



# E-BULETIN KESIHATAN KELUARGA

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VOL. 1

## JOHOR MATERNAL MORTALITY

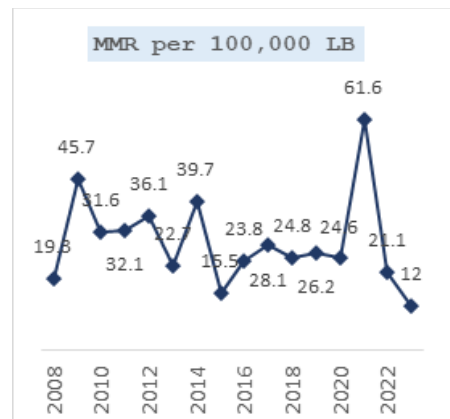
### DEFINITION OF MATERNAL DEATH

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 JOHOR JAN – JUL 2023

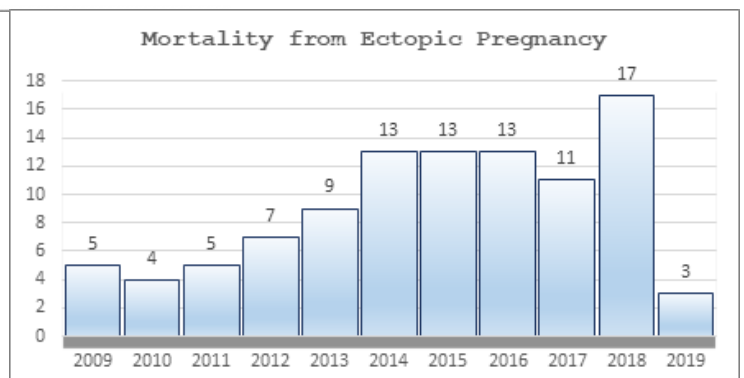
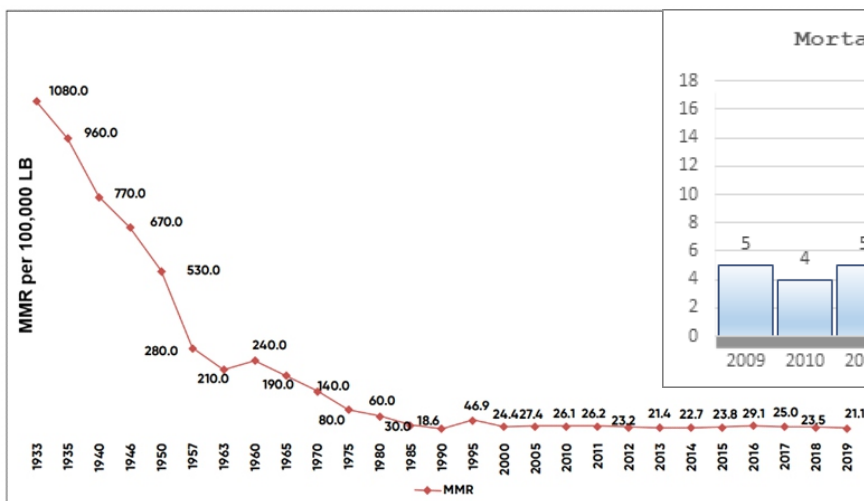
As of August, Johor's maternal mortality ratio (MMR) is at 12 per 100,000 livebirth with the estimated livebirth (LB) 49,990 for 2023. The MMR is the 3rd highest in Malaysia. Johor's MMR is showing a downward trend as compared to 61.6 per 100,000 livebirth in 2021 and 21.1 per 100,000 livebirth in 2022.

### JOHOR'S MMR ANNUAL TREND



Malaysian Maternal Mortality Rate have significantly improved over the years. However, since the year 2000, the rate seems to be plateauing. It is observed that death from ectopic pregnancy is on the rise.

