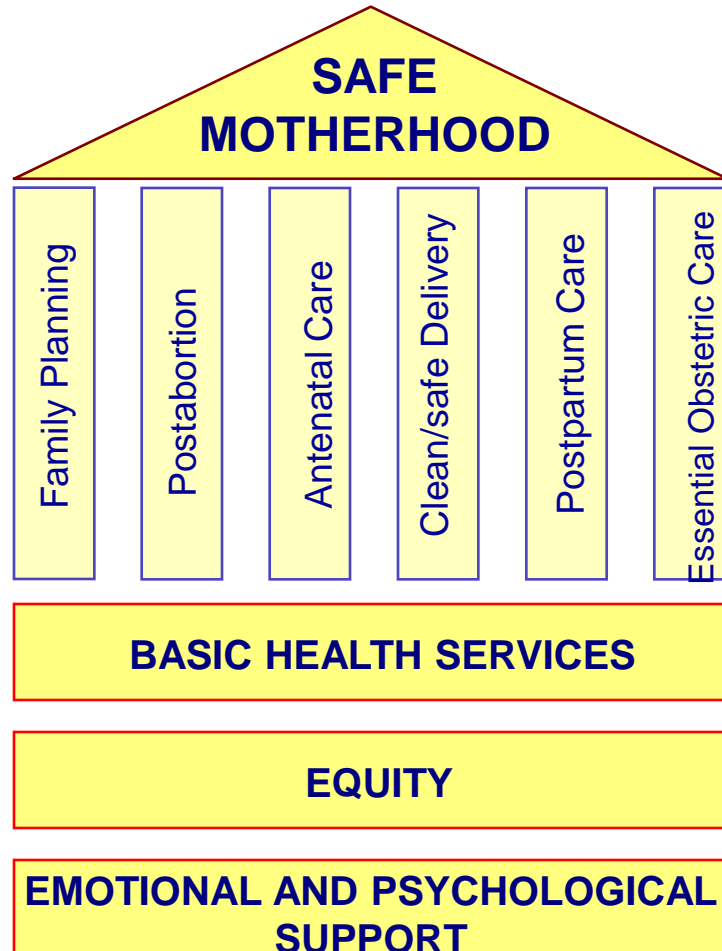


Overview Antenatal Care (ANC)

Dr. Kusuma Andriana SpOG

Essential Health Sector Interventions for Safe Motherhood



Definisi

Optimalisasi kes fisik + mental

Kehamilan

Persalinan

Nifas

Laktasi

Tujuan

Kes. ibu
Kesejahteraan janin
Abnormalitas

Cukup bulan
Partus aman
Trauma minim

Normal

ASI eksklusif

ANC Efektif → bila

- Provider terampil → ANC berkelanjutan
- Mempersiapkan persalinan dan tahu potensi komplikasi
- Promosi kes & cegah peny
 - Tetanus toxoid, nutrisi, rokok & alcohol dll
- Deteksi dan Tx peny
 - HIV, syphilis, tuberculosis, other co-existing medical diseases (e.g., hypertension, diabetes)
- Deteksi dini dan manaj komplikasi

Goal-Directed Interventions Give a Framework for Effective ANC

- Disease detection
- Counseling and health promotion
- Birth preparedness
- Complication readiness

Why Disease Detection and Not Risk Assess

- Pendekatan risiko “TIDAK EFISIEN & EFEKTIF ” unt menurunkan MMR :
 - “Risk factors” tdk memprediksi komplikasi : sering tak berhub dg penyebab komplikasi
 - What do you do once you identify risks? What about “low risk?”
 - Maternal mortality → pd populasi berisiko
 - “Risk factors”
 - relatif terjadi pd populasi yg sama ,
 - Bukan indikator yg baik
 - Sebag besar bumil berisiko tdk timbul komplikasi , sebaliknya bukil tanoa risiko justru terjadi komplikasi

