Public health and wellbeing: A matter for the midwife?

Abstract

This paper will provide a critical narrative review of public health interventions in pregnancy and the role of the midwife in public health. The historical and political context of public health and midwifery will be examined to give a background to the current midwifery public health agenda. The article will identify specific public health interventions used in pregnancy by midwives and assess how midwives perceive their role in implementing them.

Midwives are important public health practitioners, who alongside other agencies can make a long-term, positive contribution to the life course of women and their families.

Keywords: Public health, Midwives, Domestic violence, Smoking cessation, Mental health

Katy Crabbe
Midwife
Salisbury Foundation Trust

Ann Hemingway
Senior Lecturer Public Health
HSC Bournemouth University

Public health is an important part of the midwife's role. Naidoo and Wills (2000: 181) define public health as:

- A concern for the health of the whole population
- A concern for the prevention of illness
- A recognition of the many social factors which contribute to health.

Wanless (2004) takes the traditional view of public health further and places responsibility on society, organisations, communities and individuals to implement public health improvement through their organised efforts. Thus every individual has a role in public health and should take responsibility for health promotion, disease prevention and prolonging life.

Public health seeks to protect and improve the health of communities, identifying causes of poor health, disease and illness in a population and examining it from the wider social and economic standpoint. It makes links between factors such as employment and education to the level of health and wellbeing in and across populations, with the aim of positively impacting the wider social determinants of health and wellbeing.

Pregnancy and the postnatal period offers maternity care providers the opportunity to maximise the health and wellbeing of women and their families. Women may see many different health professionals during their pregnancy but the midwife is in a unique position to be able to build a relationship and have an impact on public health—both in the short and long term through continuity of care.

However, in 2012 there were 694 241 babies born in England, but the number of midwives working in the NHS in 2012 was only suitable for 565 245 births (Royal College of Midwives (RCM), 2013). The midwifery workload is further burdened with the higher numbers of complex pregnancies. These factors may potentially affect the equality of provision of maternity services in the UK.

The focus of a public health intervention in developed countries is less about managing contagious disease, as it was in the past, but about managing and preventing health conditions through surveillance and the promotion of healthy lifestyles and communities; therefore promoting positive long-term health outcomes.

Public health interventions are varied in pregnancy and range from smoking cessation support, identification of mental and emotional health problems to supporting families where domestic abuse has been identified. Midwives are also involved in identifying female genital mutilation (FGM), promoting healthy eating and weight and promoting breastfeeding. Screening in pregnancy, whooping cough and flu vaccination are other public health interventions carried out on a daily basis in maternity care.

The political and historical context of midwifery and public health

Public health has been central to maternity services throughout history, despite not always being recognised or acknowledged.

In the late 1880s, The Midwives' Institute (now the RCM) campaigned for the training and practice of midwives to be regulated, which resulted in the Midwives Act (1902) and the Maternal and Child Welfare Act of 1918 (Hendrick, 2003). This enabled regulation of a profession in which many practitioners were unqualified and uncertified. There was little in the way of preventative antenatal care that identified medical and obstetric conditions and it was not until the 1920s that systematic attempts at providing a schedule of antenatal care succeeded (McIntosh, 2010). By the 1930s a national maternity service had been established, coordinated by local public

health authorities, and provided in the homes of women and families. However, over the next few decades midwifery gradually moved into a more institutionalised and medicalised model of care (Johanson et al, 2002). The dominating public health messages at this time revolved around reducing neonatal and maternal mortality. Maternal and child welfare, health visiting, school medicine, venereal diseases and learning disabilities were the main population health concerns (Harris, 2004).

Changing Childbirth (Department of Health (DH), 1993) initiated the move away from the medicalisation of maternity care back towards normalisation and services that were flexible and responsive to the families they cared for. As a result, public health once again became a more visible part of the midwife's role.

Today, there is an increasing emphasis on the psychological and social needs of pregnant women. For midwives, evidence such as the Confidential Enquiry into Maternal and Child Health (CEMACH, 2004; 2007) supports the impact that public health has on mortality and morbidity of women and babies and requires maternity services to act to reduce risk.

