Overview Antenatal Care (ANC)

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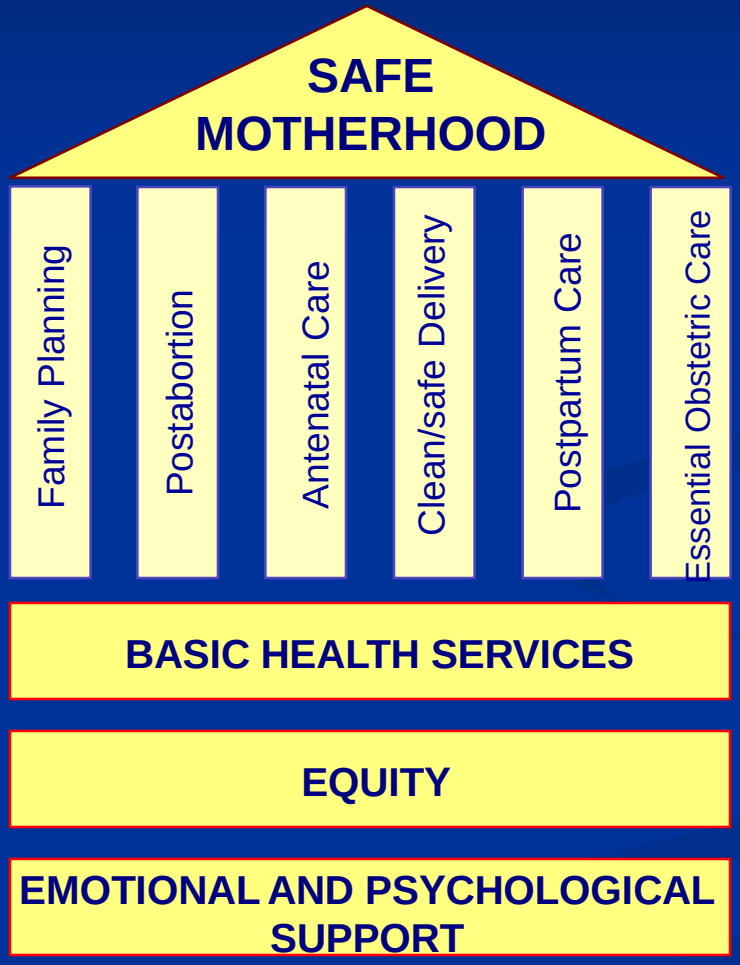
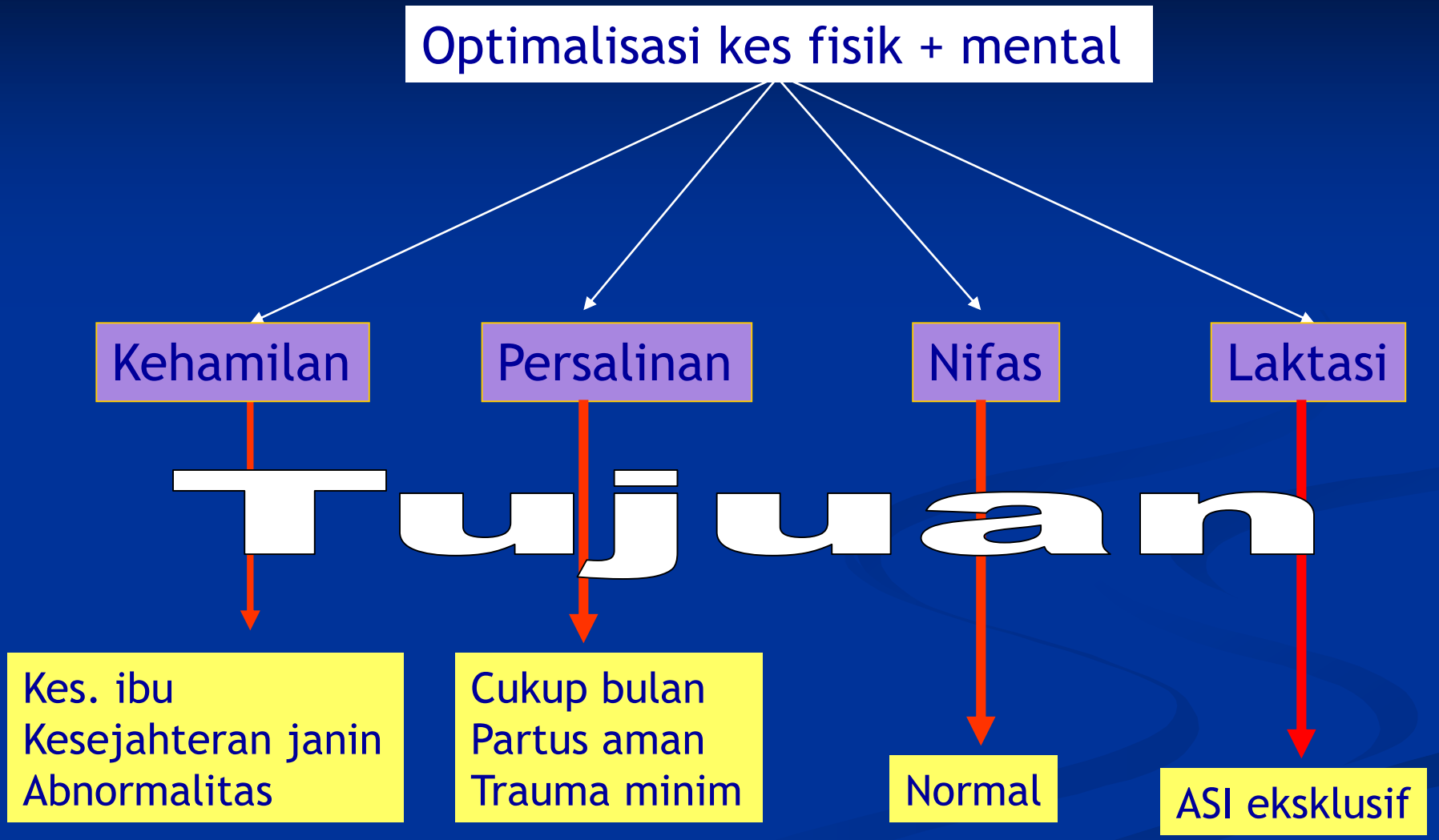
Essential Health Sector Interventions for Safe Motherhood



