

SESI 3

PERSALINAN & KELAHIRAN (*LABOR & DELIVERY*)

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DESKRIPSI

Materi kuliah membahas tentang proses persalinan dan kelahiran normal, kebijakan Teknis Asuhan Persalinan dan Kelahiran, partograf dalam penilaian, pemantauan, pengevaluasian klinik kala persalinan beserta diagnosis dan hal-hal yang harus diperhatikan pada masa nifas dan mastitis; kausa ketidak suburan pada wanita & pria

TUJUAN INSTRUKSIONAL UMUM

Memahami hal-hal yang harus diperhatikan dalam proses persalinan dan kelahiran normal, kebijakan Teknis Asuhan Persalinan dan Kelahiran, arti partograf dalam menilai, memantau, mengevaluasi klinik terkait kala-kala persalinan beserta cara penegakkan diagnosis, berbagai sebab ketidak suburan pada wanita dan pria.

TUJUAN INSTRUKSIONAL KHUSUS & POKOK/SUBPOKOK BAHASAN

- Menjelaskan:
 - Proses persalinan dan kelahiran normal
 - Rekomendasi Kebijakan Teknis Asuhan Persalinan dan Kelahiran
 - Partograf, penilaian, pemantauan, evaluasi klinik kala persalinan dan diagnosis.
 - *5 Reading: Delivery, Childbirth, Gestational Diabetes, Eclampsia & Infertility*

PLASENTA (ARI-ARI) (*PLACENTA*)

- Organ yang berkembang melekat di uterus dan sebagai jalan penghubung suplei darah dari bumil ke janin.
- **STRUKTUR:**

Plasenta berkembang dari jaringan chorion (pelapis sel – sel terluar dari telur yang fertilisasi).

Jaringan plasenta lekat erat ke lapisan uterus bumil, dan merupakan bagian yang terhubung dengan janin melalui ***umbilical cord*** (tali pusat).

Ukuran: 20x 2,5cm.

Segera bayi lahir, plasenta akan terlepas (= ***afterbirth***)

FUNGSI PLASENTA

- Plasenta berfungsi sebagai **organ pernapasan dan ekskresi bagi janin**. Melaluinya, oksigen di transfer dari sirkulasi darah bumil ke sirkulasi darah janin, dan mengangkut **produk sampah dari darah janin** masuk ke darah bumil untuk diekskresi melalui paru dan ginjal. Melalui plasenta ***nutrient*** juga disalurkan dari bumil ke janin yang dikandungnya.

Ada 3 hormon yang dihasilkan plasenta:

- **estrogen**
- **progesterone**
- **H (human) C (chorionic) G (gonadotropin)**

HCG

- Kadar tinggi HCG akan ada di urine bumil. Ini digunakan untuk dasar test kehamilan (*Pregnancy tests*)

Hormon-hormon terkait masuk darah bumil untuk:

- menyiapkan diri bumil memasuki kondisi kehamilan,
- dan
- menyiapkan kelenjar payu dara bumil untuk tugas laktasi.

Reading 1: **DELIVERY**

Expulsion or extraction of a baby from the mother's uterus.

*In most cases the baby lies lengthwise in the uterus with its head facing downward and is **delivered head first** through the vaginal opening by a combination of uterine contractions and maternal effort at the end of the **second stage of labor**.*

DELIVERY (Cont.-1)

- *If the baby is lying in an abnormal position (breech, or mal-presentation),*
 - *if the uterine contractions are weak, or*
 - *if there is disproportion between the size of the baby's head and the mother's pelvis,*
- *a **forceps delivery** or **vacuum extraction** may be required; there are called **operative deliveries**. In some cases, vaginal delivery is impossible or potentially dangerous to the mother or the baby, and **cesarean section** is necessary.*

Reading 2: **CHILDBIRTH (LABOR)**

The process by which an infant is moved from the uterus to the outside world.

Childbirth normally occurs at between 38 and 42 weeks gestation (pregnancy), timed from the mother's last menstrual period.

Childbirth (Cont.-1)

- *In previous centuries woman of all social classes commonly died in childbirth; **maternal mortality still remains high in developing countries.** In western countries, however, deaths and complications of childbirth have declined dramatically since the start of 20th century.*

*Much of this decline is due to **improvements in women's general health**; the remainder has resulted from **advances in medical treatment** of the complications of pregnancy and labor – most notably the **availability of blood transfusion and antibacterial drugs.***

Childbirth (Cont-2)

- *Although the role of specialized equipment and drugs in improving safety during childbirth cannot be denied, women have become concerned about the increased mechanization of childbirth. Hence, popularity of “natural childbirth” which **advocates the avoidance of unnecessary medical intervention.***

Hospitals have begun to recognize the right of women to choose the type of birth they prefer (as long as it is compatible with safety).

Childbirth (Cont.-3)

- *This choice may include the **option of having people present during the birth** and the type of pain relief, if any, the woman would like to have administered.*
- *More flexibility is also being shown in **allowing women to choose the position** they prefer for giving birth. For many years, the supine position has been traditional in the US and many European countries. Historically, however, this position is a fairly recent innovation, not introduced until the eighteenth century.*

Childbirth (Cont-4)

- *Most hospitals still **transfer** the mother from the labor ward to a separate delivery room when she is ready to have the baby.*
- *Some hospitals now have **alternative birthing rooms**, where the mother can deliver in a homelike atmosphere with medical facilities at hand.*

PERSALINAN & KELAHIRAN NORMAL

- **Definisi dan Tujuan:**

Persalinan dan kelahiran adalah kejadian fisiologi normal.

Kelahiran bayi adalah juga peristiwa sosial yang dinantikan bumil dan keluarga selama 9 bulan.

Saat persalinan dimulai, **peran ibu adalah melahirkan bayinya.**

Peran petugas adalah **memantau** untuk **mendeteksi dini** adanya komplikasi, berserta keluarga **memberi bantuan dan dukungan** pada ibu bersalin.