Furthermore, Public Health England is encouraging every nurse, health visitor and midwife to become health-promoting practitioners by using their knowledge and skills to improve the health and wellbeing of the public (DH, 2013a).

Politics and policy drive the public health agenda in the UK. The recent compassion in practice guidance (DH, 2013b) focuses on reducing inequalities through improving maternal and population health. It confirms that partnership working between agencies, rather than midwives working in isolation, is the most successful approach to ensure the best start in life and achieve a healthy life expectancy.

What does being healthy in pregnancy mean?

All health professionals should have an understanding of the concept of health. Midwives particularly are aware of looking holistically at an individual to gauge the health of the woman and her unborn child.

There are many definitions of health, the World Health Organization (WHO) first attempted to define health in its broader sense in 1946 as:

> ***'A state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity.'***

Although the WHO definition started a change in the traditional thinking that good health encompassed the absence of disease, the inclusion of the word 'complete' means that it would be unlikely an individual could be healthy for a reasonable length of time (Üstün and Jakob, 2005). Huber et al (2011) describes health as the ability to adapt and self-manage in the face of social, physical, and emotional challenges. In comparison, Baggot (2011) divides the traditional biomedical concept of health to a positive perspective, which also considers the social, environmental and psychological aspects of health. Other definitions agree that health is holistic and includes different dimensions, each of which need to be considered (Naidoo and Wills, 2000).

On the understanding that health is more than the absence of disease, it is appropriate that approaches to public health are based on participation, collaboration, cooperation and empowerment for them to be effective (Davies and Foley 2007). Pregnancy is potentially the only time women come into contact with health professionals on a regular basis for an intense period of time. It provides a unique opportunity for women to make lifestyle changes with the support of a health professional. However, it must be considered that each pregnancy is different and each woman has different needs that may affect her pregnancy.

Pregnancy and wellbeing

Although subjective, the two main approaches to wellbeing measure the extent to which physical and psychological needs are met, as well as the realisation of potential or the ability of a person to evolve and flourish (Hemingway, 2011). WHO (2008) identifies several areas that have an impact on health and wellbeing, pregnancy and early childhood experience. A child's experience in its early life sets a foundation for the entire life course. A child's early physical, social, emotional and language development, strongly influences outcomes through life (Allen, 2011). The social determinants of health are the distribution among the population of social and economic conditions which affect a populations health and wellbeing, such as local economy, culture, community and lifestyle (Barton and Grant, 2006).

In relation to the role of public health and midwifery, stress in pregnancy, poverty and social exclusion are known to be linked to preterm delivery, low birth weight and higher rates of maternal mental health problems (Al-Saleh and Renzo, 2009), all of which affect a child's early life experience. Thus, where a woman lives, her employment status, her networks within a

community and the lifestyle and demographics of people living in her population will have an effect on her health and that of her unborn baby.

McCulloch's (2001) study of social gradients and teenage pregnancy illustrated that teenage pregnancy and teenage parenting show social gradients in the expected direction with high rates of pregnancy associated with high levels of deprivation. In another study, Spencer (2006), noted that women who had been in a manual working class social group at birth were more likely to be affected by other negative social gradient factors throughout their life course.

It is not always one determinant that affects health outcomes. It is therefore vital that midwives work in partnership with other agencies such as health, social and voluntary agencies as this is key to empowering and supporting women to enable good health and wellbeing. This may be through helping women to widen their social networks, manage finances or through health promotion. In addition, it is important to have an awareness of the context of the individual or population's lives, including where they live, the economic situation and social support.

It is therefore important that maternity services place the mother and her baby at the centre of care, and plan and provide services to meet their needs (DH, 2004). The focus for midwives must be on the woman as an individual, while taking into account the context within which she lives her life. Therefore consideration needs to be given to her health, her wellbeing and the factors that might affect them.

Midwives and their public health role

Midwives are experts in taking a holistic view of the woman and her baby, identifying pregnancy-related health needs and referring to medical colleagues when required. Midwives support 'populations' of women who have differing expectations and needs, for example pregnant teenagers or travelling communities. They also care for groups of women who have specific health needs, such as mental health problems, where specific tailored care is required for that group.

