

# PREEKLAMPSIA: TERMINASI ATAU EKSPEKTATIF

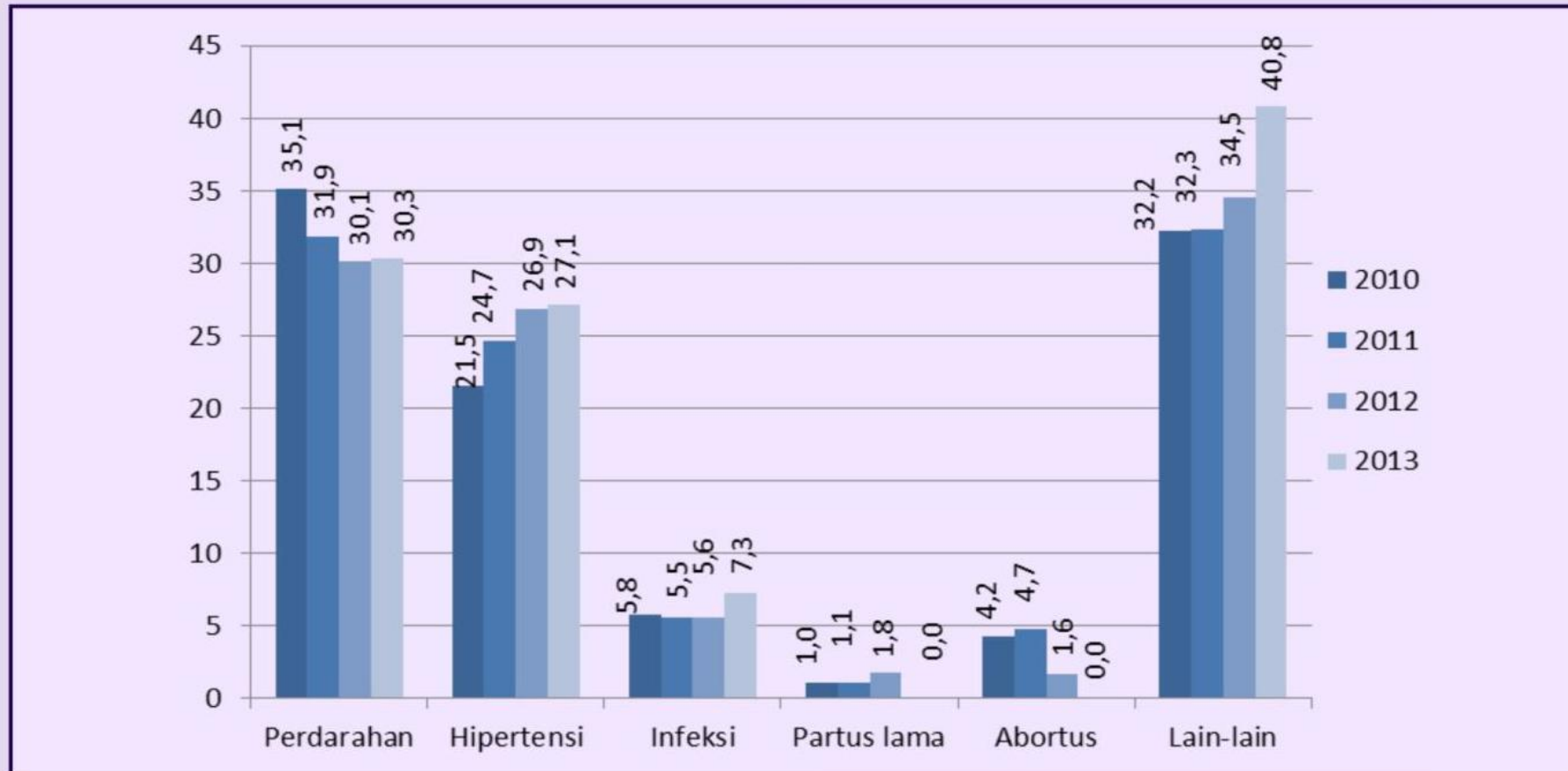


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# CAUSES OF MATERNAL MORTALITY @ INDONESIA