Persalinan & Kelahiran Normal (Lanjutan-1)

- **Persalinan (labor)** adalah proses membuka dan menipisnya serviks, dan turunnya janin ke dalam jalan lahir.
- **Kelahiran (delivery)** adalah proses saat mana janin dan ketuban didorong keluar melalui jalan lahir.
- **Persalinan dan kelahiran normal** adalah proses pengeluaran janin yang terjadi pada kehamilan cukup bulan (37-42 minggu), lahir spontan dengan **presentasi belakang kepala** yang berlangsung dalam 18 jam, tanpa komplikasi baik pada ibu maupun pada janin.

Persalinan & Kelahiran Normal (Lanjutan-2)

- **Persalinan dibagi dalam 4 kala:**

Kala I: dimulai saat persalinan sampai pembukaan lengkap (10 cm) . Proses dibagi 2 fase.

Fase laten (8 jam): serviks membuka s/d 3 cm.

Fase aktif (7 jam): serviks membuka dari 3 s/d 10cm dengan kontraksi lebih kuat dan sering.

Kala II: dari pembukaan lengkap (10cm) s/d bayi lahir.

Proses in umumnya berlangsung 2 jam pada primipara dan 1 jam pada multipara.

Persalinan & Kelahiran Normal (Lanjutan-3)

Kala III: segera setelah bayi lahir sampai lahirnya plasenta (ari-ari), kurang lebih 30 menit.

Kala IV: dari saat lahirnya plasenta sampai 2 jam pertama postpartum.

Tujuan asuhan persalinan:

Memberikan asuhan yang memadai dalam upaya mencapai pertolongan persalinan yang **bersih, aman**, dengan memperhatikan **aspek sayang ibu dan sayang bayi**.

Persalinan & Kelahiran Normal (Lanjutan-4)

Kebijakan pelayanan asuhan persalinan:

1. Semua persalinan harus dihadiri dan dipantau oleh **petugas kesehatan terlatih.**
2. RB/Tempat rujukan berfasilitas memadai untuk menangani **kegawat-daruratan obstetri dan neonatal** harus tersedia 24 jam.
3. Obat-obat esensial, bahan, perlengkapan harus tersedia bagi seluruh petugas terlatih.

Rekomendasi Kebijakan Teknis Asuhan

Persalinan dan Kelahiran:

- **Asuhan Sayang Ibu dan Sayang Bayi** harus dimasukkan sebagai bagian dari persalinan bersih dan aman, termasuk hadirnya keluarga atau orang-orang yang memberi dukungan bagi ibu.
- Partograf harus digunakan untuk memantau persalinan dan berfungsi sebagai **suatu cacatan/bagian rekam medis persalinan.**

Rekomendasi Kebijakan Teknis Asuhan Persalinan dan Kelahiran (Lanjutan-1)

- Selama persalinan normal, intervensi hanya dilaksanakan jika benar-benar dibutuhkan.

Prosedur ini hanya dibutuhkan jika ada infeksi atau penyulit.

- Manajemen aktif kala II, termasuk melakukan penjepitan dan pemotongan tali pusat (***umbilical cord***) secara dini, memberikan suntikan oksitosin IM, melakukan pemengangan tali pusat terkendali (PTT) dan segera melakukan **masase fundus**, harus dilakukan pada semua persalinan normal.

Rekomendasi Kebijakan Teknis Asuhan Persalinan dan Kelahiran (Lanjutan-2)

- Penolong persalinan harus tetap tinggal bersama ibu dan bayi sedikitnya 2 jam pertama setelah kelahiran, atau sampai ibu sudah dalam keadaan stabil.

Fundus uteri (tingginya) harus diperiksa:

- setiap 15 menit selama 1 jam pertama
- dan - setiap 30 menit pada jam kedua.

Masase fundus harus dilakukan sesuai kebutuhan untuk **memastikan**:

- **tonus otot uterus tetap baik,**
- **perdarahan minimal dan**
- **pencegahan perdarahan.**

Rekomendasi Kebijakan Teknis Asuhan Persalinan dan Kelahiran (Lanjutan-3)

- Selama 24 jam pertama setelah persalinan, fundus harus sering diperiksa dan dimasase sampai tonus baik. Ibu atau anggota keluarga dapat diajarkan melakukan hal ini.
- Segera setelah lahir, seluruh tubuh terutama kepala bayi harus segera diselimuti dan bayi dikeringkan serta dijaga kehangatannya untuk mencegah terjadinya **hipotermia**.

Rekomendasi Kebijakan Teknis Asuhan Persalinan dan Kelahiran (Lanjutan-4)

- Obat-2 esensial, bahan dan perlengkapan harus disediakan oleh petugas dan keluarga.

(Rujukan: Buku Acuan Nasional Pelayanan Kesehatan
Maternal dan Neonatal, JNPKKR-POG,
YBP-SP, Jakarta, 2002)

PARTOGRAF

- Rekam grafik untuk memantau kemajuan persalinan dan membantu petugas kesehatan dalam menentukan keputusan dalam penatalaksanaan.
- Partograf memberi peringatan pada petugas kesehatan bahwa suatu persalinan berlangsung;
 - lama, atau
 - gawat ibu dan janin, atau
 - mungkin perlu dirujuk.

(Lihat di buku rujukan: desain formluir partograf)

PARTOGRAF (Lanjutan-1)

Partograf dijalankan dengan benar sebagai berikut:

- **Denyut jantung janin:** Catat setiap jam.
- **Air ketuban:** Catat warna air ketuban setiap melakukan pemeriksaan vagina:
 - **U:** selaput **U**tuh
 - **J:** selaput pecah, air ketuban **J**ernih
 - **M:** air ketuban bercampur **M**ekoneum
 - **D:** air ketuban bernoda **D**arah
- **Perubahan bentuk kepala janin (*molding & molase*):**
 - 1: sutura yang tepat/bersesuaian
 - 2: sutura tumpang tindih tetapi dapat diperbaiki
 3. sutura tumpang tindih tidak dapat diperbaiki

PARTOGRAF (Lanjutan-2)

- **Pembukaan mulut rahim (serviks):** dinilai pada setiap pemeriksaan pervaginam.
- **Penurunan kepala:** mengacu pada bagian kepala (dibagi 5 bagian) yang teraba pada pemeriksaan abdomen/luar) di atas tulang simfisis pubis.
- **Waktu:** berapa jam dari jam pasien diterima.
- **Jam:** jam sesungguhnya.
- **Kontraksi:** catat setiap $\frac{1}{2}$ jam, lakukan dengan palpasi (menghitung kontraksi/10 menit) dan lama masing-masing kontraksi (dalam detik): < 20 detik; antara 20 - 40 detik; > 40 detik.
- **Oksitosin:** Bila pakai obat ini (iv), catat banyaknya per volume cairan infus dalam tetesan/menit.

