



e-BULETIN

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JOHOR MATERNAL MORTALITY

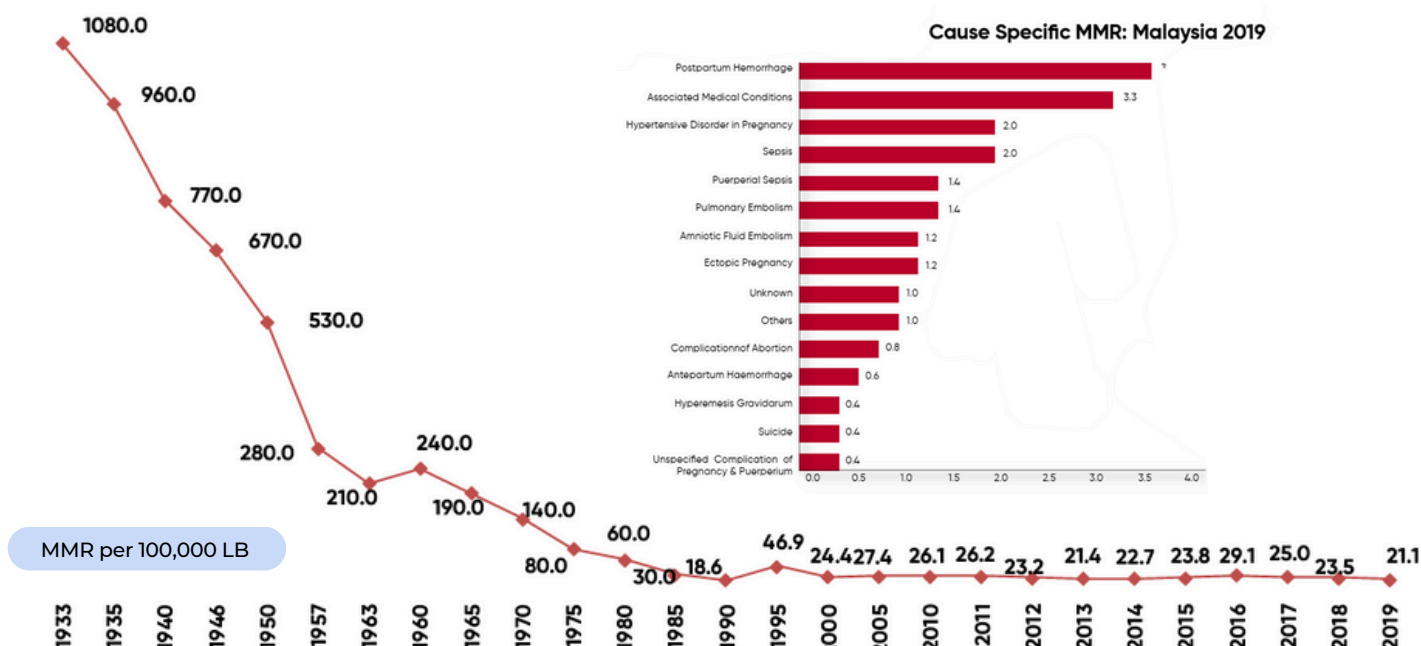
DEFINITION OF MATERNAL DEATH

The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of duration and site of pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

MATERNAL DEATHS MALAYSIA JANUARY – DECEMBER 2024

- The cumulative maternal deaths (from all causes) was 195, a decline as compared to 219 cases during the same period in 2023.
- Number of maternal death in Johor in 2024 (from all causes) is at 28 similar to 2023.

MATERNAL MORTALITY RATIO MALAYSIA 1933-2019



Source of data: Family Health Development Division, Ministry of Health

PLACENTA ACCRETA SPECTRUM DISORDERS

PLACENTA ACCRETA

- Placenta accreta occurs when the placenta grows into the uterine wall during pregnancy. The placental villi extend beyond the confines of the endometrium and attach to the superficial aspect of the myometrium but without deep invasion.
- Normally after childbirth, the placenta separates from the uterine wall, but with placenta accreta it remains attached.
- The condition often occurs without symptoms, and cannot be prevented.
- Common symptoms include painless vaginal bleeding during the third trimester or unexplained anaemia.

EPIDEMIOLOGY

- It occurs approximately 1 in 7000 pregnancies, and the incidence is increasing due to the increased practice of Caesarean sections.
- The combination of a previous Caesarean section and an anterior placenta previa should raise the possibility of a placenta accreta.

- This disease has maternal mortality of up to 7% depending on location.

RISK FACTORS

- A previous Caesarean delivery (C-section) or uterine surgery or uterine curettage
- Whether the placenta covers the cervix (placenta previa) or sits in the lower portion of your uterus
- Multiple pregnancies (twin pregnancy or more)
- Pregnant person age over 35
- Previous deliveries

DIAGNOSIS

- Ultrasound has a sensitivity of 90%, a positive predictive value of 68%, and a negative predictive value of 98% for diagnosis
- MRI may also be considered in certain cases

Features of placenta accreta on ultrasound are:

- loss of the normal hypoechoic plane in the myometrium beneath the placental bed
- presence of multiple placental lacunae

- loss of the normal hyperechoic line separating the urinary bladder wall from the uterus
- thinning of the myometrium to <1 mm
- bulging of the placenta into surrounding organs adjacent to the uterus, causing a mass-like lesion protruding out from the uterine wall

COMPLICATIONS

Placenta accreta is considered a high-risk complication of pregnancy and can cause the following:

- Excessive bleeding before, during, or after delivery that may require a blood transfusion and a stay in the intensive care unit
- Preterm delivery
- Prolonged hospital stay, possibly before delivery
- Hysterectomy (surgical removal of the uterus) which prevents future childbearing
- Surgical injury to organs including the intestines, bladder and ureter.



TREATMENT

- Planned Caesarean delivery at 34-37 weeks gestation by senior specialist.
- Hysterectomy (removal of the uterus) is often necessary to control bleeding

Highlights for primary care providers

- It is empirical to identify patient at risk and refer
- Refer patients early and urgently if having antepartum haemorrhage, APH

Highlights for hospital without specialist care providers

- Identify patient at risk and stabilise cases before transfer.
- To inform and discuss with buddy specialist prior to transfer of cases.
- Arrange for blood transfusion if clinically indicated.

References

1. Penn Medicine's Placenta Accreta Spectrum Center of Excellence website, <https://www.pennmedicine.org/for-patients-and-visitors/patient-information/conditions-treated-a-to-z/placenta-accreta>
2. Placenta Accreta Foundation
3. American College of Obstetricians and Gynecologists: <https://www.acog.org/>
4. Mayo Clinic: 1. Prevention & Treatment of Placenta accreta
5. Radswiki T, Salehzadeh H, Walizai T, et al. Placenta accreta. Reference article, Radiopaedia.org (Accessed on 25 Jul 2025)
6. Esakoff T, Sparks T, Kaimal A et al. Diagnosis and Morbidity of Placenta Accreta. Ultrasound Obstet Gynecol. 2011;37(3):324-7. doi:10.1002/uog.8827 - Pubmed

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