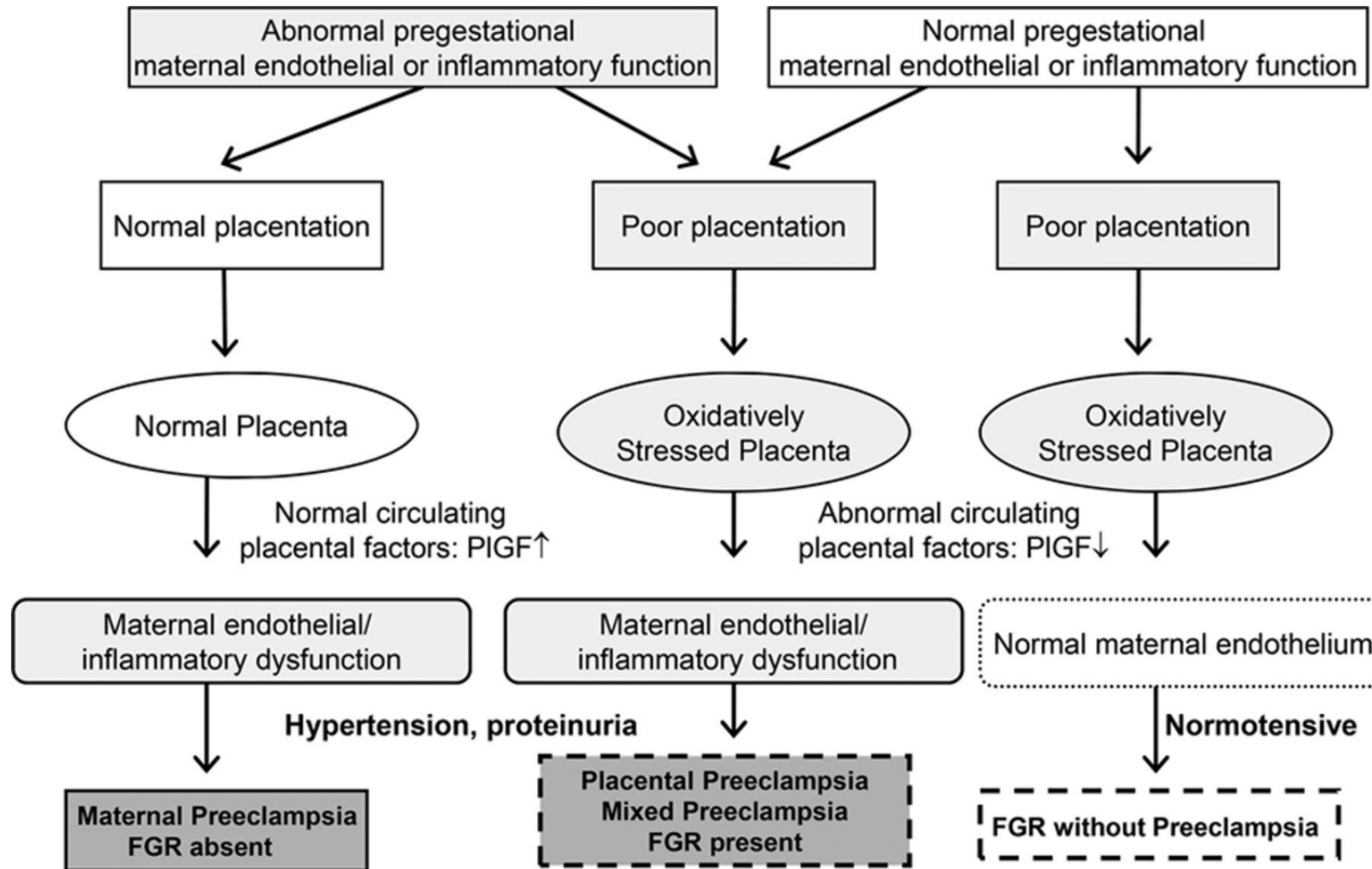
Gambar 2. Penyebab Kematian Ibu Tahun 2010-2013