PARTOGRAF (Lanjutan-3)

- **Obat yang diberikan:** catat semua.
- **Nadi (pols):** catat setiap 30-60 menit.
- **Suhu badan:** catat setiap dua jam
- **Protein, aseton dan volume urin:** Catat setiap kali berkemih.

Apabila temuan **melintas ke arah kanan** dari garis waspada pada bagan pencatatan (partograf)

→ **lakukan penilaian terhadap kondisi ibu dan janin dan segera mencari rujukan yang tepat.**

(Lihat contoh Partograf pada lampiran, atau buku rujukan: Acuan Nasional Pelayanan Kesehatan Maternal dan Neonatal yang telah disebut)

PENILAIAN KLINIK

Kala I Pengkajian awal:

Pengkajian awal perlu dilakukan untuk menentukan apakah persalinan sudah pada waktunya, apakah kondisi bumil dan kondisi bayinya normal.

Runtunan kajian:

Lihat: tanda-tanda perdarahan, mekoneum, bagian organ yang lahir. Tanda bekas operasi sesar, apa kulit ibu kuning atau pucat.

Tanya: kapan tanggal perkiraan kelahiran → menentukan ibu sudah/belum waktunya melahirkan.

Periksa: tanda-tanda hipertensi, detak jantung janin, apa ada bradikardia?

Tentukan apakah perlu tindakan segera atau rujukan.

Penerusan penilaian persalinan:

- **Kemajuan persalinan, melalui:**
 - **Riwayat persalinan;** pemeriksaan abdomen; dan pemeriksaan vagina.
 - **Kondisi ibu,** melalui: kajian kartu/catatan asuhan antenatal; pemeriksaan umum; pemeriksaan laboratorium dan pemeriksaan psiko-sosial.
 - **Kondisi janin:** gerak, letak, besar, tunggal/kembar, denyut jantung, dan posisi janin.
Jika selaput ketuban pecah: warna cairan, kepekatan dan jumlah yang keluar.

Hal-Hal yang di Pemantau:

- Pemantauan kondisi kesehatan bumil dan bayi selama persalinan dicatat ke bagan partograf.

Kemajuan Persalinan:

- His/kontraksi: frekuensi, lamanya dan kekuatan.
(kontrol ½ jam sekali pada fase aktif)
- Pemeriksaan Vagina: pembukaan serviks, penipisan serviks, penurunan bagian terendah, molding/molase kepala bayi. (kontrol setiap 4 jam)
- Pemeriksaan abdomen luar: penurunan kepala.
(kontrol setiap 2 jam pada fase aktif)

Hal-Hal yang di Pemantau (Lanjutan-1)

Kondisi Bumil:

- Tanda vital, status kandung kemih, pemberian makanan/minuman (kontrol setiap 4 jam)
- Perubahan perilaku; dehidrasi/lemah, kebutuhan dukungan.

Keadaan Janin:

- Denyut jantung setiap $\frac{1}{2}$ jam pada fase aktif.
- Pantauan selaput ketuban yang pecah,

Hal-Hal yang di Pemantau (Lanjutan-2)

Diagnosis:

<u>Kategori</u>	<u>Keterangan:</u>
- inpartu	Ada tanda-2 persalinan.
- kemajuan persalinan normal	Kemajuan berjalan sesuai dengan partograf.
- persalinan bermasalah	Kemajuan tidak sesuai dengan partograf, melewati garis waspada.
- kegawatdaruratan saat persalinan	Eklampsia, perdarahan, gawat janin.

Peran petugas kesehatan pada asuhan kebidanan selama persalinan normal adalah:

- **Memantau dengan seksama dan memberikan dukungan serta kenyamanan pada ibu, baik segi emosi/perasaan maupun fisik, melalui tindakan:**
 - menghadirkan orang yang dianggap penting oleh bumil (suami, keluarga pasien, teman dekat).
 - mengatur aktivitas dan posisi bumil.
 - membimbing bumil untuk rileks sewaktu ada his.
 - menjaga privasi bumil; sentuhan; masase.
 - penjelasan tentang kemajuan persalinan.
 - menjaga kebersihan diri, mengatasi rasa panas.
 - pemberian cukup minum, mempertahankan kandung kemih tetap kosong.

Kebiasaan yang Lazim dilakukan namun Tidak Menolong atau bahkan dapat Membahayakan

- Enema sebagai tindakan rutin
- Mencukur rambut daerah kemaluan sebagai tindakan rutin
- Kateterisasi kandung kemih sebagai tindakan rutin
- Tidak memberikan makanan dan minuman.
- Memisahkan ibu dengan orang-orang yang berarti dan pemberi dukungan.
- Posisi terlentang
- Mendorong abdomen
- Mengedan sebelum pembukaan serviks lengkap.

RUJUKAN

- Pada kasus-kasus kegawatdaruratan dan kasus penyulit yang melebihi tingkat keterampilan dan kemampuan petugas kesehatan dalam mengelola → maka harus dirujuk ke fasilitas kesehatan terdekat yang memiliki kemampuan menangani kegawatdaruratan obstetrik.

Bantuan awal untuk menstabilkan kondisi ibu harus diberikan sesuai kebutuhan/prosedur.

Partograf (rekam medis) harus dikirim bersama ibu.

Anggota keluarga dianjurkan untuk menemani.

Petugas harus membawa peralatan obat-obatan yang diperlukan.

