

EMERGENCY OB FOR RURAL HOSPITAL PRACTITIONERS

Recognising deteriorating patients

COMMON EMERGENCIES

Bleeds

Antepartum Bleeding - Trauma, Accidental /Abruption
- Placenta Praevia./Vasa praevia

- Post partum Bleeding - Homebirth, pre term Birth
- Miscarriage
- Severe Hypertension Pre eclampsia & Eclampsia
- **Sepsis**

INCIDENCE AND MORBIDITY & MATERNAL MORTALITY

- PMMRC NZ Statistics show 17 per 100,000 births (cf 24 10 yrs earlier)
- Increased rate for women over 40 yrs and for Maori/Pacifica
- CAUSES
- Suicide (50% post partum 50% during pregnancy)
- Embolism AFE and VTE
- Sepsis

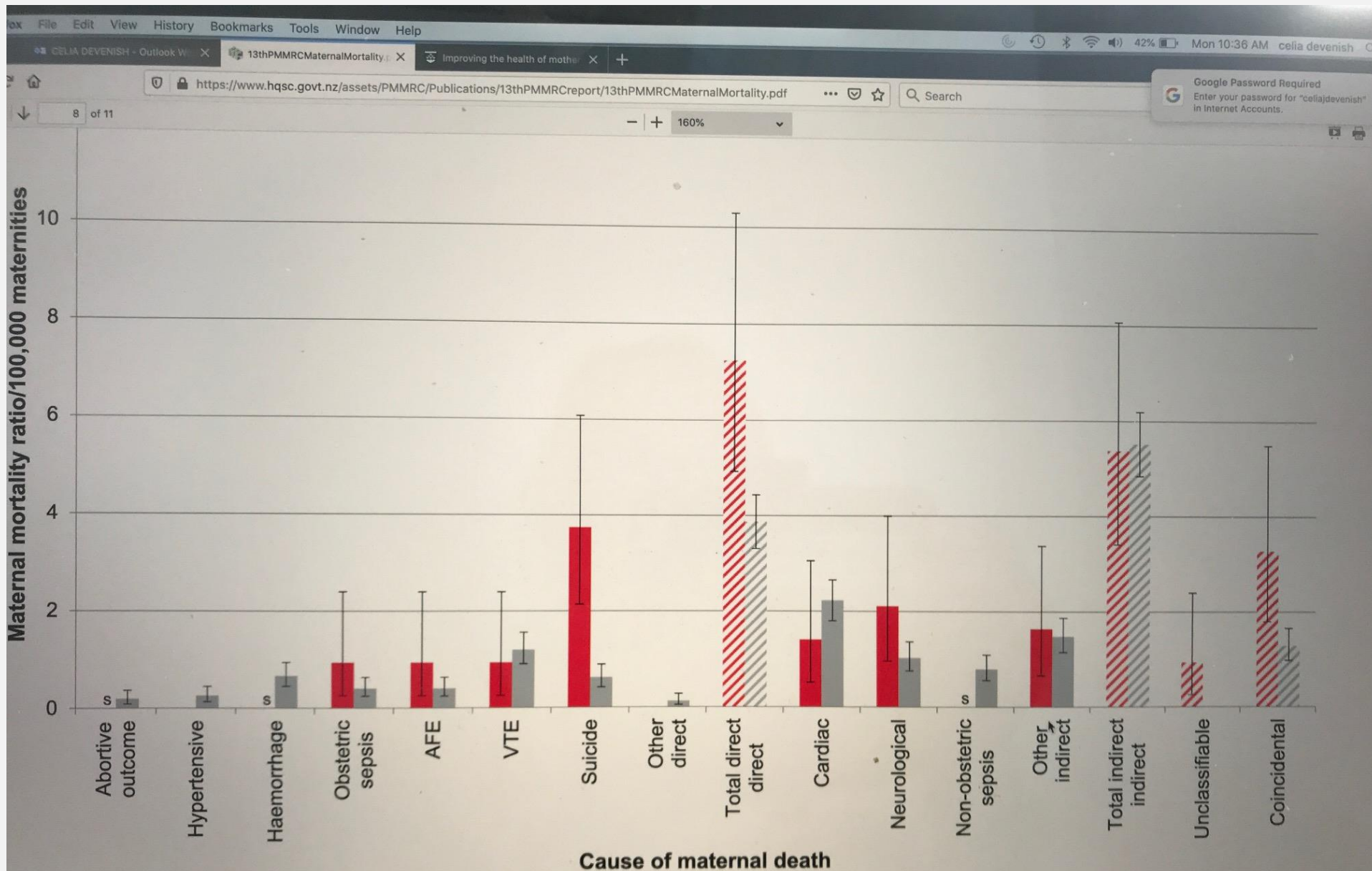
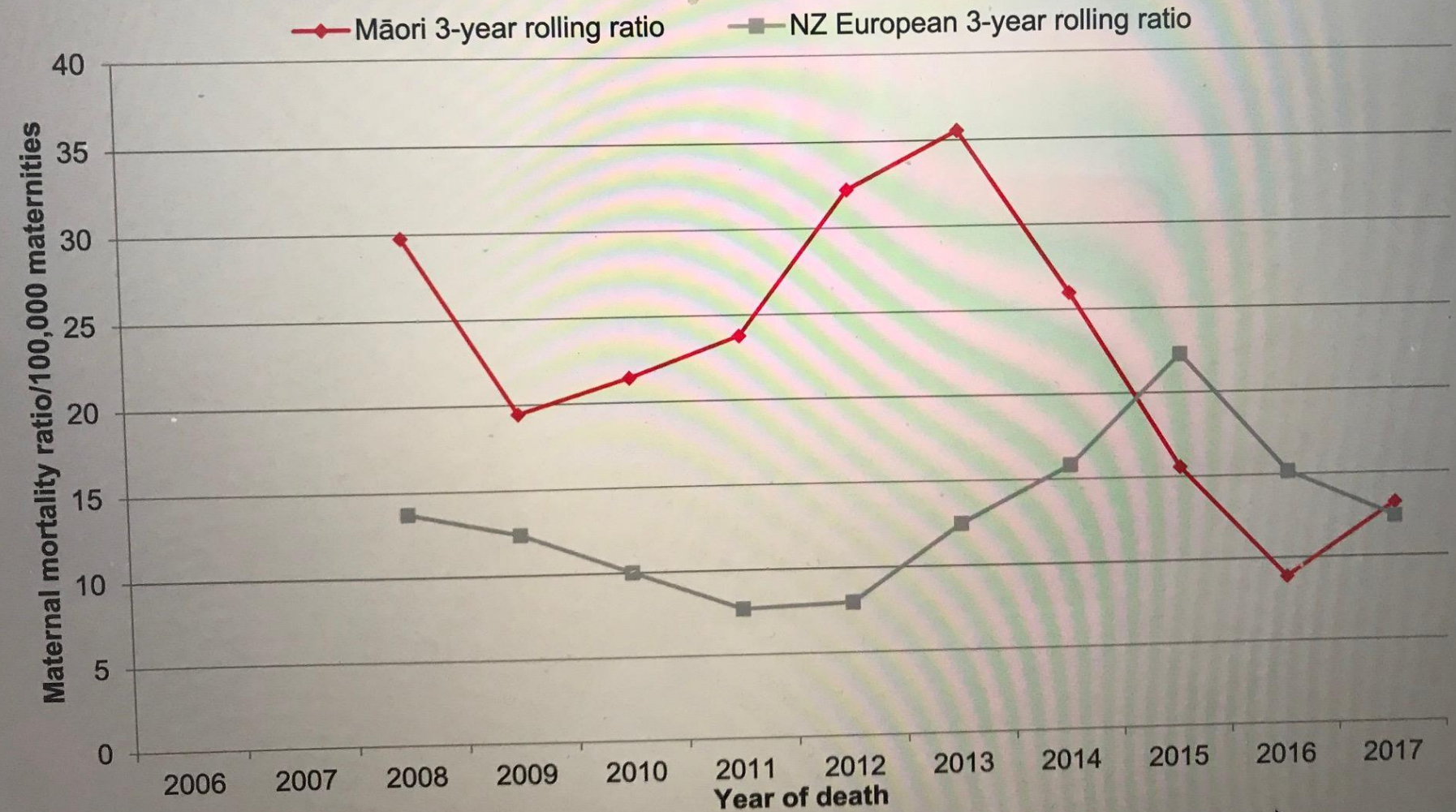


Figure 5.3: Maternal three-year rolling mortality ratios (per 100,000 maternities) by prioritised ethnic group (Māori and New Zealand European) and year 2006–2017



Sources: Numerator: PMRC's maternal mortality data extract 2006–2017; Denominator: MAT data 2006–2017.

RARE BUT OCCUR ANYWHERE

- Pulmonary Embolism
- Amniotic Fluid Embolism (high in NZ stats)
- Cerebral vein thrombosis
- Subarachnoid bleeds
- Trauma. MVA
- Suicide at all gestations (all means including insulin overdose)

RISK FACTORS FOR PREGNANCY BLEEDING

1. What risk factors are there for postpartum haemorrhage (PPH)? What would you do to prevent postpartum haemorrhage?
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3. What are the causes of antepartum haemorrhage (APH)?

