**Editorial**

**How we deliver Obstetric Care**

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Medical disorders are complicating pregnancy with increasing frequency for many reasons. Women are deferring pregnancy to later years when they more frequently suffer from medical conditions such as hypertension, diabetes or obesity and its associated complications. In addition, childhood illness such as congenital heart disease is increasingly well-managed such that these women are surviving to adulthood and wish to have children.

It is now well-recognised that medical disorders complicating pregnancy are a major cause of maternal morbidity and mortality, worldwide. Globally, indirect causes are responsible for 27% of the mothers who die (1). In the UK, indirect causes of maternal death now outstrip direct causes, overall and at every stage of pregnancy and postpartum. In the latest Confidential Enquiry into Maternal Death and Morbidity in the UK and Ireland (2009-2012) (2), two-thirds (i.e., 168/257of women died from an indirect cause (either medical or mental health), and ~75% (163/215 of those women had a pre-existing medical condition This was after excluding obesity (present in 56/215, 26.0%) which is an independent risk factor for direct maternal death (3). Also, medical co-morbidities increase the risk of *direct* maternal death from the most common obstetric complications. In a UK study of risk factors for the five leading causes of direct maternal death (i.e., eclampsia, pulmonary embolism, severe sepsis, amniotic fluid embolism, and peripartum haemorrhage), medical co-morbidities were the strongest risk factor for direct maternal death in multivariable modelling (3).

There is growing recognition that pregnancy is a ‘stress test’ that reveals underlying subclinical risk and which may be predictive of future long-term health conditions such as diabetes mellitus following gestational diabetes (4) or frank cardiovascular disease and/or stroke following pre-eclampsia, independent of traditional cardiovascular risk markers (5). Thus, these medical complications in pregnancy warrant ongoing management and screening to potentially reduce long-term morbidity.

Calls have been made to improve the care of women with medical problems before, during, and after pregnancy (2). This should include readily available, expert, multidisciplinary preconception counselling services; patient centred multidisciplinary pregnancy management and models of postpartum management that recognise pregnancy complications as risk factors for future health problems.

How that can be accomplished is likely to be different even within well-resourced environments and potentially more difficult in under-resourced settings. In this edition of Obstetric Medicine, we present the first in a series describing the organisation of obstetric medical services in Canada where there is strong interest in the delivery of these services within medical and obstetric communities.

References

1. Say L, Chou D, Gemmill A, et al. Global causes of maternal death: a WHO systematic analysis. Lancet Glob Health 2014; 2: e323–33.

2. Knight M, Kenyon S, Brocklehurst et al (Eds.) on behalf of MBRRACE-UK. Saving Lives, Improving Mothers’ Care - Lessons learned to inform future maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2009–12. Oxford: National Perinatal Epidemiology Unit, University of Oxford 2014. ISBN 978-0-9931267-1-0

3. Nair M, Kurinczuk J, Brocklehurst Pet al. Factors associated with maternal death from direct pregnancy complications: a UK national case-control study. BJOG 2015;122(5):653-662.

4. Charach R, Wolak T, Shoham-VardiI et al. Can slight glucose intolerance during pregnancy predict future maternal atherosclerotic morbidity? Diabet Med. 2015 Nov 25. doi: 10.1111/dme.13036. [Epub ahead of print]

5. Schokker SA, Van Oostwaard MF, Melman EM et al. Cerebrovascular, cardiovascular and renal hypertensive disease after hypertensive disorders of pregnancy. Preg Hypertens. 2015 Oct;5(4):287-93.