KALA II

- **Penilaian Klinik:**

Saat pembukaan lengkap dan bumil siap melahirkan, selama kala II petugas harus terus memantau:

1. **Tenaga/Kekuatan:** usaha mengedan dan kontraksi uterus
2. **Janin:** penurunan presentasi janin, dan kembali normalnya detak jantung janin.
3. **Kondisi ibu.**

Pemantauan meliputi:

1. Kemajuan persalinan (Tenaga):

- Usaha mengedan.
- Palpasi kontraksi uterus (setiap 10 menit)
- frekuensi, lama dan kekuatan.

2. Kondisi Bumil (Pasien):

- Periksa nadi dan tensi darah (setiap 30 menit)
- Respon keseluruhan pada kala II:
 - Keadaan dehidrasi
 - Perubahan sikap/perilaku
 - Tingkat kekuatan tenaga (yang dimiliki)

3. Kondisi Janin (Penumpang):

- Periksa detak jantung janin setiap 15 menit atau makin lebih sering dilakukan dengan makin dekatnya kelahiran.
- Penurunan presentasi perubahan posisi.
- Warna cairan tertentu.

Diagnosis:

- Kala II ditegakkan dengan melakukan **pemeriksaan dalam** terlebih dahulu untuk kepastian pembukaan lengkap atau kepala janin sudah nampak di vulva dengan diameter 5-6 cm.

Kategori

Keterangan:

Kala II berjalan baik

Ada kemajuan penurunan kepala bayi.

Kala II dalam kondisi kegawatdaruratan

Kondisi gawatdarurat membutuhkan perubahan dalam penatalaksanaan atau tindakan segera.

CONTOH:

Kemungkinan ditemukan adanya tanda-tanda:

- eklampsia,
- kegawatdaruratan bayi,
- penurunan kepala terhenti,
- atau kelelahan bumil).

Rekam Medis:

Semua informasi terkait kala II harus direkam di bagian belakang partograf.

Urutan kegiatan asuhan kebidanan pada persalinan normal:

- Kala II adalah pekerjaan yang tersulit bagi bumil, suhu badan meninggi, mengejan selama kontraksi dan lelah.
- **Tindakan yang harus dilakukan:**
 - memberikan dukungan terus menerus kepada bumil
 - menjaga kebersihan diri bumil
 - mengipasi/me-massage
 - memberi dukungan mental
 - mengatur posisi ibu
 - menjaga kandung kemih tetap kosong

Kala II (Lanjutan-3)

- memberi cukup minum.
- memimpin mengedan
- memimpin pernapasan selama persalinan
- memantau detak jantung janin (DJJ)
- menolong kelahiran bayi:
 - menolong kelahiran kepala
 - memeriksa tali pusat
 - melahirkan bahu dan anggota seluruhnya.
- bayi dikeringkan dan dihangatkan dari kepala sampai seluruh tubuh.
- merangsang bayi (melalui pengeringkan dan mengusap-usap pada bagian punggung atau menepuk telapak kaki bayi).

Kebiasaan yang Lazim yang dilakukan namun tidak Bermanfaat bahkan dapat Membahayakan.

- Kateterisasi secara rutin
- Menekan fundus uteri dengan tangan
- Mengedan dengan posisi terlentang dan menahan napas panjang.
- Episiotomi sebagai tindakan rutin
- Memutar kepala bayi
- Melakukan rangsangan berlebihan
- Mengisap lendir terlalu lama, dalam dan kuat.
- Membiarkan bayi basah atau tidak diselimuti.
- Tidak menghadirkan orang-orang yang berarti bagi bumil
- Posisi litotomi atau terlentang saat melahirkan.

KALA III

- Saat plasenta lahir dan segera setelah itu adalah waktu paling kritis untuk mencegah perdarahan postpartum.
- Apabila plasenta terlepas atau sepenuhnya terlepas, tetapi tidak keluar → perdarahan terjadi di belakang plasenta sehingga uterus tidak dapat sepenuhnya berkontraksi akibat plasenta masih ada di dalam.
- Kontraksi otot uterus merupakan mekanisme fisiologi yang menghentikan perdarahan.

Kala III (Lanjutan-1)

- Begitu plasenta lepas, jika bumil tidak dapat melahirkan sendiri, maka petugas tidak dapat menolong mengeluarkan plasenta, mungkin salah diagnosis dengan **rentensio plasenta**.
Seringkali plasenta terperangkap di bawah serviks dan hanya diperlukan sedikit dorongan untuk mengeluarkan dari rahim.

Manajemen aktif kala III persalinan:

- **mempercepat kelahiran plasenta dan**
- **dapat mencegah atau mengurangi perdarahan postpartum.**

Penilaian Klinik Kala III

- **Pengkajian awal/segera:**
 - Palpasi uterus untuk menentukan apakah ada bayi yang kedua: jika ada tunggu sampai bayi kedua lahir.
 - Menilai apakah bayi baru lahir dalam keadaan stabil, atau tidak, → rawat bayi segera.

Penilaian Klinik Kala III

- **Diagnosis:**

Kategori	Deskripsi
Kehamilan dengan janin normal tunggal	Persalinan spontan melalui vagina pada bayi tunggal, cukup bulan
Bayi normal	Tidak sulit bernapas. Apgar >7 pada menit ke 5 Tanda-tanda vital stabil BB sama atau > 2.5 kg.

Penilaian Klinik Kala III

- Bayi dengan penyulit adalah bayi dengan:
 - BB kurang,
 - asfiksia.
 - Apgar rendah,
 - cacat lahir pada kaki.
- **Penanganan**
Langkah-langkah pada manajemen Kala III:
 1. jepit dan gunting tali pusat sedini mungkin.
 2. memberikan oksitosin 10 U IM
 3. melakukan penanganan tali pusat terkendali atau PTT (*CCT/Controlled Cord Traction*).
 4. Masase fundus uteri

- **Pelepasan Plasenta secara fisiologi:**
 - Jika penolong sendirian, sebaiknya menunggu plasenta lepas fisiologi.
 - Oksitosin segera setelah plasenta lahir, dan juga bila tidak lepas setelah bayi lahir sudah selesai ditangani dan PTT.
- **Tanda-tanda Pelepasan Plasenta Fisiologi**
 - Bertambah panjang
 - Pancaran darah
 - Bentuk uterus menjadi lebih bulat.