Despite evidence that links the importance of midwives in having a public health role (International Confederation of Midwives, 2012), midwifery's dominant influence is the medical model of care, without an acknowledgment of the social context in which childbirth occurs (Kitzinger, 2005). The acknowledgement of public health strategies should be central to midwifery practice if midwives are to positively influence long-term health outcomes of women and their families. However, Carlson (2005) highlighted the professional and structural barriers to midwives recognising their contribution to public health. The Nursing and Midwifery Council (2008) is clear that midwives should be actively encouraging women to think about their own health and the health of their babies and families, and how this can be improved as well as providing the traditional biomedical care.

McNeill et al (2012a) completed a systematic review of public health interventions in midwifery. They identified 36 systematic reviews that examined a diverse range of public health interventions. The review's overarching finding was that gaps exist in knowledge around the impact of midwifery practice on public health outcomes. The review identified limited systematic evidence to support the implementation of midwifery interventions and highlighted the difficulty in measuring impact due to some interventions not being well evaluated. Throughout the research, similar themes can be noted which include lack, or perceived lack, of knowledge, confidence in delivering public health strategies and the research focus on the biomedical element of midwifery practice, with limited research on midwives' delivering public health strategies. Studies that explore midwives preparation for their public health role are relatively limited. McNeill et al (2012b) used mixed methods to examine the public health education in pre-registration midwifery, finding that it was generally not taught as a separate subject but combined with other aspects of the course. This is an important point if midwives are to address the public health agenda and improve outcomes; it is vital that they are equipped with the theoretical knowledge at the start of their career to proceed.

A plethora of policies and documents have been released by the Government which focus on public health, in order to reduce health inequalities and increase long-term health outcomes at the individual and community level (Wanless, 2004; DH, 2009; DH, 2010; Marmott, 2010; DH, 2011). Topics such as breastfeeding, obesity, early intervention and FGM are frequently discussed.

Domestic abuse

The identification of domestic abuse is a key public health issue in which midwives are central. More than 30% of domestic abuse begins in pregnancy (CEMACH, 2007), having a significant impact on the woman and her unborn baby's physical and emotional health. Caution should be exercised when looking at statistical evidence surrounding domestic abuse as it is evidenced to be under

reported (WHO, 2005). However, this further illustrates a potential for midwives to fulfil their role as being key to identifying and supporting women where domestic abuse is present. Domestic abuse in pregnancy is defined as any incident or pattern of incidents of controlling, coercive or threatening behaviour, violence or abuse between those aged 16 or over who are or have been intimate partners or family members regardless of gender or sexuality (Walby and Allen, 2004).

Lazenbatt (2005) examined how midwives perceive their role in raising the issue of domestic abuse with women. In a study of 448 midwives from different areas of practice only 28% of midwives directly raised the issue of abuse with women. The presence of a partner was identified as a main barrier to routine questioning; this is supported by the evidence (Stenson et al, 2001; Salmon et al, 2006) and is a challenging barrier to overcome. Salmon et al (2007) also identified midwives' concerns around personal risk in domestic abuse situations specifically as many midwives are lone workers. When questioning midwives about their perceived role in identifying domestic abuse, Lazenbatt et al (2005) noted that confidence was a major factor in dealing with issues around addressing domestic abuse. Buck and Collins (2007) completed a systematic review of 13 studies examining midwives' identification of domestic abuse and agreed that confidence was an issue for practitioners but also identified time being a factor in midwives' ability to address domestic abuse. Historically, midwives have found it difficult to identify child or domestic abuse. However, in a 5 year follow-up of the Bristol Domestic Abuse Enquiry Programme, researchers noticed that midwives had begun to feel more confident in their ability to ask about abuse in the home as well as a statistically significant increase in self-reported knowledge on how to deal with disclosure of violence (Baird et al, 2013). This illustrates that with the instigated mandatory training throughout the UK, midwives are becoming more proficient at carrying out this vital public health enquiry and providing interventions to deal with disclosure. A Swedish study by Finnbogadottir and Dykes (2010) looked to explore midwives' awareness of a clinical experience regarding domestic abuse and supports the view that continuous education and professional support is vital.