Definisi


Optimalisasi kes fisik + mental
Kehamilan
Persalinan
Nifas
Laktasi
Tujuan
Kes. ibu
Kesejahteran 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 komlpikasi
  - What do you do once you identify risks? What about “low risk?”
  - Maternal mortality ➔ pd populoasi berisiko
  - “Risk factors”
    - relatif terjadi pd populasi yg sama ,
    - Bukan indikator yg baik
  - Sebag besar bumil berisiko tdk timbul komplikasi , sebaliknya bumil tanpa risiko justru terjadi komplikasi

Fortney 1995; Yuster 1995.

Yang Tidak Direkomendasikan

- Pendekatan Risiko terhadap Asuhan Antenatal
  - Kasango, studi di Zaire
    - 71% ibu yang mengalami persalinan macet tidak bisa diprediksikan
    - 90% ibu yang diidentifikasi sebagai yang “beresiko” tidak pernah mengalami komplikasi

Goal-Directed Components of ANC: Disease Detection

- Look for problems requiring additional care

Parameter	Condition
Skin, general appearance, night blindness, goiter	Malnutrition
Temperature, dysuria	Signs of infection
Blood pressure, edema, proteinuria, reflexes	Signs of pre-eclampsia
Hemoglobin, conjunctiva/palms/ tongue pallor	Signs of anemia
Breast exam	Breast disease
Baby's movements, fundal height, baby's heart beat	Fetal distress/demise
Pelvic and speculum exam	Sexually transmitted diseases

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
- Previable : sbl 24 mgg
- Preterm : 24 - 37 mgg
- Term : 37 – 42 mgg
- Post term : > 42 mgg

PELAKSANAAN

- Nas → minim 4 x → FOCUSED ANC
- Ideal : 1x /bl sd UK 28 mgg

  2 mgg an UK 28 - 36 mgg

  1 x /mgg UK > 36 mgg
- Standar minimal 7 T → 10 T
  - Timbang BB : 1kg/bl
  - TFU : naik
  - TD : Normal
  - Imunisasi TT : Ya
  - Tes PMS : Indikasi → tes Laboratorium
  - Tablet besi : Ya
  - Temu wicara : Ya

7 T

1. Timbang BB : 1kg/bl
2. TFU : naik
3. TD : N
4. Imunisasi TT : Ya
5. Tes PMS : Indikasi
6. Tablet besi : Ya
7. Temu wicara : Ya

10 T

1. Timbang BB
2. TFU
3. TD
4. Imunisasi TT
5. Tes Laboratorium
6. Tablet besi
7. Temu wicara
8. sTatus Gizi : LILA
9. Bunyi janTung anak
10. Tentukan presentasi janin

1. 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.

