INTERNATIONAL MEDICAL UNIVERSITY
MALAYSIA

Confidential Enquiry into Maternal Deaths (CEMD)

Population Health Module

Associate Professor Dr Aqil M. Daher
MB ChB, MPH, PhD
Community Medicine
International Medical University
AqilDaher@imu.edu.my

Learning Outcomes

1. Describe what is confidence enquiry into maternal deaths
2. Describe the importance of the enquiry
3. Describe the process of an enquiry
4. Demonstrate knowledge on the Malaysia experience on the enquiry
5. Demonstrate knowledge on the dissemination of results and conclusion from the enquiry

Maternal death

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

Causes of maternal death

- **Direct causes**
  - Bleeding
  - Infections
  - High blood pressure
  - Pregnancy related complication
  - Unsafe abortion

- **Indirect causes**
  - Associated diseases
    - Anemia, HD, DVT
  - Infections
  - Delays
  - Accessibility
  - Poverty
  - Cultural

Why do we need to measure maternal mortality?

Good indicator to assess:

1. Gender status (status of women in society).
2. Socioeconomic status.
3. Progress of Safe Motherhood interventions.
4. **Is a barometer of country's development.**

MDG 5 Improving Maternal Health

- **MDG 5** – Improve Maternal Health
  - Reduce maternal mortality by ¾ between 1990 and 2015
  - Increase proportion of births attended by skilled birth attendants
- **Revised Goal 5 (2005)**
- Improve Maternal Health and Achieve by 2015 universal access to Reproductive Health
- **Post MDG- SDG**
  - 3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births

Approaches of investigating maternal death

1. Verbal autopsy (Community-based maternal death review).
2. Facility-based maternal death review.
3. **Confidential enquiries into maternal deaths.**
4. Near misses (Survey of severe morbidity).
5. Clinical audit.

Confidential enquiry into maternal deaths

Confidential Enquiry into Maternal Deaths

(CEMD) is defined as a systematic **multidisciplinary anonymous investigation** of all or a representative sample of **maternal deaths** occurring at an area, region (state) or national level, which identifies the numbers, causes and avoidable or remediable factors, associated with them.

Principles of CEMD

- Confidentiality concerning the patient and care given
- Non- punitive in action
- Comprehensive (all deaths to be investigated)
- Seamless (collaboration between the public health, hospital and the private sectors)

Confidentiality

MDRs are confidential, usually anonymous, done in a non-threatening environment

Openness in reporting provides a more complete description of sequence of events

Sole purpose of MDR is to learn from mistakes to save lives but not to blame

Contentious issues in CEMD

Issues in the definition (42 days after delivery)

Maternal mortality but admitted with other condition(comorbidity)

Involvement of the private hospitals in referrals

Missing (unreported) maternal deaths

Preventive actions undertaken late

Feedback from State and federal level late.

Importance

- Show weakness in maternal healthcare services.
- Identify preventable factors and the constraints in the management of the cases.
- Identify social, cultural, epidemiological and other factors associated with maternal deaths at health facility and community levels.
- To determine the classification of pregnancy related deaths, thus finalise the country's official data of maternal death.
- Raise awareness among health professionals and community members about risk factors and causes of maternal deaths
- Empowers policy makers, health professional and the community to design appropriate interventions to prevent maternal death
- Improve obstetric and midwifery practice.

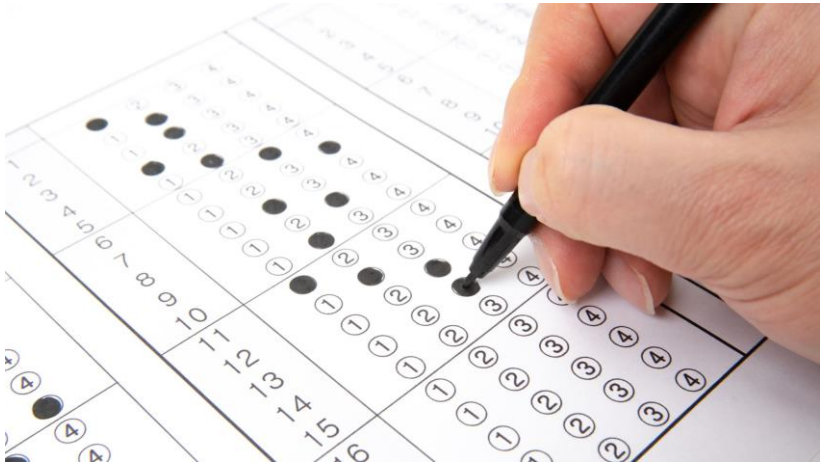
Malaysia experience

Malaysia situation

- The CEMD was introduced in Malaysia in 1991, based on the England and Wales system.
- The Committee is known as the National Technical CEMD Committee.
- Ministry of Health under the purview of Family Health Development Division.
- Comprised of personnel from relevant expertise such as Public Health, Obstetrics and Gynaecology, Family Medicine, Internal Medicine, Forensic and Nursing.
- Maternal mortality ratio increase slightly in 1991 to 44 per 100,000 live births

Benefits to Malaysia

- Work-flow process for notification, investigation and reporting of pregnancy related deaths has improved
- Improve health services and accessibility for pregnant women .
- Strengthening or introduction of specific initiatives to improve maternal health.
- Improvement of work process based on the shortfalls in care identified during the enquiry .
- Improved integration and cooperation among the different stakeholders.
- Development of Training Manuals, Guidelines and Protocols.



Dissemination of results

Maternal Death

Notification to District Health Office

Investigation conducted by District Health Office

Review and discuss the case during District Technical Committee

Submission of final report (using a specific format) to State Health Office

Review and discuss the case during State Technical Committee for Maternal Death Review Meeting

Submission of final report (using a specific format) to Headquarters

Review and discuss each case during National Technical CEMD Committee Meeting

- Recommendations for actions
- National data analysis
- CEMD report writing & Publication triennially

Terms of reference of district committee

- Investigate maternal deaths within 2-4 weeks.
- Identify
  - cause of death,
  - contributory factors
  - Substandard care
- Fill up the KIK/KI-1 ,3 and 4 forms
- Submit the format to the sate level for investigation and review
- Provide the feed back to District Quality Assurance Committee (QAP committee)

THANK YOU