Sumber : Direktorat Kesehatan Ibu, 2010-2013



**A model of extended definition of preeclampsia on the basis of placenta-derived biomarkers**



Anne Cathrine Staff et al. *Hypertension*. 2013;61:932-942

# Revisi definisi preeklampsia (ISSHP 2014)

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Hypertension developing after 20 weeks gestation and the coexistence of one or more of the following new onset conditions:

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1. Proteinuria
2. Other maternal organ dysfunction:
  - renal insufficiency (creatinine  $\geq 90$   $\mu\text{mol/L}$ )
  - liver involvement (elevated transaminases and/or severe right upper quadrant or epigastric pain)
  - neurological complications (examples include eclampsia, altered mental status, blindness, stroke, or more commonly hyperreflexia when accompanied by clonus, severe headaches when accompanied by hyperreflexia, persistent visual scotomata)
  - haematological complications (thrombocytopenia, DIC, haemolysis)
3. Uteroplacental dysfunction
  - foetal growth restriction



***Atypical Preeclampsia-eclampsia***

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## *Atypical Preeclampsia-eclampsia*

**Table 1. Atypical preeclampsia (4)**

Gestational hypertension plus
Mild symptoms of preeclampsia
Thrombocytopenia
Elevated liver enzymes
Proteinuria plus
Hemolysis
Thrombocytopenia
Elevated liver enzymes
Early preeclampsia at <20 weeks
Late postpartum preeclampsia/eclampsia
HELLP, ELLP, and EL syndromes

# ACOG executive summary on hypertension in pregnancy, Nov 2013

1. The term “mild” preeclampsia is discouraged for clinical classification. The recommended terminology is:
  - a. “preeclampsia without severe features” (mild)
  - b. “preeclampsia with severe features” (severe)
2. Proteinuria **is not** a requirement to diagnose preeclampsia with **new onset** hypertension.
3. The **total** amount of proteinuria  $> 5\text{g}$  in 24 hours has been eliminated from the diagnosis of preeclampsia with severe features.
4. **Early** treatment of **severe** hypertension is mandatory at the threshold levels of **160 mm Hg** systolic or **110 mm Hg** diastolic.

# Paradigma Kewaspadaan

- Preeklampsia sangat dinamis dan progresif
- Pasif => lebih waspada => Aktif
- Jangan terlena dengan “preeklampsia ringan”
- TD level ringan sampai sedang (140-159 mmHg sistolik dan atau 90-100 mmHg diastolik) => EVALUASI/ PANTAU KETAT
- Konsensus Fetomaternal terapi pada tensi 140/90 mmHg => pertimbangan akses terhadap fasilitas

## Do not wait when a patient has severe-range hypertension!

- **Acute onset, persistent** (lasting 15 min or more), severe systolic ( $\geq 160$  mm Hg) or severe diastolic hypertension ( $\geq 110$  mm Hg) or both in pregnant or postpartum women with preeclampsia/eclampsia constitutes a **hypertensive emergency\*** and **it is inadvisable to wait 4 hours for treatment.**

\*Emergent Therapy for Acute-Onset, Severe Hypertension With Preeclampsia or Eclampsia, ACOG Committee Opinion, # 514, December 2011

- Pengurangan Stres
  - komponen TD ibu adalah adrenergik
  - minimalkan rasa tidak nyaman ibu
  - beberapa komponen
    - ruangan tenang, tidak terlalu terang, terisolasi
    - protokol tatalaksana terencana dengan baik
    - penjelasan rencana dengan jelas pada pasien/keluarga
    - minimalkan rangsangan
    - pendekatan tim yang konsisten dan meyakinkan
      - ✓ **bidan**/perawat, obstetri, anestesi, hematolog, dr.
- Anak

- Penilaian Keadaan Ibu – Laboratorium

- Hematologi

- hemoglobin, platelet, apusan darah
    - PTT, PT(INR), fibrinogen, FDP
    - LDH, asam urat, bilirubin

