastwood, J.G., Jalaludin, B.B., Kemp, L.A., Phung, H.N., et al. (2012) Relationship of postnatal depressive symptoms to infant temperament, maternal expectations, social support and other potential risk factors: findings from a large Australian cross-sectional study. *BMC Pregnancy and Childbirth*. [Online] 12148. Available from:

doi:10.1186/1471-2393-12-148.

Galloway, S. & Hogg, S. (2015) *Getting it right: getting it right for mothers. Closing the gaps in community perinatal mental health services.* [Online]. Available from:

https://www.nspcc.org.uk/globalassets/documents/research-reports/gettin g-it-right.pdf [Accessed: 27 April 2017].

Gater, R., Tomenson, B., Percival, C., Chaudhry, N., et al. (2009) Persistent depressive disorders and social stress in people of Pakistani origin and white Europeans in UK. *Social Psychiatry and Psychiatric Epidemiology*. [Online] 44 (3), 198. Available from: doi:10.1007/s00127-008-0426-x.

Hogg, S. (2013) *Prevention in mind – All Babies Count: Spotlight on Perinatal Mental Health*. [Online]. Available from:

https://www.nspcc.org.uk/globalassets/documents/research-reports/all-babies-count-spotlight-perinatal-mental-health.pdf [Accessed: 3 April 2017]. Home-Start (n.d.) *Home-Start in Wales*. [Online]. Home-Start. Available from: https://www.home-start.org.uk/Pages/Category/home-start-wales [Accessed: 13 April 2017].

HSC & Public Health Agency (2016) Supporting the best start in life. Infant

Mental Health Framework for Northern Ireland. [Online]. Available from: http://www.publichealth.hscni.net/sites/default/files/IMH%20Plan%20April% 202016\_0.pdf [Accessed: 3 April 2017]. Jones, C.C.G., Jomeen, J. & Hayter, M. (2014) The impact of peer support in the context of perinatal mental illness: A meta-ethnography. *Midwifery*. [Online] 30 (5), 491-498. Available from: doi:10.1016/j.midw.2013.08.003.

Mahadevan, J. (2012) New mums lack support to cope with isolation and depression. *Children & Young People Now*. [Online] 2 July. Available from: http://www.cypnow.co.uk/cyp/news/1073793/new-mums-lack-support-to-cope-with-isolation-and-depression.

Maternal, Newborn and Infant Clinical Outcome Review Programme & MBRRACE-UK (2015) *Saving Lives, Improving Mothers' Care Surveillance of maternal deaths in the UK 2011–13 and lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2009–13.* [Online]. Available from:

https://www.npeu.ox.ac.uk/downloads/files/mbrrace-uk/reports/MBRRACE-UK%20Maternal%20Report%202015.pdf.

Mental Health Foundation (2017) *Creating Connections Impact Report 2014–16.* [Online]. Available from:

https://www.mentalhealth.org.uk/sites/default/files/Creating%20Connections%20Impact%20Report%20-%20English.pdf.

Morgan, K.J. & Eastwood, J.G. (2014) Social determinants of maternal self-rated health in South Western Sydney, Australia. *BMC Research Notes*. [Online] 751. Available from: doi:10.1186/1756-0500-7-51.

NICE (2015) *Antenatal and postnatal mental health: clinical management and service guidance*. [Online]. June 2015. NICE. Available from:

https://www.nice.org.uk/guidance/cg192?unlid=96995752320173220311.

Office for National Statistics (2016) *Birth Summary Tables – England and Wales.* [Online]. 13 July 2016. Office for National Statistics. Available from:

https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/datasets/birthsummarytables [Accessed: 12 April 2017].

Public Health Network Cymru (2017) *Perinatal Mental Health*. [Online]. 2017. Public Health Network Cymru. Available from:

http://www.publichealthnetwork.cymru/en/topics/mental-health/perinatal-mental-health/.

Public Health Wales (2016) *Making a Difference: Investing in Sustainable Health and Well-being for the People of Wales - Executive Summary.* 

# [Online]. Available from:

http://www.wales.nhs.uk/sitesplus/documents/888/PHW%20Making%20a%20difference%20ES%28Web%5F2%29.pdf.

Public Health Wales (2015) Welsh Adverse Childhood Experience (ACE) Study: ACEs and their impact on health-harming behaviours in the Welsh adult population. [Online]. Available from:

http://www2.nphs.wales.nhs.uk:8080/PRIDDocs.nsf/7c21215d6d0c613e802 56f490030c05a/d488a3852491bc1d80257f370038919e/\$FILE/ACE%20Rep ort%20FINAL%20(E).pdf [Accessed: 3 April 2017].

Redshaw, M. & Henderson, J. (2013) From Antenatal to Postnatal Depression: Associated Factors and Mitigating Influences. *Journal of Women's Health*.

[Online] 22 (6), 518-525. Available from: doi:10.1089/jwh.2012.4152.

Scottish Intercollegiate Guidelines Network (2012) *Management of Perinatal Mood Disorders*. [Online]. Available from:

http://www.sign.ac.uk/pdf/sign127.pdf.

StatsWales (n.d.) Part 1: Local Primary Mental Health Support Services. [Online]. StatsWales. Available from:

https://statswales.gov.wales/Catalogue/Health-and-Social-Care/Mental-Health/Mental-Health-Measure/Part-1.

Welsh Government (2016a) *Minister announces extra staff to support new mothers*. [Online]. 10 March 2016. Available from:

http://gov.wales/newsroom/health-and-social-services/2016/160310staff/?lang=en [Accessed: 27 April 2017].

Welsh Government (2014) *Review of access to, and implementation of, psychological therapy treatments in Wales*. [Online]. Available from: http://gov.wales/docs/dhss/publications/141024therapyen.pdf [Accessed: 27 April 2017].

Welsh Government (2016b) *Together for Mental Health Delivery Plan 2016–19*. [Online]. Available from:

http://gov.wales/docs/dhss/publications/161010deliveryen.pdf [Accessed: 27 April 2017].

World Health Organization (2016) *Mental health: strengthening our response*. [Online]. April 2016. WHO. Available from:

http://www.who.int/mediacentre/factsheets/fs220/en/ [Accessed: 18 April 2017].

Wrexham Glyndŵr University (2014) *New project to support 4,500 young families in North Wales*. [Online]. 2014. Wrexham Glyndŵr University.

# Available from:

https://www.glyndwr.ac.uk/en/AboutGlyndwrUniversity/Newsandme diacentre/Newsarchive/PressReleases2014/ASPIREproject/ [Accessed: 13 April 2017].