PREGNANCY BLOOD VOLUME AND FLOW TO UTERUS

- Blood volume increases and is also related to BMI
- Blood Flow to uterus at term is 500-700ml per minute
- Post partum with or without placenta in situ can rapidly loose 1-2 litres
- Uterine tone required but uterotonics ineffective if clots and accumulated blood remain in uterus
- Manual expression of clots from uterus is required
- WEIGH all blood and swbas/sheets etc to give EBLoss

IMMEDIATE ACTIONS

- Assemble team
- 2x large bore iv access
- Gp and Hold/Cross match. & CBC/haemacue
- MEWS /BP PR /Urinary output fluid balance & IDC
- Bimanual Uterine Compression
- Assess need O neg Blood
- Explain plan /transfer arrangements if required when stabilised

ANTE-PARTUM BLEEDS

- Abruptio Accidental Bleed
- Placental separation may be due to trauma/poor placentation/severe hypertension
- Hard firm uterus associated with poor fetal outcome but mother must be stable before considering transfer
- Praevia can bleed any gestation but chiefly associated with 30 weeks + when lower segment is forming

POST-PARTUM BLEEDS

May be related to

- Tone – ineffective uterine tone
- Trauma to uterus or genital tract
- Tissue – retained placenta or clots
- Thrombin used by DIC eg abruption
- Partial inversion of uterus NB easily missed and profound collapse requires VE to diagnose

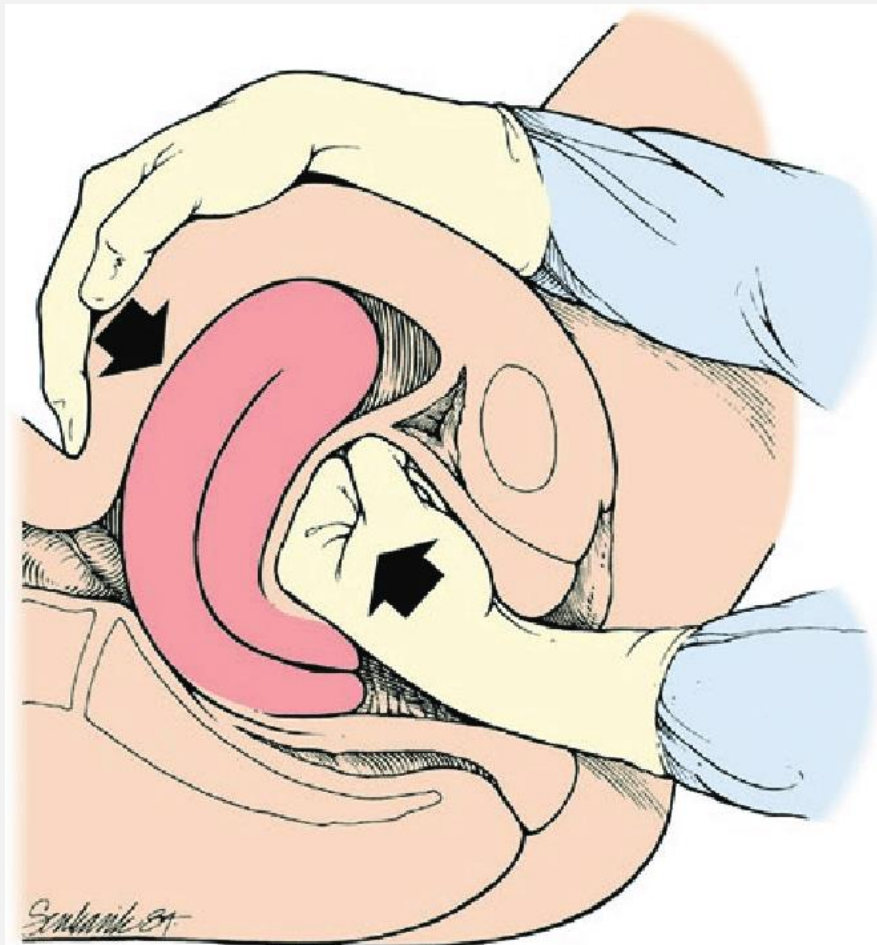
POST-PARTUM UTEROTONICS

- Tranexamic Acid 1 G stat iv
- Syntocinon bolus and infusion
- Syntometrine
- Carboprost 250 ug every 15 mins
- Misoprostol 800mg PR (4x 200mg tablets)