1. Penambahan BB

Kategori Berat (BMI)	Total Kenaikan BB (Kg)	Penambahan BB	
		TM I (Kg)	TM II (Kg)
Normal (19,8-26)	12,5 – 13	2,3	0,49
Kurus (< 19,8)	11,5 – 16	1,6	0,44
Lebih (26-29)	7 – 11, 6	0,9	0,3
Obesitas (> 29)	6		

2. TFU

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

3. GEJALA DAN TANDA

- TEKANAN DARAH DIASTOLIK MERUPAKAN INDIKATOR
  - MENGUKUR TAHANAN PERIFER
  - TIDAK TERPENGARUH KEADAAN EMOSI
- DIAGNOSIS HIPERTENSI BILA TEKANAN DIASTOLIK ≥ 90 mmHg PADA DUA KALI PENGUKURAN BERJARAK ≥ 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

PENILAIAN KLINIK

TEKANAN DARAH MENINGKAT

(≥ 140/90 mmHg)

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**

4. IMUNISASI TT

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

5. STATUS GIZI

- Pengukuran LILA → N : ≥23.5
  - Bila < 23.5 → ibu hamil KEK (BB sbl hamil < 42 kg, TB < 145, BB trim 3 : 45 kg, Hb 11 g%, IMT sblm hamil < 17)
- Pengukuran BB
- Pengukuran TB
- Pengukuran IMT

MG01-PL

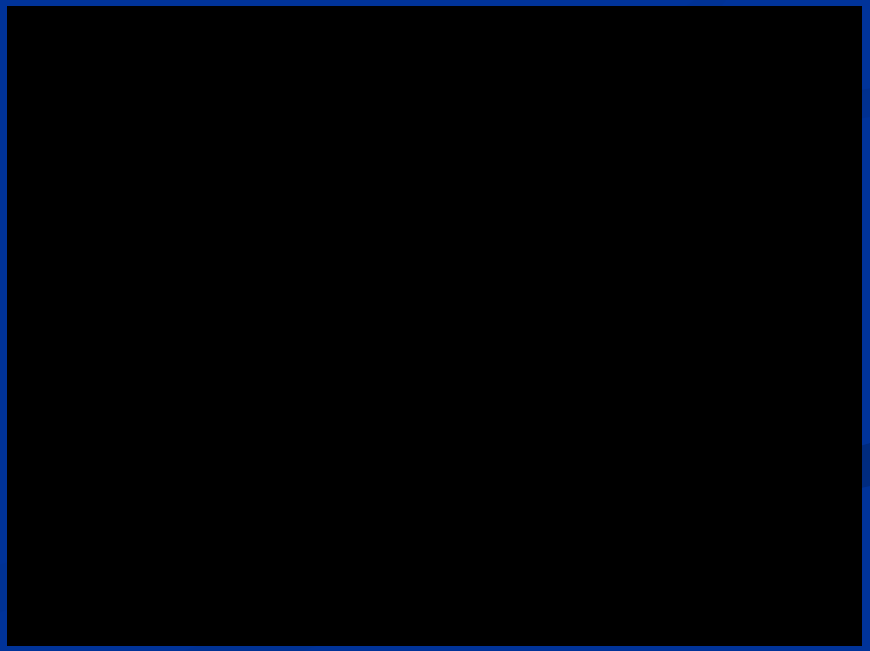
Bahan : Art Karton 210 gr
Ukuran : 36,8 x 3,5 cm