Goal-Directed Components of ANC: Disease Detection

- Look for problems requiring additional care

Goal-Directed Components of ANC: Counseling and Health Promotion

- Tujuannya untuk
 - Nutrition and micronutrients
 - Rest and avoidance of heavy physical work
 - Danger signals of complications and disease/illness
 - Family planning
 - Breastfeeding
 - Malaria prophylaxis
 - Tobacco and alcohol use

Goal-Directed Components of ANC: Birth Preparedness

- Rencanakan :
 - Prepare the necessary items for birth
 - Identify a skilled attendant and arrange for presence at birth
 - Identify appropriate site for birth, and how to get there
 - Identify support people, including who will accompany the woman and who will take care of the family
- Establish a financing plan/scheme

Goal-Directed Components of ANC: Complication Readiness

15% of all pregnant women develop a life-threatening complication requiring obstetric care

- Rencanakan dana
- Decision maker ???
- Bgm transportasi
- Blood donation

Take Home Message

Antenatal care includes goal-directed interventions

- Skilled attendant
- Preparation for birth and complications
- Health promotion
- Detection of complications

DEFINISI

- Gestational Age : usia hamil mulai HPHT
- Developmental age : usia hamil mulai fertilisasi
- Trim 1 : 0 – 14 mgg
- Trim 2 : 14 – 28 mgg
- Trim3 : 28 – lahir
- Embrio : fertilisasi – 8 mgg
- Fetus : 8 mgg – lahir
- Previabile : sbl 24 mgg
- Preterm: 24 - 37 mgg
- Term : 37 – 42 mgg

PELAKSANAAN

- Nas → minim 4 x
- Ideal : 1x /bl sd UK 28 mgg
2 mgg an UK 28 - 36 mgg
1 x /mgg UK > 36 mgg
- Standar minimal **7 T**
 - Timbang BB : 1kg/bl
 - TFU : naik
 - TD : Normal
 - Imunisasi TT : Ya
 - Tes PMS : Indikasi
 - Tablet besi : Ya
 - Temu wicara : Ya

TIMBANG BADAN

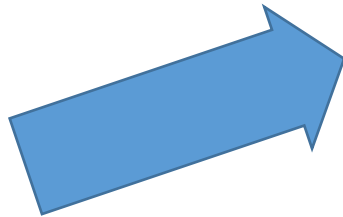
- Metabolic changes, accompanied by fetal growth, result in an increase in weight of around 25% of the non-pregnant weight.
- Approximately 12.5 kg in the average woman.

Variations in Carrying the Baby



TIMBANG BADAN

- Per(+) bervariasi antar perempuan → per (+) nyata pada trim II → 0.5 kg/mgg
- Mendekati aterm BB sedikit ↓
- Per (+) ok



Fetus	3,400
Placenta	650
Amniotic fluid	800
Uterus	970
Breasts	405
Blood	1,450
Extravascular fluid	1,480
Maternal stores (fat)	3,345
Total	12,500 grams

TFU

U K	Tinggi Fundus	
12 minggu	-	Diatas simfisis pubis
16 minggu	-	Pertengahan simfis- umbilikus
20 minggu	20 cm (\pm 2 cm)	Setinggi umbilikus
22 – 27 mgg	UK (cm) (\pm 2 cm)	-
28 minggu	28 cm (\pm 2 cm)	Pertengahan umbilikus – px
29 – 35 mgg	UK (cm) (\pm 2 cm)	-
36 minggu	36 cm (\pm 2 cm)	Setinggi proc.Xiphoideus
40 minggu	32 cm (\pm 2 cm)	2 jari dibawah proc. Xiphoideus