Kebiasaan yang Lazim dilakukan namun tidak membawa Manfaat atau bahkan Membahayakan:

Praktek:

- Mendorong uterus sebelum plasenta lahir
- Mendorong fundus ke bawah mengarah ke vagina
- Kateterisasi
- Tarikan tali pusat terlalu kuat
- Membiarkan plasenta tetap berada dalam uterus.

EVALUASI

- 1. Apabila dengan manajemen aktif dan plasenta belum juga lahir dalam waktu 30 menit:**
 - periksa kandung kemih dan lakukan kateterisasi jika kandung kemih penuh,
 - periksa adanya tanda-tanda pelepasan plasenta
 - berikan oksitosin 10 U IM dosis kedua, dalam jarak waktu 15 menit dari pemberian pertama.
 - siapkan rujukan jika tidak ada tanda-tanda pelepasan plasenta.

EVALUASI (Lanjutan)

2. Apabila tidak melakukan manajemen aktif (ada penyulit pada bayi, dan petugas hanya seorang diri)

- periksa tanda-tanda pelepasan fisiologi, lakukan PTT (untuk melahirkan plasenta berikut selaput ketuban)
- melakukan masase uterus hingga uterus mengeras.
- memberikan oksitosin 10 U IM setelah plasenta lahir.

HATI-HATI

- Jika uterus terasa bergerak ke bawah waktu tali pusat ditarik → HENTIKAN!
Plasenta mungkin belum lepas dan terjadi inversio uteri.
- Jika ibu menyatakan nyeri atau jika uterus lembek/tidak kontraksi → HENTIKAN!
Bahaya *hemorrhage* (perdarahan).
- Menunggu beberapa menit, kemudian periksa lagi apakah plasenta sudah terlepas.

KALA IV

- **Penilaian Klinik melalui Pemantauan:**
Masa postpartum merupakan saat paling kritis untuk mencegah kematian ibu, terutama kematian akibat perdarahan.

Selama kala IV, petugas harus memantau ibu setiap 15 menit pada jam pertama setelah plasenta lahir, dan setiap 30 menit pada jam kedua setelah persalinan.

Jika kondisi ibu tidak stabil, maka ibu harus dipantau lebih sering.

Kala IV (Lanjutan)

Periksa:

- Tinggi dan kontraksi fundus uteri;
- plasenta lengkap/tidak;
- selaput ketuban lengkap/tidak;
- perineum robek/tidak;
- memperkirakan pengeluaran darah;
- lokia,
- kandung kemih;
- kondisi ibu dan kondisi bayi baru lahir.
- involusi uterus normal/tidak.

Kala IV dengan penyulit.

PENANGANAN:

Dua jam pertama setelah persalinan merupakan waktu kritis bagi ibu, dan bayi.

Keduanya baru saja mengalami perubahan fisik yang luar biasa – selain ibu melahirkan bayi dari perutnya, dan bayi sedang menyesuaikan diri dari dalam perut ibu ke dunia luar.

Petugas/bidan harus tinggal bersama ibu dan bayi untuk memastikan bahwa keduanya dalam kondisi yang stabil dan mengambil tindakan yang tepat untuk melakukan stabilisasi tersebut.

*Reading 3: **DIABETIC PREGNANCY*** ***(GESTATIONAL DIABETES)***

- *A small number of women acquire diabetic mellitus during pregnancy – a phenomena called **gestational diabetes**. Diabetus mellitus may also have been present and under treatmwent before pregnancy. In both cases special precaution are necessary.*
- ***Preexisting diabetes***
Nearly all women with established diabetes mellitus can have a normal pregnancy, provided the diabetes is well controlled throughout.

DIADBETIC PREGNANCY (Cont.-1)

*It is important to plan the pregnancy and to make sure that the **blood glucose** level is under particularly good controlled before and at the time of conception, otherwise there is slightly **increased chance** of the baby being **malformed**.*

*If controlled is poor during the pregnancy, there may be an increase in the amount of glucose reaching the baby (which make the **baby grow faster** than normal) and this may cause difficulties at birth.*

*Also, the growth of infants of diabetic mother, may be **stunted**, these babies may have complications in the days immediately after birth.*

DIADBETIC PREGNANCY (Cont.-2)

- **Gestational Diabetes**

*Gestational diabetes is most often detected in the second half of pregnancy, when **increased glucose appears in the urine** or the baby is found to be **bigger than expected** when a physician examines the mother's abdomen (through this finding do not always mean the mother is diabetic).*

Apparently, not enough insulin is produced to keep the blood glucose levels normal during the pregnancy.

Obstetrician now screen for diabetes at 26 weeks.

Gastational diabetes usually disappearrs with the delivery of the baby, but can be a sign of future diabetes in up to $\frac{3}{4}$ of these mothers.

DIADBETIC PREGNANCY (Cont.-3)

- **CARE**

*When feasible, diabetic pregnancies are treated at **high-risk obstetrical centers** (many of which offer pre-pregnancy clinics for those with established diabetes to help achieve good control before conception) and at **antenatal clinics to supervise** all aspects of the pregnancy.*

*The chances that the baby of a diabetic parent will **become diabetic** are about 1/100 and, if both parents are diabetic, about 1/20. If only the **father is diabetic**, no special precautions need to be taken at conception or during the pregnancy.*

Reading 4: **ECLAMPSIA**

- *A rare, serious condition of late pregnancy, labor, and the period following delivery (puerperium).*

*Eclampsia is characterized by seizures (convulsion) in the woman, sometimes followed by coma and death: eclampsia also **threatens the life of the baby.***

*The disorder occurs as a **complication of moderate or severe** (but not mild) pre-eclampsia, a common condition of late pregnancy that is marked by **hypertension, proteinuria and edem.***

CAUSES:

*Both **preeclampsia and eclampsia** are believed to be caused by a **substance or toxin produced by the placenta**, the organ in the uterus that sustains the unborn child. To date, however extensive investigations have failed to identify the cause.*

*Eclampsia occurs more **commonly in women who have had little or no prenatal care**. Preeclampsia develops in these women without it being recognized and treated.*

- **INCIDENCE**

About $\frac{1}{2}$ of the cases develop in late pregnancy, $\frac{1}{3}$ during labor and the rest after delivery

ECLAMPSIA (Cont.-2)

- **SYMPTOMS & SIGNS**

In eclampsia the symptoms that characterize severe preeclampsia are present. In addition before the onset of seizures, the women may suffer from headache, confusion, blurred vision, and abdominal pain.