Smoking cessation

Smoking remains one of the few modifiable risk factors in pregnancy; however, just over 12.7% of women still smoke in pregnancy in the UK (Health and Social Care Information Centre, 2014). These figures, looking at smoking status at time of delivery note that this is the lowest rate in 8 years indicating that the public health message may be getting through. Midwives' perceptions of their role in giving smoking cessation advice has shown to be dependent on the outcome of advice previously given, personal experience and their relationship with the client (Herberts and Sykes, 2012). Midwives were not noted to perceive smoking cessation support as a negative part of their role but often prioritised other areas due to the extent of their responsibilities. This is a common theme in research on midwives and public health, with prioritisation going to the biomedical aspects of the midwife's role. It has been evidenced that the majority of midwives feel a professional responsibility to intervene with smokers but felt that there are often personal and organisation barriers to providing an effective service (Bull, 2007).

Perinatal mental health

Perinatal mental health as a public health concern has been highlighted through the confidential enquires into maternal deaths, with findings that point to suicide or psychiatric causes as the leading cause of maternal death in the UK (Royal College of Obstetricians and Gynaecologists, 2004). In a study by Lavender et al (2001), which assessed midwives' attitudes into taking a greater public health role by looking at specific areas including postnatal depression, the researchers found that midwives felt that they could make 'a lot' of difference. However, midwives did highlight the need for adequate training resources and time to implement changes. Jones et al (2010) agree; in their study of 815 Australian midwives' perceived lack of competence was considered to be the main barrier rather than lack of interest.

In a study that examined midwives' attitudes to assessing mental health problems in pregnancy, Ross-Davie et al (2006) surveyed 187 midwives working in inner London to answer the question: 'are midwives ready for the development of their public health role in mental health?' They found positive attitudes among midwives wanting to take on a more developed role. Midwives responded that they felt screening for mental health problems should be a core part of their role. As with findings in previous studies, midwives highlighted the need for increased education and training around identification and increasing confidence to support women. Midwives need to have an understanding of mental health conditions to be able to screen effectively, identify symptoms and be able to refer appropriately. In a further study by Elliott et al

Key points

- Public health is central to the role of a midwife but it is often not acknowledged
- Midwives must recognise that the needs of each individual are very different and the woman should be at the centre of care
- Midwives must work in partnership with other agencies and not in isolation to affect public health outcomes
- The role of the midwife and public health has an impact on a child's life course
- Confidence and training are required to address domestic violence, smoking cessation and mental health problems

(2007) following a training session for midwives, an improvement was noted in recording of mental health problems in the notes. This, however, was a service innovation and not performed as a research study so it is difficult to ascertain the reliability of results. However, this provides some assistance in promoting the need for further research into training and the provision of resources to assist midwives to realise their full potential in perinatal mental health screening.

Home visiting, parenting programmes and peer support have all been shown to improve perinatal mental health outcomes (Elkan et al, 2000; Barlow et al, 2004; Shaw et al, 2006; National Institute for Health and Care Excellence, 2007; Olds et al 2007). Exclusive breastfeeding also has been found to reduce the incidence of postnatal depression (Figueiredo et al, 2013) as long as the woman did not have a negative breastfeeding experience (Watkins et al, 2011).

Conclusion

Both research and policy point to public health having a greater prominence in the midwifery agenda. Internationally, the midwifery agenda is focusing on the importance of midwives and their role in improving the health of mothers and babies (DH, 2013b). In the UK, compassion in practice and the importance of adopting the 6 Cs into everyday midwifery care remains a high priority (Cummings, 2012) to ensure safe transparent care. Although midwives have always provided public health interventions, it has not always been recognised that they are pivotal public health practitioners. The evidence concludes that research is still scarce on midwives and public health, particularly around perceptions of their public health role. However, the available research shows that midwives are increasingly engaging with the public health agenda. Barriers have been identified and midwives themselves note that public health strategies are difficult to deliver due to constraints on time and resources as well as training and education.