GEJALA DAN TANDA

- **TEKANAN DARAH DIASTOLIK MERUPAKAN INDIKATOR**
 - **MENGUKUR TAHANAN PERIFER**
 - **TIDAK TERPENGARUH KEADAAN EMOSI**

- **DIAGNOSIS HIPERTENSI BILA TEKANAN DIASTOLIK \geq 90 mmHg PADA DUA KALI PENGUKURAN BERJARAK \geq 1 JAM**

- **HIPERTENSI DALAM KEHAMILAN**
 - **HIPERTENSI KARENA KEHAMILAN**
 - **HIPERTENSI KRONIK**

PENILAIAN KLINIK

**TEKANAN
DARAH
NORMAL**

**KEJANG
RIWAYAT KEJANG
DEMAM (-)
KAKU KUDUK (-)**

EPILEPSI

**DEMAM
NYERI KEPALA
KAKU KUDUK (+)
DISORIENTASI**

**MALARIA
SEREBRAL
MENINGITIS
ENSEFALITIS**

**TRISMUS
SPASME OTOT
MUKA**

TETANUS

**NYERI KEPALA
GANGGUAN
PENGLIHATAN
MUNTAH
RIWAYAT GEJALA
SERUPA**

MIGRAINE

**TEKANAN DARAH
MENINGKAT
($\geq 140/90$ mmHg)**

PENILAIAN KLINIK

**NYERI KEPALA
GANGGUAN
PENGLIHATAN
HIPERREFLEKSIA
PROTEINURIA
KOMA**

**HAMIL
< 20 MG**

**HIPERTENSI
KRONIK**

**SUPERIMPOSED
PREECLAMPSIA**

**HAMIL
> 20 MG**

KEJANG +

EKLAMPSIA

KEJANG -

HIPERTENSI

**PREEKLAMPSIA
RINGAN**

**PREEKLAMPSIA
BERAT**

IMUNISASI TT

- 1 bl sebelum menikah
- TT 1 : UK 16 mgg
- TT 2 : UK 20 mgg
- Booster : bila kehamilan berikutnya > 5 th

TES PMS

- Untuk menilai adanya PMS
- Dilakukan wawancara + pemeriksaan penunjang bila diperlukan

Evidence category	Source
Ia	Systematic review and meta-analysis of randomised controlled trials
Ib	At least one randomised controlled trial
IIa	At least one well-designed controlled study without randomisation
IIb	At least one other type of well-designed quasi-experimental study
III	Well-designed non-experimental descriptive studies, such as comparative studies, correlation studies or case studies
IV	Expert committee reports or opinions and/or clinical experience of respected authorities

Recommendation grade	Evidence
A	Directly based on category I evidence
B	Directly based on: <ul style="list-style-type: none"> • category II evidence, or • extrapolated recommendation from category I evidence
C	Directly based on: <ul style="list-style-type: none"> • category III evidence, or • extrapolated recommendation from category I or II evidence
D	Directly based on: <ul style="list-style-type: none"> • category IV evidence, or • extrapolated recommendation from category I, II or III evidence
Good practice point	The view of the Guideline Development Group
NICE 2002	Recommendation taken from the NICE technology appraisal

Asymptomatic bacteriuria

- *Pregnant women should be offered routine screening for asymptomatic bacteriuria by midstream urine culture early in pregnancy.*
- *Identification and treatment of asymptomatic bacteriuria reduces the risk of preterm birth.*

- Wanita hamil harus ditawarkan skrining rutin untuk bakteriuria asimtomatik dengan kultur urin midstream awal kehamilan. Identifikasi dan pengobatan bakteriuria asimtomatik mengurangi risiko kelahiran prematur.

bakteriuria asimtomatik

Asymptomatic bacterial vaginosis

*Pregnant women should **not be offered** routine screening for bacterial vaginosis because the evidence suggests that the identification and treatment of **asymptomatic bacterial vaginosis** does not lower the risk for preterm birth and other adverse reproductive outcomes.*

- Bacterial vaginosis asimtomatis

Wanita hamil tidak boleh ditawarkan skrining rutin untuk vaginosis bakteri karena bukti menunjukkan bahwa identifikasi dan pengobatan tanpa gejala vaginosis bakteri tidak menurunkan risiko kelahiran prematur dan hasil reproduksi yang merugikan lainnya.