The seizures consist of violent, rhythmic jerking movement of the limbs caused by involuntary contraction of the muscles; there may also be breathing difficulty caused by the constriction of the muscles of the larynx.

The seizures may sometimes be followed by coma.

ECLAMPSIA (Cont.-3)

- ***TREATMENT***

*The seizure are treated by ensuring that the women can breath properly (sometimes by inserting an **endotracheal tube** down her throat) and by giving anticonvulsant drugs, which prevent further seisures.*

The baby's condition is monitored throughout.

Rapid delivery (often by emergency caesarean section is usually performed, since the conditions often clears once the baby is born.

ECLAMPSIA (Cont.-4)

- **OUTLOOK**

About $\frac{1}{3}$ to $\frac{1}{2}$ of babies fail to survive eclampsia, usually because of lack of oxygen in the uterus.

Of these deaths, $\frac{1}{2}$ occur before delivery, the others soon after.

After delivery, the mother's blood pressure usually returns to normal, within a week and proteinuria clears within 6 weeks. In about 5 to 10% of cases, however, serious complications develop in the woman before, during or after delivery.

There may include failure of the heart and lungs, kidney, or liver, intracerebral hemorrhage, pneumonia or pulmonary edems

Reading 5: **INFERTILITY**

- ***The infertility of a couple to conceive.***

Conception depends on the production of healthy sperm by the man, healthy eggs by the woman, and sexual intercourse so that the sperm reach the woman's fallopian tubes.

*There must **not be a mechanical obstruction** to prevent the sperm from reaching the egg, and the sperm must be able to fertilize the egg when they meet.*

INFERTILITY (Cont.-1)

*Next, the fertilized egg must be able to become **implanted in the uterus.***

*Finally, the developing embryo must be healthy and its **hormonal environment must be adequate** for further development so that the pregnancy can continue to full term.*

Infertility may result from a disturbance of one or more of these factors.

INFERTILITY (Cont.-2)

- **INCIDENCE**

Infertility is a common problem. As many as 1 in 6 couples requires help from a specialist.

Infertility increases with age, the older a couple is when trying for concieve, the more difficult it may be.

- **INFERTILYIY FACTORS**

Male factors _____

Female factors _____

Joint factors _____

%

0

10

20

30

40

50

Causes:

Male infertility:

The major cause is failure to produce enough healthy sperm. Azoospermia and Oligospermia both causes infertility.

In some cases the sperm are malformed or their life span after ejaculation is too short for them to travel far enough to reach the egg.

Defects in the sperm may be due to a blockage of the spermatic tubes or damage to the spermatic ducts, usually due to a sexually transmitted disease, such as GO (gonorrhoea)

Causes (Cont.-1)

A varicocele (varices vein in the scrotum) may also be factor.

Abnormal development of the testes due to endocrine disorder or damage of the testes by orchitis may also cause defective sperm.

Toxin such as alcohol, cigarettes, or various drugs can lower the sperm count.

Infertility, in men may also be caused by a failure to deliver the sperm into the vagina, as occurs in impotence or in disorders affecting ejaculation, such as inhibited ejaculation or retrograde ejaculation.

Causes (Cont.-2)

- *In rare cases, there may be a chromosomal abnormality (Klinefelter's syndrome) or as genetic disease (such as cystic fibrosis) that cause infertility in men.*

- ***FEMALE INFERTILITY***

***Anovulation** is the most common cause of female infertility. Failure to ovulate often occurs for no obvious reason. It can be caused by:*

- *a hormonal imbalance,*
- *stress, or*
- *a disorder of the ovary, such as a tumor or cyst.*

Causes (Cont.-3)

Blocked fallopian tubes, which frequently occur after pelvic inflammatory disease, may prevent the sperm from reaching the egg.

The woman may have **one tube or no tubes** because of a congenital defect or because they were removed during surgery for ectopic pregnancy.

Disorders of the uterus (such as **fibroids**) often cause infertility as can endometriosis.

Causes (Cont.-4)

*Infertility also occurs if the woman's cervical mucus provides a **hostile environment** to her partner's sperm by producing antibodies that kill or immobilize them.*

*Rarely, a **chromosomal abnormality or allergy** to her partner's sperm may cause a woman's infertility.*

- **DIAGNOSIS**

If pregnancy has not resulted after a year of unprotected intercourse (about 90% of women trying to get pregnant do so within a year), the couple may seek professional help.

DIAGNOSIS (Cont.)

- *Physical examination of **both the man and the woman** will be performed to determine the general state of their health, and to eliminate untreated physical disorders that may be causing the infertility.*

The couple is also interviewed, separately, and together, regarding their sexual habits, to determine if intercourse is taking place correctly for conception.

*If the cause of infertility remain undiagnosed after their examinations, **special tests may be performed.***

TREATMENT

- *When no specific cause can be found, improving the general state of health may help. The physician may suggest changes in **diet**, such as **reducing alcohol intake**, and may suggest relaxing and eliminating stress.*

- ***Treatment of male infertility** is limited.*

When azoospermia exists, the couple must accept their childless state or consider adoption or artificial insemination by donor.

*If the sperm count is low, artificial insemination by the husband may be tried, although its success rate varies. In some cases of male infertility due to an endocrine imbalance, drugs such as **clomiphene** or **gonadotropin** hormone therapy may prove useful.*

TREATMENT (Cont.-)

- ***For female infertility***, failure to ovulate requires ovarian stimulation with a drug such as clomiphene with or without a gonadotropin hormone.