To be effective, midwives need to be able to work in collaboration with other agencies such as social care and voluntary services. Commissioners and managers should consider the evidence for specialist midwives who focus on the health of the local community and who would enable targeted action for vulnerable groups. Educational establishments must ensure that public health is high on the agenda for midwifery students' education so that they have the tools and knowledge to see themselves as pivotal public health practitioners.

Midwives are in a unique position to support women to make healthy choices throughout their pregnancy and beyond to prevent ill health and promote health in line with the increasing recognition of the importance of maximising health for infants and children at the start of their lives. Midwives provide a range of public health interventions on a regular basis, but do not always place this intervention in the public health context, considering the long-term wellbeing of maternal and infant health. Midwives, managers and public health authorities all need to take responsibility for midwives to become a more pivotal part of the public health team. **BJM**

Al-Saleh E, Renzo GCD (2009) Actions needed to improve maternal health. *Int J Gynaecol Obstet* **106**(2): 115–9. doi: 10.1016/j.ijgo.2009.03.021

Allen G (2011) *Early Intervention: The next steps.* www.gov.uk/government/uploads/system/uploads/attachment_data/file/284086/early-intervention-next-steps2.pdf (accessed 15 June 2014)

Baggott R (2011) *Public Health Policy and Politics.* Palgrave Macmillan, Basingstoke

Baird K, Salmon D, White P (2013) A five year follow up study of the Bristol Pregnancy domestic violence programme to promote routine enquiry. *Midwifery* 29(8): 1003–10. doi: 10.1016/j.midw.2013.01.007

Barlow J, Coren E (2004) Parent-training programmes for improving maternal psychosocial health. *Cochrane Database Syst Rev* (1):CD002020

Barton H, Grant M (2006) A health map for the local human habitat. *J R Soc Promot Health* **126**(6): 252–3

Buck L, Collins S (2007) Why don't midwives ask about domestic abuse? *British Journal of Midwifery* **15**(12): 753–8

Bull L (2007) Smoking cessation intervention with pregnant women and new parents (part 2): A focus group study of health visitors and midwives working in the UK. *J Neonat Nurs* **13**(5): 179–85

Carlson C (2005) Expanding horizons: Developing a public health perpective in Midwifery. In: Lúanaigh PO, Carlson C *Midwifery and Public Health: Future Directions, New Opportunities*. Elsevier Health Sciences, Oxford

Confidential Enquiry into Maternal and Child

Health (2004) *Why Mothers die 2000-2002. The sixth report of the confidential enquires into maternal deaths in the United Kingdom*. http://www.hqip.org.uk/assets/NCAPOP-Library/CMACE-Reports/33.-2004-Why-Mothers-Die-2000-2002-The-Sixth-Report-of-the-Confidential-Enquiries-into-Maternal-Deaths-in-the-UK.pdf (accessed 14 August 2014)

Confidential Enquiry into Maternal and Child Health (2007) *Saving Mothers' Lives: Reviewing maternal deaths to make motherhood safer 2003-2005 Summary and Key Recommendations for Midwives.* www.mdeireland.com/pub/SML07_Midwifery_Summary.pdf (accessed 14 August 2014)

Cummings J (2012) *Compassion in practice: nursing, midwifery and care staff – our vision and strategy.* NHS Commissioning Board, London

Davies J, Foley P (2007) Partnerships and alliances for health. In: Lloyd E, Handsley S, Douglas J, Earle S, Spurr S (2007) *Policy and practice in promoting public health.* The Open University, Milton Keynes

Department of Health (1993) *Changing Childbirth: Report of the Expert Maternity Group*. HMSO. London

Department of Health (2004) *National Service Framework for Children, Young People and Maternity Services.* HMSO. London

Department of Health (2009) *The Healthy Child Programme: Pregnancy and the first five years of life.* DH, London

Department of Health (2010) *Healthy Lives Healthy People: our strategy for public health in England*. DH, London

Department of Health (2011) *Multi-agency Practice Guidelines: Female Genital Mutilation.* DH, London