- Hepatik

- SGPT-SGOT, LDH
    - (glukosa, amonia terhadap *R/O AFLP*)

- Ginjal

- proteinuria
    - kreatinin, urea, asam urat
    - Jumlah urin 24 jam

# Preeclampsia early recognition tool

ASSESS	NORMAL (GREEN)	WORRISOME (YELLOW)	SEVERE (RED)
Awareness	Alert/oriented	<ul style="list-style-type: none"> <li>•Agitated/confused</li> <li>•Drowsy</li> <li>•Difficulty speaking</li> </ul>	<ul style="list-style-type: none"> <li>•Unresponsive</li> </ul>
Headache	None	<ul style="list-style-type: none"> <li>•Mild headache</li> <li>•Nausea, vomiting</li> </ul>	<ul style="list-style-type: none"> <li>•Unrelieved headache</li> </ul>
Vision	None	<ul style="list-style-type: none"> <li>•Blurred or impaired</li> </ul>	<ul style="list-style-type: none"> <li>•Temporary blindness</li> </ul>
Systolic BP (mm HG)	100-139	140-159	≥160
Diastolic BP (mm HG)	50-89	90-105	≥105
HR	61-110	111-129	≥130
Respiration	11-24	25-30	<10 or >30
SOB	Absent	Present	Present
O2 Sat (%)	≥95	91-94	≤90
Pain: Abdomen or Chest	None	<ul style="list-style-type: none"> <li>•Nausea, vomiting</li> <li>•Chest pain</li> <li>•Abdominal pain</li> </ul>	<ul style="list-style-type: none"> <li>•Nausea, vomiting</li> <li>•Chest pain</li> <li>•Abdominal pain</li> </ul>
Fetal Signs	<ul style="list-style-type: none"> <li>•Category I</li> <li>•Reactive NST</li> </ul>	<ul style="list-style-type: none"> <li>•Category II</li> <li>•IUGR</li> <li>•Non-reactive NST</li> </ul>	<ul style="list-style-type: none"> <li>•Category III</li> </ul>
Urine Output (ml/hr)	≥50	30-49	≤30 (in 2 hrs)
Proteinuria <small>(Level of proteinuria is not an accurate predictor of pregnancy outcome)</small>	Trace	<ul style="list-style-type: none"> <li>•&gt; +1**</li> <li>•≥300mg/24 hours</li> </ul>	
Platelets	>100	50-100	<50
AST/ALT	<70	>70	>70
Creatinine	<0.8	0.9-1.1	>1.2
Magnesium Sulfate Toxicity	<ul style="list-style-type: none"> <li>•DTR +1</li> <li>•Respiration 16-20</li> </ul>	<ul style="list-style-type: none"> <li>•Depression of patellar reflexes</li> </ul>	<ul style="list-style-type: none"> <li>•Respiration &lt;12</li> </ul>

- **Penilaian Keadaan Janin**
  - **Gerakan janin**
  - **Penilaian denyut jantung janin -NST**
  - **Ultrasonografi untuk perkembangan**
  - **Profil biofisik**
  - **Indeks cairan amnion (AFI) atau AFV**
  - **Pemeriksaan Doppler arus darah : tali pusat,  
a.cerebri media**

## Key clinical pearl

In patients with **preterm** preeclampsia with severe features, the disease can rapidly progress to significant maternal morbidity and/or mortality.

Terminasi atau  
Menunda??