*Microsurgery can sometime repair damage to the fallopian tubes if it is not too severe. If surgery on the fallopian tubes is unsuccessful, **in vitro fertilization** is the only way that pregnancy will be possible.*

*Uterine abnormalities or disorder, such as fibroids, may require treatment. If the cervical mucus has proved hostile, **artificial insemination of the husband's semen** directly into the cervix can prevent the sperm from coming into contact with the mucus.*

OUTLOOK

Only about ½ the couples professionally treated for infertility achieve a pregnancy, but the chances vary according to cause.

(Readings material are copied from:

Charles B Clayman. MD: The AMA Encyclopedia of Medicine, 1989)

READING:

HIGH RISK PREGNANCY

Dikutip oleh
dr.Mayang Anggraini Naga
FIKES-KesMas, U-IEU
2009

CLASSIFICATION OF RISK FACTORS IN HIGH RISK PREGNANCY

- **PRE-EXISTING RISKS**

- *Age under 18, over 35*
- *Parity: First and 5th and over*
- *Interval: Short spacing of less than 2 years*
- *Social: Low status*
- *Marital: The unmarried*
- *Education: The illiterate*
- *Height: Short stature (<140 cm)*
- *Weight: Obesity*
- *Personal hygiene: Poor*
- *Neighborhood: Rural and Urban, Slum, Especially in LDCs (Less Developed Countries)*

Cont.-1

- ***PRE-EXISTING PATHOLOGY***

- *Poor general health*
- *Anemia, malnutrition*
- *Diabetes, hypertension*
- *VD (venereal disease = PSM), AIDS, Tuberculosis*
- *chronic infection*
- *Cardio-renal disease*
- *Structural abnormality*
- *History of fetal loss*
- *History of obstetric difficulties*
- *Smoking & Drug abuse*

RISK EMERGING DURING PREGNANCY

- *Anemia of pregnancy*
- *Poor pregnancy weigh gain*
- *Antepartum hemorrhage*
- *Toxemias of pregnancy*
- *Abortion*
- *Malpresentation, multiple pregnancy*
- *Cephalo-pelvic disproportion*
- *Rh-incompatibility*
- *Drug abuse, alcohol, smoking*
- *Infection, especially viral*
- *Gestational diabetes*
- *Radiation exposure*

RISK OF LABOR AND DELIVERY

- *Premature labor*
- *Premature rupture of membrane*
- *Prolonged labor*
- *Intrapartum/postpartum hemorrhage*
- *Malpresentation*
- *Operative intervention*
- *Anesthesia*
- *Sepsis*

INVESTIGATION

- *Several papers considered investigative procedures in high risk pregnancy and perinatal mortality, ranging from:*
 - *clinical and laboratory evaluation,*
 - *epidemiologic surveys,*
 - *quantification of risks,*
 - *surveillance and*
 - *monitoring.*

INVESTIGATION (Cont.-)

AREA NEEDING FURTHER ELABORATION INCLUDE:

- a) Simple maternity and neonatal care monitoring;*
- b) Innovative health services research in maternity and neonatal care;*
- c) evaluation and modification of the risk approach;*
- d) comparative investigation of maternal mortality using the RAMOS or other approaches.*

NUTRITIONAL AND MOTHERHOOD

- ***Source Of Nutritional Deficiency Include:***
 1. *Food is anavailable;*
 2. *Food is available but cannot be afforded;*
 3. *Food is affordable but family does not actively obtain it;*
 4. *Family obtains food which is then maldistributed among members with neglect of vulnerable groups;*
 5. *Food reaches vulnerable groups but its value is lowered:*
 - *by parasitic and other infection,*
 - *by absorption or metabolic dirorders or*
 - *by other pathology.*

NUTRITIONAL AND MOTHERHOOD (Cont.-)

The family is emphasized as:

- *a nutrition unit and*
- *breastfeeding is stressed with proper supplementation.*

The policy implication are to:

- *increase local availability of food,*
- *improve social conditions,*
- *provide nutrition education,*
- *diet planning,*
- *promote breastfeeding with supplements.*

MANAGEMENT OF HIGH RISK PREGNANCY

- *This includes:*
 - *antenatal care*
 - *prevention of preterm deliveries,*
 - *proper medical and surgical services*
in primary health care;
better still, provision of successive and
complementary tiers of care:
 - *from mother herself, to the*
 - *TBA and community workers,*
 - *primary health care station,*
 - *secondary health care station all the way to*
 - *specialized maternity referral care centers.*

THE TRADITIONAL BIRTH ATTENDANCE (TBA)

- *The TBA figured visibly in all papers dealing with management, with impressive consistency.*
- *Everyone seems to believe that the TBA should have a defined role in maternity care and family planning, should be duly:*
 - *recognized,*
 - *trained and*
 - *certified.*

One paper suggested the establishment of a syndicate or college for TBSs with the function of:

- *training.*
- *certification.*
- *coordination and*
- *lobbying.*

(The Philippine is moving fast in training and utilizing TBA)

MANAGEMENT OF THE NEONATE

- *Proper maternity care is the first line in neonatal care.*
- *Special provisions include:*
 - *elimination of drug abuse during pregnancy, and*
 - *prevention of infection in pregnancy;*
 - *detection and management of Rh-incompatibility;*
 - *fetal monitoring;*
 - *immunization of mother against neonatal tetanus;*
 - *care of prematurity and fetal stress;*
 - *breastfeeding with supplementation;*
 - *immunization against the main infections;*
 - *monitoring of growth and development, using growth curves or periodic measurement*

FAMILY PLANNING

- *Several papers elaborated on the health benefits :*
 - *family planning and*
 - *recommended adequate child spacing,*
 - *proper pregnancy timing (i.e. avoiding risky ages under 18 and over 35),*
 - *reducing high multiparity, and*
 - *prevention of abortion,*

these measures are to be supplemented with proper antenatal care when pregnancy occurs.