Department of Health (2013a) *Public Health England: Nursing and Midwifery contribution to Public Health.* www.gov.uk/government/uploads/system/uploads/attachment_data/file/210100/NMR_final.pdf (accessed 18 August 2014)

Department of Health (2013b) *Midwifery Public Health contribution to Compassion in Practice through maximising wellbeing and improving health in women, babies and families.* DH, London

Elkan R, Kendrick D, Hewitt M, Robinson JJ, Tolley K, Blair M, Dewey M, Williams D, Brummell K (2000) The effectiveness of domiciliary health visiting: a systematic review of international studies and a selective review of the British literature. *Health Technol Assess* **4**(13): i–v, 1–339

Elliott SA, Ross-Davie M, Sarkar A, Green L (2007) Detection and initial assessment of mental disorder: the midwife's role. *British Journal of Midwifery* **15**(12):759-764

Figueiredo B, Dias CC, Brandão S, Canário C, Nunes-Costa R (2013) Breastfeeding and postpartum depression: state of the art review. *J Pediatr* **89**(4): 332–8. doi: 10.1016/j.jped.2012.12.002

Finnbogadottir H, Dykes AK (2010) Midwives' awareness and experiences regarding domestic violence among pregnant women in southern Sweden. *Midwifery* **28**(2): 181–9. doi: 10.1016/j.midw.2010.11.010

Harris B (2004) *The Origins of the British Welfare State, Social Welfare in England and Wales, 1800–1945.* Palgrave Macmillan, Basingstoke

Health and Social Care Information Centre (2014) *Statistics on Women's Smoking Status at Time of Delivery - England, Quarter 4, 2013-14*.http://www.hscic.gov.uk/article/2021/Website-Search?productid=14841&q=2014+smoking+pregnancy&sort=Relevance&size=10&page=1&area=both#top (accessed 20 July 2014)

Hemingway A (2011) Lifeworld Perspectives and Well being: Relevant for Public Health? *Int J Qual Stud Health Well-being* **6**(4) doi: 10.3402/qhw.v6i4.10364

Hendrick H (2003) *Child Welfare: England 1872-1989.* Routledge, London

Herberts C, Sykes K (2012) Midwives' perceptions of providing stop-smoking advice and pregnant smokers' perceptions of stop-smoking services within the same deprived area of London. *J Midwifery Womens Health* **57**(1): 67–73. doi: 10.1111/j.1542-2011.2011.00072.x

Huber M, Knottnerus JA, Green L, van der Horst H, Jadad AR, Kromhout D (2011) How should we define health? *BMJ* 343: d4163

International Confederation of Midwives (2012) *International definition of the midwife. The Hague-the Netherlands: international confederation of midwives.* www.internationalmidwives.org/Portals/5/2011/Definition%20of%20the%20Midwife%20-%202011.pdf (accessed 20 July 2014)

Johanson R, Newburn M, Macfarlane A (2002) Has the medicalisation of childbirth gone to far? *BMJ* **324**(7342): 892–5

Jones CJ, Creedy DK, Gamble JA (2010) Australian midwives' attitudes towards care for women with emotional distress. *Midwifery* **28**(2): 216–21. doi: 10.1016/j.midw.2010.12.008

Kitzinger S (2005) *The Politics of Birth*. Elseiver, Edinburgh

Lavender T, Bennet N, Blundell J, Malpass L (2001) Midwives views on re-defining midwifery 1: health promotion. *British Journal Of Midwifery* **9**(11): 666–70 http://dx.doi.org/10.12968/bjom.2001.9.11.9409

Lazenbatt A, Cree L, McMurray F (2005) The use of exploratory factor analysis in evaluating Midwives attitudes and stereotypical myths related to the identification and management of DV in practice. *Midwifery* **21**: 322–34

Marmot M (2010) *Fair society, healthy lives.* www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review (accessed 16 August 2014)

McCulloch A (2001) Teenage childbearing in Great Britain and the spatial concentration of poverty households. *J Epidemiol Community Health* **55**(1): 16–23

McIntosh T (2010) Exploring the history of birth: a case study of midwifery care in the 1930's. *MIDIRS* **20**(2): 159–63