## Expectant management in pregnancies with preeclampsia with severe features 24-34 weeks

### **Expectant management recommendations:**

With stable maternal/fetal conditions, continued pregnancy should be undertaken only at facilities with adequate maternal and neonatal intensive care resources

**Administer corticosteroids for fetal lung maturity benefit**

# Expectant management of pregnancies with preeclampsia < 34 weeks gestation

Maternal Stabilization refers to:

- Seizure prophylaxis
- BP control
- Adequate maternal cardio-pulmonary function
- AND
  - Consultation with:
    - NICU
    - MFM
    - Anesthesia and/or
    - Critical care services

## Management of suspected preeclampsia with severe features < 34 weeks gestation

### Initial 24-48 hours observation

- Initiate antenatal corticosteroids if not previously administered
- Initiate 24 hour urine monitoring as appropriate
- Ongoing assessment of maternal symptoms, BP, urine output
- Daily lab evaluation (minimum) for HELLP and renal function
- May observe on an antepartum ward after initial evaluation

#### Proceed to delivery for:

- Recurrent severe hypertension despite therapy
- Other contraindications to expectant management

#### Antenatal corticosteroid treatment completed:

- Expectant management not contraindicated
- Consider ongoing in-patient expectant management

Adapted from Sibai BM. Evaluation and management of severe preeclampsia before 34 weeks' gestation. American Journal of Obstetrics & Gynecology, September 2011, pg. 191-198.

- Kapan Persalinan Dilakukan
  - $\geq 37$  minggu dengan hipertensi gestasional
  - $\geq 34$  minggu dengan hipertensi gestasional berat
  - $< 34$  minggu dengan:
    - TD diastolik yang sulit dikontrol dengan menggunakan obat antihipertensi
    - bukti lab ( $\downarrow$  platelets atau  $\uparrow$  LFT, proteinuri berat), adanya keterlibatan multi-organ yang memburuk, walaupun TD terkontrol
    - dugaan gawat janin
    - kejang tidak terkontrol, berulang
    - gejala tidak responsif terhadap terapi yang sesuai

## ACOG task force recommendations

- For women with gestational hypertension, less than 160/110 or preeclampsia without severe features at or beyond 37 0/7 weeks of gestation, delivery rather than continued observation is suggested.

Ref: Koopmans CM, et al. Induction of labour versus expectant monitoring for gestational hypertension or mild preeclampsia after 36 weeks gestation. (HYPITAT). Lancet 2009;374:979-88

- Persalinan- Pengobatan
  - Persalinan disaat tepat meminimalkan morbiditas dan mortalitas ibu maupun neonatal
  - Mengoptimalkan status ibu sebelum intervensi persalinan
  - Tunda persalinan untuk mendapatkan maturitas janin dan lakukan rujukan hanya jika kondisi ibu dan janin memungkinkan
  - Hipertensi gestasional merupakan penyakit progresif, manajemen konservatif potensial berbahaya bila terdapat penyakit bertambah berat atau dugaan gawat janin

- Tatalaksana Peri- dan Postpartum
  - jangan turunkan TD terlalu rendah karena berisiko gawat janin
  - jangan berikan cairan berlebih
  - analgesi epidural lebih dipilih bila ada koagulopati atau jumlah platelet yang rendah
  - pendekatan multispesialisasi
  - pasca persalinan → pasien harus dimonitor