Family Planning (Cont.-)

It was stressed that high risk pregnancy is an undisputed indication for contraception in Islam.

Family planning was further emphasized as a human right, according to world plan of action endorsed in the Bucharest and Mexico City world population conferences.

RESEARCH PRIORITIES

- *A fastinating list of researchable leads to improve maternity care was presented.*

Examples are:

- *the measurement of triceps skin thickness to identifiy gravidas in need of nutritional supplements or to predict low birth weight.*
- *use of prophylactice antibiotics to prevent chorioamnionitis and preterm labor,*
- *antenatal zince supplementation to prevent chorioamnionitis and stimulate appetite for improved weight gain,*
-

RESEARCH PRIORITIES (Cont.-)

- *prophylactic aspirin to prevent pregnancy induced hypertension. And a host of other interesting leads.*

But the paper on research priorities also pointed out that many standard practices in maternity care – before, during or after delivery – have not been submitted to rigorous evaluation in controlled clinical trials.

The need for an international network of investigators to conduct such research was emphasized.

PRIMARY HEALTH CARE

- *Most papers focused their topics on implications for primary health care.*

The frustrations of trying to satisfy basic health needs for rural and urban slum mothers and their newborns in the face of inadequate means was evident in lively discussions for many papers.

At time the discussions indicated that the chance of reaching our goal of health for All by the Year 2000 was distressingly remote.

Primary Health Care (Cont.-)

*But there was an evolving interpretation of the phrase **“in the spirit of self-reliance and self-determination”**, in the definition of primary health care, that could solve the dilemma of needs vs resource.*

This interpretation is to depend on communities to set their own development priorities, including health.

Not all communities will choose all necessary aspects to health simultaneously.

In this way the goal becomes part of the process, and now reads:

“Health for All Who Want It by the Year 2000”.

Declaration of Monastir*

We, ...

Therefore,

1. 2. 3. 4. 5.

dan

6. We put forward the following recommendations for the prevention and care of high risk pregnancies:

- (a) An increase in the antenatal visits for all pregnancies at maternal and child health centres, whether fixed or mobile, adopting the risk approach.*

Declaration of Monastir (cont.-1)*

- (b) The prevention of prematurity and intrauterine growth retardation, the principal causes of perinatal mortality, by diagnosis and treatment of all risk factors.*

- (c) An increase in the number, and the decentralization of preventive and curative health centres in order to provide more qualified technical supervision of deliveries and the puerperium, in line with the risk approach.*

Declaration of Monastir (cont.-2)*

(d) The development of family planning centres and promotion of increased knowledge and availability of birth-spacing methods, in order to avoid the severe consequences for women and children of uncontrolled fertility.

As the Chief of State of the host country, President Bourguiba, has stated on several occasions.

“Family planning is a fundamental right of the individual and of the nuclear family”.

The congress participants emphasize that adequate birth spacing can make an important contribution to maternal and neonatal health.

Declaration of Monastir (cont.-3)*

- (e) Prevention of pregnancy before 19n years of age*
- (f) A reduction in the number of births after 35 years of age.*
- (g) Ensuring an interval of at least two years between consecutive pregnancies.*
- (h) Systematic vaccination for pregnant women with tetanus toxoid, to eradicate neonatal tetanus.*
- (i) Improvement of conditions of hygiene during obstetric care and delivery.*
- (j) Promotion of breastfeeding of a long enough duration to ensure adequate nutrition and imunity for the infant.*

Declaration of Monastir (cont.-4)*

- (k) Prevention and management of qualitative and quantitative malnutrition of pregnant and lactating women, as well as prevention and control of tobacco smoking.*
- (l) WHO, UNICEF and other organizations concerned, should pursue and strengthen their actions in the research and application of simple and effective preventive and therapeutic methods such as oral rehydration therapy. It is also important to ensure that health professional include such methods in their daily practice.*

Declaration of Monastir (cont.-5)*

(m) Coordinated organization at local and regional levels of preventive and curative effort, with special emphasis on:

- better liaison between the centres providing antenatal care and those providing care for labour and delivery;*
- improvement of transport facilities for women labour;*
- general and standard exchange of medical information on referred patients;*

Declaration of Monastir (cont.-6)*

(m) (cont.-)

- *general use of partograms in all delivery centres for the diagnosis of complications of labour at an early stage;*
- *more complete and precise collection of reliable epidemiological data about maternal and perinatal mortality and morbidity.*
This is urgently needed in non-hospital-based populations.

Declaration of Monastir (cont.-7)*

(n) Education: A continuous effort is required to improve the schooling and general education of women of reproductive age.

There should be an increase in the number of university and paramedical centres for the training of sufficient teams of qualified doctors, midwives, and nurses.

(o) Community participation: The above recommendations can only provide fruitful results if they are implemented with the active participation of local communities in accordance with the principles of the Declarations of Alma Ata (1978) and Mexico City (1984).

Declaration of Monastir (cont.-8)*

(p) In particular, the Congress recognizes that, in some part of the world, a large number of women continue give birth with no qualified assistance at all.

While the aim should be to achieve correct professional supervision, it is necessary to use in the under-developed areas the potential which the TBA represent.

They should benefit from basic and continued training and regular supervision.

CONCLUSION

These recommendations are a message addressed to decisionmakers, to institutions and to all well-intentioned people without cultural, national, social, economic or professional discrimination, that they might contrivte to the spreading of and practical application to the above-mentioned measures for improvement of maternal, perinatal and child health, and of the wellbeing of families throughout the world.

*** *Reading Material is copied from:***

***High Risk Mothers and Newborns
Detection, Management and Prevention
(Proceeding second International Congress For
Maternal, and Antenatal Health, 1984.
Monastir/Tunisia. IAMANEH-Seminar Berlin/FRG
1985 and ASIA-Pacific Echo-conference
Manila/Philippines 1986)
Edited by: Abdel R Omran, M.D. Jean Martin, M.D.
Bechir Hamza, M.D.***

(Schwarcz/Suisse/Switzerland) (WHO/UNICEF)