Chlamydia trachomatis

*Pregnant women should **not be offered** routine screening for asymptomatic chlamydia because there is insufficient evidence on its effectiveness and cost effectiveness.*

C

- Chlamydia trachomatis

Wanita hamil tidak boleh ditawarkan skrining rutin untuk klamidia asimtomatik karena ada cukup bukti tentang efektivitas efektivitas dan biaya.

Cytomegalovirus

*The available evidence does **not support** routine cytomegalovirus screening in pregnant women and it should not be offered.*

B

- sitomegalovirus

Bukti yang ada tidak mendukung screening cytomegalovirus rutin pada wanita hamil dan tidak boleh ditawarkan.

Hepatitis B virus

- *Serological screening for hepatitis B virus **should be offered** to pregnant women*
- *So that effective postnatal intervention can be offered to infected women to decrease the risk of mother-to-child-transmission.*

- Skrining serologis untuk virus hepatitis B harus ditawarkan kepada ibu hamil
Sehingga intervensi postnatal efektif dapat ditawarkan kepada perempuan yang terinfeksi untuk mengurangi risiko ibu-ke-anak transmisi.

Hepatitis C virus

*Pregnant women should **not be offered routine screening** for hepatitis C virus because there is **insufficient evidence** on its effectiveness and cost effectiveness.*

C

- Wanita hamil tidak boleh ditawarkan skrining rutin untuk virus hepatitis C karena ada cukup bukti tentang efektivitas efektivitas dan biaya.

HIV infection

Pregnant women should be offered screening for HIV infection early in antenatal care because appropriate antenatal interventions can reduce mother-to-child transmission of HIV infection.

- Wanita hamil harus ditawarkan skrining untuk infeksi HIV awal dalam perawatan antenatal karena intervensi antenatal yang tepat dapat mengurangi penularan dari ibu-ke-anak infeksi HIV.

Rubella

*Rubella-susceptibility screening **should be offered early in antenatal care** to identify women at risk of contracting rubella infection and to enable vaccination in the postnatal period for the protection of future pregnancies.*

- Skrining Rubella-kerentanan harus ditawarkan pada awal perawatan antenatal untuk mengidentifikasi wanita yang beresiko infeksi rubella kontrak dan untuk memungkinkan vaksinasi pada periode postnatal untuk perlindungan kehamilan berikutnya.

Streptococcus group B

Pregnant women should not be offered routine antenatal screening for group B streptococcus (GBS) because evidence of its clinical effectiveness and cost effectiveness remains uncertain.

Syphilis

Screening for syphilis should be offered to all pregnant women at an early stage in antenatal care because treatment of syphilis is beneficial to the mother and fetus.

B

Toxoplasmosis

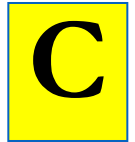
*Routine antenatal serological screening for toxoplasmosis **should not be offered** because the harms of screening may outweigh the potential benefits.*

B

Toxoplasmosis

- **Pregnant women should be informed of primary prevention measures to avoid toxoplasmosis infection, such as:**

- 1. Washing hands before handling food*
- 2. Thoroughly washing all fruit and vegetables, before eating*
- 3. Thoroughly cooking raw meats*
- 4. Wearing gloves and thoroughly washing hands after handling soil and gardening*
- 5. Avoiding cat faeces in cat litter or in soil.*



Tablet Besi

- *Iron supplementation should not be offered routinely to all pregnant women.*
- *It does not benefit the mother's or fetus's health and may have unpleasant maternal side effects.*

A

TEMU WICARA (ANAMNESA)

Riwayat Kehamilan Ini

- **Usia ibu**
- **HPHT**
- **Perdarahan pervaginam**
- **Keputihan**
- **Mual dan muntah**
- **Obat-obatan atau jamu**
- **Masalah lain**

Riwayat Obstetri Lalu

- Jumlah kehamilan
 - Jumlah persalinan cukup bulan, atau prematur
 - Jumlah anak hidup
 - Jumlah abortus
 - Riw. Hipertensi
 - Berat bayi < 2,5 kg atau > 4 kg
 - Masalah saat hamil, persalinan dan nifas
-

ANAMNESA

- Riwayat penyakit sebelumnya
 - Anamnesa yang teliti → tanya !!!