McNeill J, Lynn F, Alderdice F (2012a) Public health interventions in midwifery: a systematic review of systematic reviews. *BMC Public Health* **12**:955. doi: 10.1186/1471-2458-12-955

McNeill J, Doran J, Lynn F, Anderson G, Alderdice F (2012b) Public health education for midwives and midwifery students: a mixed methods study. *BMC Pregnancy Childbirth* **12**: 142. doi: 10.1186/1471-2393-12-142

Naidoo J, Wills J (2000) *Health Promotion: Foundations for Practice.* Bailliere Tindall, London

National Institute for Health and Care Excellence (2007) *Antenatal and Postnatal Mental Health: Clinical management and service guidance*. NICE, London

Nursing and Midwifery Council (2008) *The Code - Standards of Conduct, Performance and Ethics for*

Nurses and Midwives. NMC, London

Olds DL, Kitzman H, Hanks C, Cole R, Anson E, Sidora-Arcoleo K, Luckey DW, Henderson CR Jr, Holmberg J, Tutt RA, Stevenson AJ, Bondy J (2007) Effects of nurse home visiting on maternal and child functioning: age-9 follow-up of a randomized trial. *Pediatrics* **120**(4): e832–45

Ross-Davie M, Green L, Elliott SA (2006) A public health role for perinatal mental health: are midwives ready? *British Journal of Midwifery* **14**(6): 330-5

Royal College of Obstetricians and Gynaecologists (2004) *Confidential Enquiry into Maternal and Child Health. Why mothers die 2000 to 2002*. RCOG Press, London

Royal College of Midwives (2013) *State of Maternity Services Report*. www.rcm.org.uk/sites/default/files/State%20of%20Maternity%20Services%20report%202013.pdf (accessed 15 August 2014)

Salmon D, Murphy S, Baird K, Price S (2006) An evaluation of the effectiveness of an educational programme promoting the introduction of routine antenatal enquiry for domestic violence. *Midwifery* **22**(1): 6–14

Salmon D, Baird K, Price S (2007) Does routine antenatal enquiry lead to an increased rate of disclosure of domestic abuse? Findings from the Bristol Pregnancy and Domestic Violence Programme. *Evidence Based Midwifery* **5**(3): ISSN 1479-4489

Shaw E, Levitt C, Wong S, Kaczorowski J; McMaster University Postpartum Research Group (2006) Systematic review of the literature on postpartum care: effectiveness of postpartum support to improve maternal parenting, mental health, quality of life, and physical health. *Birth* **33**(3): 210–20

Spencer N (2006) Explaining the social gradient in smoking in pregnancy: Early life course accumulation and cross-sectional clustering of social risk exposures in the 1958 British national cohort. *Soc Sci Med* **62**(5): 1250–9

Stenson K, Saarinen H, Heimer G, Sidenvall B (2001) Woman's attitudes to being asked about exposure to violence. *Midwifery* **17**(1): 2–10

Üstün B, Jakob R (2005) *Calling a Spade a Spade: Meaningful Definitions of Health Conditions*. www.who.int/bulletin/bulletin_board/83/ustun11051/en/ (accessed 12 August 2014)

Walby S, Allen J (2004) Domestic violence, sexual assault and stalking: Findings from the British Crime Survey. http://www.avaproject.org.uk/media/28384/hors276.pdf (accessed 14 August 2014)

Wanless D (2004) *Securing good health for the whole population*. http://www.southampton.gov.uk/moderngov/documents/s19272/prevention-appx%201%20wanless%20summary.pdf (accessed 12 August 2014)

Watkins S, Meltzer-Brody S, Zolnoun D, Stuebe A (2011) Early breastfeeding experiences and postpartum depression. *Obstet Gynecol* **118**(2 Pt 1): 214–21. doi: 10.1097/AOG.0b013e3182260a2d

World Health Organization (1946) Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.

World Health Organization (2005) *Multi-Country Study on Women's Health and Domestic Violence against Women*. www.who.int/gender/violence/who_multicountry_study/en/ (accessed 12 August 2014)

World Health Organization (2008) Commission on Social Determinants of Health.WHO, Geneva