Severe Maternal Morbidity (SMM)

NATIONAL PERINATAL EPIDEMIOLOGY CENTRE

Based on the findings of Severe Maternal Morbidity in Ireland Annual Report 2014

16 MATERNAL MORBIDITIES

In the NPEC SMM audit, a case of (SMM) was defined as a pregnant or recently-pregnant woman who experienced any one of sixteen maternal morbidities.

61,593

Number of maternities in participating units in 2014

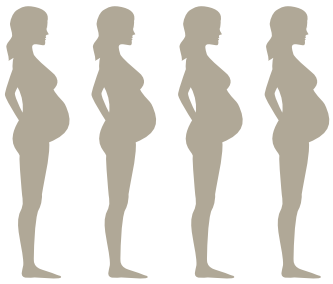
15%

Since 2011 there has been a 15% increase in SMM cases

47%

172 women

(47%) were admitted to Intensive Care Unit/ Critical Care Unit



x4

A multiple pregnancy is associated with more than a fourfold increase risk of SMM

- **47%** Major obstetric haemorrhage
- **11%** Renal or liver dysfunction
- **6%** Peripartum hysterectomy
- **6%** Septicaemic shock
- **5%** Pulmonary embolism
- **4%** Acute respiratory dysfunction
- **3%** Uterine rupture
- **2%** Eclampsia

IN THIS AUDIT A CASE OF (SMM) WAS DEFINED AS A:

- major obstetric haemorrhage (MOH) – estimated blood loss ≥ 2500ml
- uterine rupture
- peripartum hysterectomy
- eclampsia
- renal or liver dysfunction
- pulmonary oedema
- acute respiratory dysfunction
- pulmonary embolism
- cardiac arrest
- coma
- cerebrovascular event
- status epilepticus
- septicaemic shock
- anaesthetic complications
- admission to an intensive care or coronary care unit
- interventional radiology

National recommendations from the NPEC Severe Maternal Morbidity Audit

Based on the findings of Severe Maternal Morbidity in Ireland Annual Report 2014, the NPEC makes the following recommendations:

- All maternity units should continue to collect and submit data on severe maternal morbidity to inform the maternity services through the NPEC national audit on severe maternal morbidity. A multidisciplinary approach, involving consultant obstetricians, consultant anaesthetists, senior midwives and senior trainees is recommended to ensure complete case ascertainment. Regular multidisciplinary meetings may assist this approach.

- Robust clinical audit of perinatal outcomes in all maternity units in Ireland is vital for patient care. Such audit requires the protected time of clinical staff. Funding should be provided by the Health Service Executive (HSE) to ensure that staffing levels allow protected time for clinical audit.

- Formal counselling support should be made available for all women and their partners following a severe maternal morbidity: this is already currently available in some units but not all.

- The NPEC endorses the multidisciplinary training in the management of postpartum haemorrhage advocated by the National Clinical Programme for Obstetrics and Gynaecology. We recommend the development and national implementation of a specific proforma to improve management and documentation during a major obstetric haemorrhage event, whether in the antenatal or postnatal period.

- A quantitative approach involving volume and weight assessment to estimate blood loss should be considered for use in all maternity units. Development of a national tool-kit would assist standardisation of such an approach.

- Ongoing national audit on the provision of critical care in obstetrics is warranted in order to identify the critical care needs for pregnant and recently pregnant women at national level and to inform the planning of maternity services.

- The location where critical care for the pregnant or recently pregnant woman is provided varies across maternity units according to available resources: in small units, critical care is often provided in the ICU/CCU. It is thus recommended that in such units, the appropriate resources and training for the care of the critically ill woman in obstetrics are in place within the ICU/CCU. For maternity units with greater than 2,500 births per annum, consideration should be given to resourcing the unit with the capacity to provide Level 2 Care.

The full report is available on the NPEC website.

National Perinatal Epidemiology Centre
Department of Obstetrics and Gynaecology
University College Cork

5th Floor
Cork University Maternity Hospital
Wilton
Cork

+353 (0)21 420 5053
npec@ucc.ie
www.ucc.ie/en/obsgyn/npec
or @NPEC_UCC

NATIONAL PERINATAL EPIDEMIOLOGY CENTRE

NOCA National Office of Clinical Audit

HSE

UCC University College Cork, Ireland Coláiste na hOllscoile Corcaigh