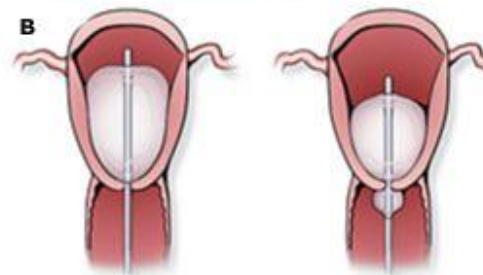
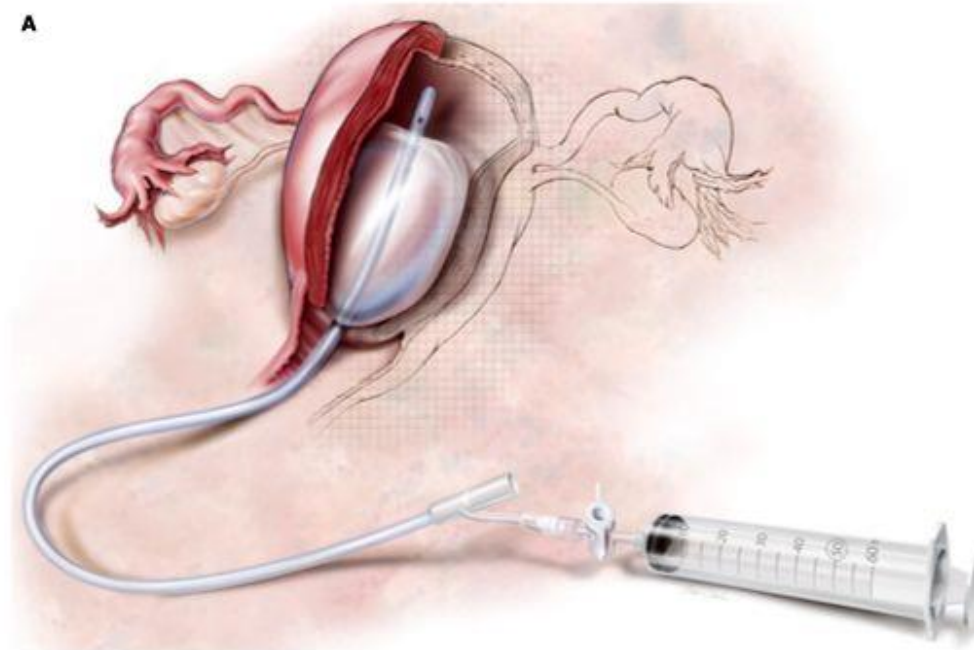
PHYSICAL MEANS TO ASSIST PPH

- Bimanual Compression –do. Ot stop
- Empty bladder IDC
- Bakari Balloon irrespective of complete third stage
- **In hospital theatre** stepwise suture of uterine vessels
- O'leary
- B lynch
- Compression sutures
- Hysterectomy or Interventist Ut Artery

BIMANUAL COMPRESSION



BAKARI BALLOON



SEVERE HYPERTENSION

- 150/ 100 level at which both abruption and intracrainial events occur
- Reduction BP with intermittent LABETALOL 10-20mg boluses, every 10-20 mins. Some units use
- Dropping BP too rapidly can result in fetal compromise
- Hydrallazine alternative and can be used with labtalol as needed
- Nifedipine has risk if using with MgSO₄ iv (in UK maternal deaths associated)

HYPERTENSIVE DISORDERS IN PREGNANCY

- What are the risk factors for pre-eclampsia?
- How does Severe Pre eclampsia present ?

ECLAMPSIA

- Grand Mal Seizures
- FIRST PRIORITY is stabilizing mother, ABCs MgSO₄, BP control,
- Monitor renal function, especially hourly urine output to avoid Mg toxicity
- If fits persist consider intra cranial causes eg bleeds CT scan
- May be part of HELLP and rarely Acute Fatty Liver with liver Failure

HELLP SYNDROME

- Haemolysis, Elevated Liver Enzymes, Low Platelets
- Suspect when fulminating hypertensive course and proteinuria
- Low Platelets can lead into DIC
- Delivery of fetus essential to maternal outcome, so
- Co-ordinating safe transfer to a tertiary Centre with NICU facility key

SEVERE SEPSIS ASSOCIATED WITH PREGNANCY

- May present Antepartum or Post partum
- Vague symptoms which may not include pyrexia
- WBC can be normal or low
- RESPIRATORY RATE the Key
- MEWS chart essential

CAUSES OF SEPSIS

- Can result from
- Maternal infections or
- Ascending infections from genital tract eg
 - Chorioamnionitis and unrecognized PPROM
 - Endometritis post partum
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CONCLUSIONS