JANGAN tunggu ibu yang bercerita

- Riwayat Sosial ekonomi
 - Status perkawinan
 - Kebiasaan rokok, alkohol
 - Pekerjaan
 - Pendidikan dll

PEMERIKSAAN FISIK

- UMUM → Vital Sign
- Pemeriksaan luar → setiap kunjungan → TFU, BJA, Leopold
- Pemeriksaan genitalia
 - Bila ada indikasi
 - Dari luar, VT → TIDAK DILAKUKAN UNTUK TENTUKAN HAMIL +/-
- Lab : DL, UL, GDA

Konseling (Health Promotion)

- Gizi
- Aktifitas normal
- Perubahan fisiologis
- Hub suami istri
- Rencana ANC
- Pantau janin → 10 gerak/12 jam
- Tanda-tanda bahaya
- Rencana partus
- Kebersihan
- Keterlibatan keluarga → Suami SIAGA, Tab dll

GIZI

- Kenaikan BB 1 – 2 kg/ bl
- Kalori : (+) 300 kcal/hr dari kebutuhan awal
- Vitamin
 - As. Folat : 400 µg/hr
 - Zat besi : 30 mg/hr elemental
 - Calcium : 1200 mg/hr

Folic acid

- *Dietary supplementation with folic acid, before conception and up to 12 weeks' gestation, reduces the risk of having a baby with neural tube defects (anencephaly & spina bifida).*
- *The recommended dose is 400 micrograms per day.*



Vitamin A

- *Vitamin A supplementation (intake greater than 700 micrograms) might be teratogenic and therefore it should be avoided.*
- *Liver and liver products may also contain high levels of vitamin A, consumption of these products should also be avoided.*

Vitamin D

- *There is insufficient evidence to evaluate the effectiveness of vitamin D in pregnancy.*
- *In the absence of evidence of benefit, vitamin D supplementation should not be offered routinely to pregnant women.*

MUAL & MUNTAH

- Terjadi 50 % pd T1
- Berat → hiperemesis gravidarum
- Management MM ringan :
 - Hindari makanan berlemak
 - Makan sedikit tapis ering
 - Minum the jahe
- Management MM berat
 - Hentikan suplemen
 - Antihistamin
 - Prometazine
 - Metoclopramide

AKTIFITAS FISIK

- Tidak perlu dibatasi
- Hindari posisi OR supinasi yg lama pada T2 dan T3
- Stop → bila kelelahan (++), sesak)
- Kontraindikasi :
 - IUGR
 - Vag bleeding
 - Incompetenc Cx
 - Faktor risiko partus prematur
 - KPD
 - HT dlam kehamilan

Exercise in pregnancy

Beginning or continuing a moderate course of exercise during pregnancy is not associated with adverse outcomes.

A

Sexual intercourse in pregnancy

Sexual intercourse in pregnancy is not known to be associated with any adverse outcomes.

Air travel during pregnancy

- *Pregnant women should be informed that long-haul air travel is associated with an increased risk of venous thrombosis.*
- *Wearing correctly fitted compression stockings is effective at reducing the risk.*

Car travel during pregnancy

Pregnant women should be informed about the correct use of seat belts (that is, three-point seatbelts 'above and below the bump, not over it').

Traveling abroad during pregnancy

If pregnant women are planning to travel abroad, they should discuss considerations such as flying, vaccinations and travel insurance.