### MATERNAL MORTALITY RATIO MALAYSIA 1933-2019



Source:  
Published data from Family Health Development Division, Ministry of Health & Dept of Statistic Malaysia



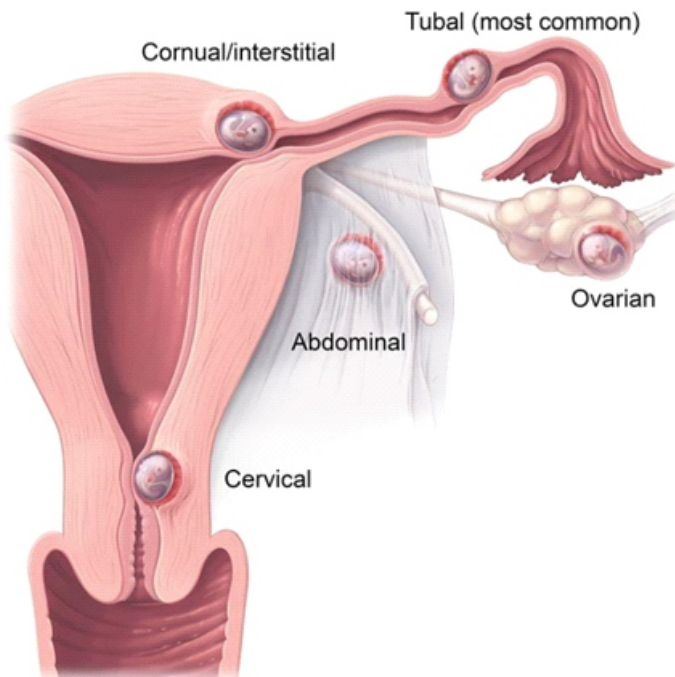
# MATERNAL MORTALITY INVESTIGATION REPORT

Madam X is a middle aged factory operator. She was last pregnant 10 years ago, currently divorced and staying in a workers hostel. She complained of abdominal pain while working during the night shift, however was seen well the following morning. However, at 10PM, she complained of dizziness and weakness, and have to be assisted to a clinic. She was

alert but weak, normotensive but tachycardic. Abdominal examination was unremarkable. Glucometer reading was high. She was diagnosed as Generalised Myalgia and given 2 pints of IV saline. She was discharged with oral rehydration salts and anti-histamine for dizziness. Her pregnancy status was not ascertained. One hour later, she

developed breathing difficulties and became unresponsive. At ED, her GCS was 3/15 and vital signs were unrecordable. She was pronounced dead. Post-mortem revealed 2.5L of hemoperitoneum and a ruptured ectopic pregnancy at ampulla of right fallopian tube corresponding to 8 weeks of gestation.

Substandard care identified were failure to diagnose pregnancy and failure to appreciate the severity of her condition. Pregnancy status should be ascertained in all women of reproductive age group, seeking treatment, irregardless of their marital status. Establishing the last normal menstrual period, performing the urine pregnancy test and early ultrasonography may help early diagnosis of ectopic pregnancy for this case.



“All women of reproductive age, presenting with an acute abdomen should be suspected of having an ectopic pregnancy”

## Ectopic Pregnancy

Ectopic pregnancy is derived from the Greek word ‘ektipas’ which means ‘out of place’. It is a pregnancy that implants outside the uterine cavity or womb. It occurs in 1% to 2% of all pregnancies and of these about 98% implants in the fallopian tube. Other sites for ectopic pregnancy include abdominal cavity, ovaries, cornu of the uterus and cervix.

Atypical presentation is common, mimicking other gynaecological, gastrointestinal or urinary tract disease, including appendicitis, salpingitis, ruptured corpus luteum or follicular cysts, threatened abortion, ovarian torsion and urinary tract infection.

Common symptoms:  
Sudden severe abdominal pain  
Dizziness, fainting spells, sweating and feeling weak  
Collapse due to the excessive bleeding  
Distended abdomen  
Pale appearance  
Atypical symptoms:  
diarrhoea or vomiting

Efforts to prevent ectopic pregnancy deaths includes ensuring early access to care and raising public awareness about early pregnancy testing, symptoms and risks of ectopic pregnancy.



Performing urine pregnancy test (UPT) for teenager or unmarried woman – a practitioner’s dilemma

High index of suspicion is a prerequisite for the attending doctor.

Do ascertain and document the date of Last Menstrual Period (LMP).

Do explain the need for UPT to patient and reassure confidentiality.

Explain to family members and document refusal or unwillingness to proceed with the UPT.

Use the ultrasound machine if available

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3. <https://www.ucrhealth.org/2021/11/ectopic-pregnancy/>