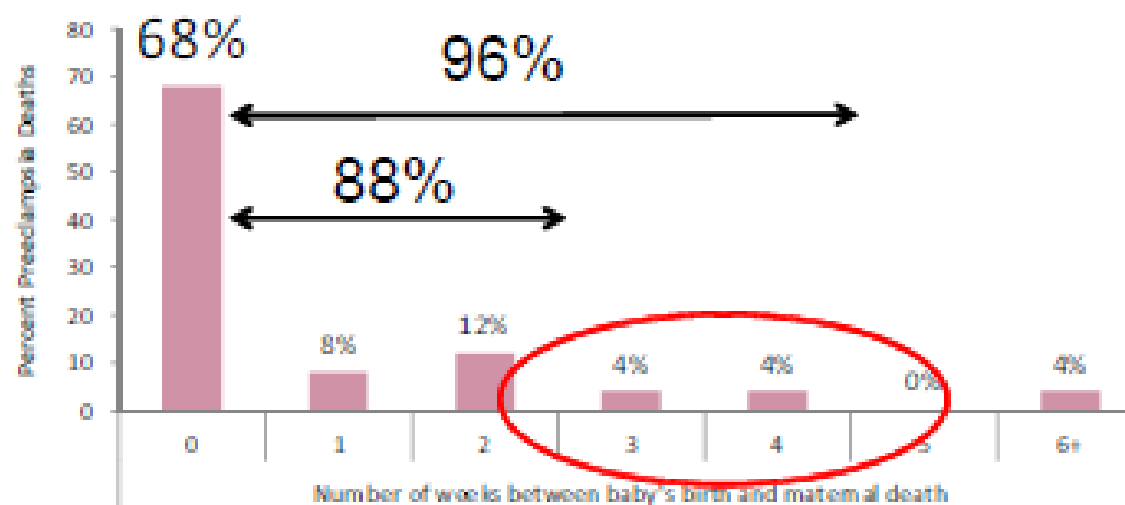
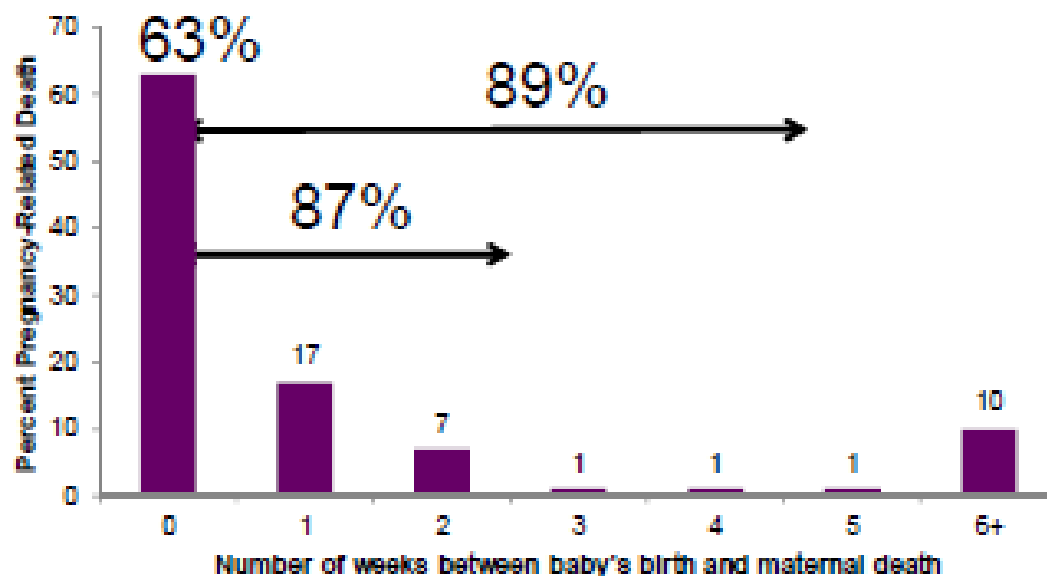
# Eclampsia: Maternal-perinatal outcome in 254 consecutive cases over 12 years

- 73 (29%) occurred postpartum.
- Over half of postpartum cases, (40 cases/16%) occurred in the late postpartum period (>48 hrs)
- 18 of these 40 cases were normotensive; all 18 had symptoms of headache or visual disturbance

Sibai BM. Eclampsia VI. Maternal-perinatal outcome in 254 consecutive cases. Am J Obstet Gynecol Sep 163(3):1049-1054; discussion 1054-1065 1990.

# Timing of pregnancy-related deaths

## CA-PAMR, 2002 to 2004





## ACOG task force recommendations post partum hypertension and preeclampsia

- For women in whom GHN, PE, or superimposed PE is diagnosed, it is suggested that **BP be monitored** in the hospital or equivalent outpatient surveillance be performed for at least **72 hours** postpartum and again **7-10 days** after delivery **or earlier in women with symptoms.**

# Kesimpulan

Waktu yang tepat untuk pengakhiran kehamilan pada preeklamsia sangat tergantung pada berbagai faktor dengan target utama keselamatan ibu, dan kesejahteraan janin yang optimal.