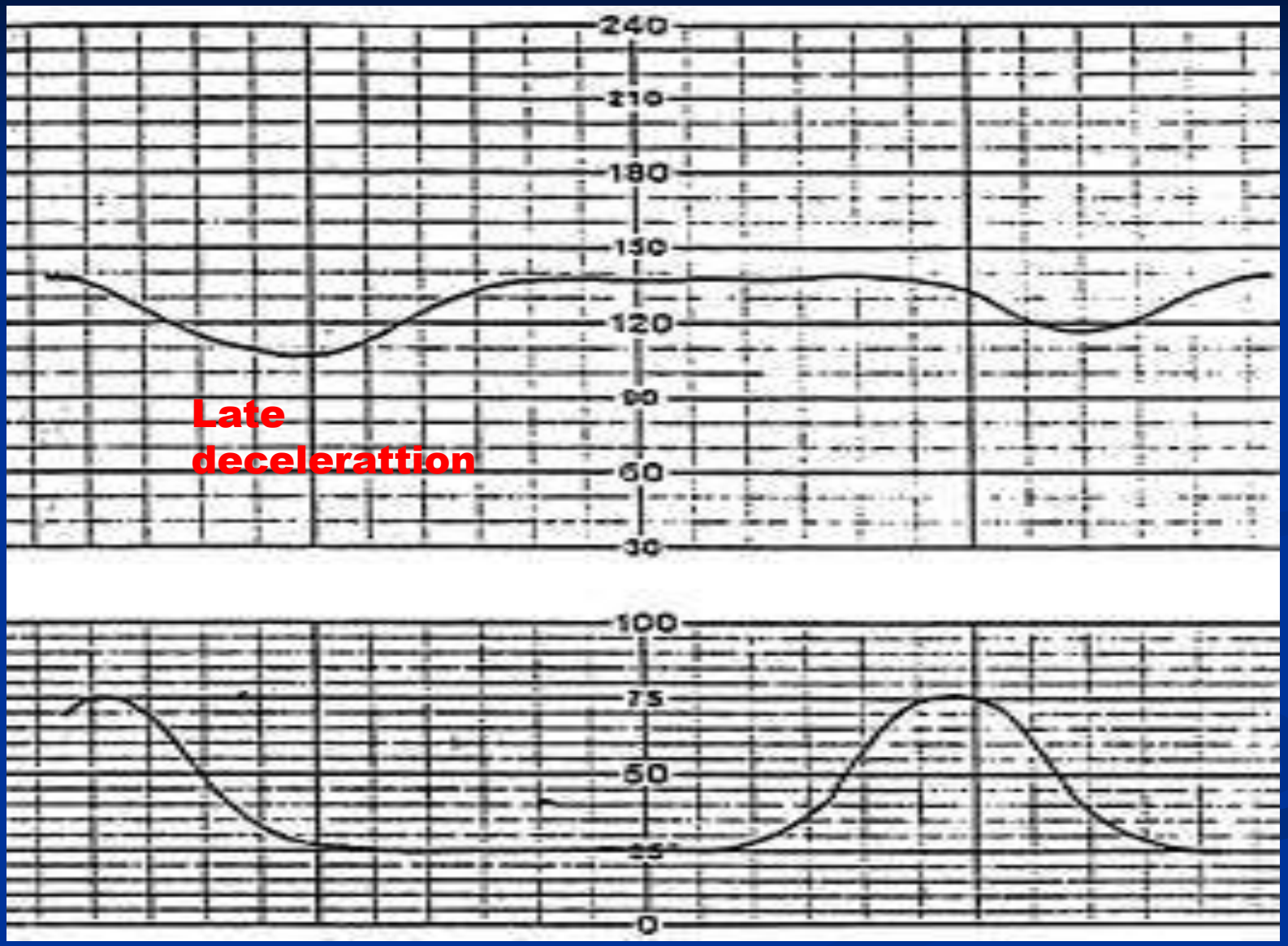
- Mempunyai gambar skala pada kedua sisi
- Satu sisi digunakan untuk mengukur lengan atas ibu hamil pada trisi sabar.
  Warna putih berarti ibu hamil mempunyai berat badan yang cukup.
  Warna merah berarti ibu hamil mempunyai berat badan yang kurang.
- Satu sisi yang lain digunakan untuk mengukur lengan atas bayi yang baru lahir.
  Warna putih berarti bayi mempunyai berat badan yang cukup.
  Warna merah berarti bayi mempunyai berat badan yang kurang.

National Research Council Recommended Daily Dietary Allowances for Women Before and During Pregnancy and Lactation

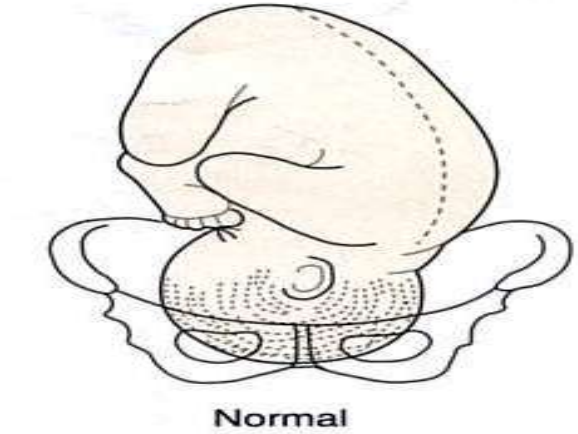
Nutrient	Nonpregnant[a]	Pregnant	Lactating
Kilocalories	2200	2500	2600
Protein (g)	55	60	65
Fat-soluble vitamins			
A (μg RE)[b]	800	800	1300
D (μg)	10	10	12
E (mg TE)[c]	8	10	12
K (μg)	55	65	65
Water-soluble vitamins			
C (mg)	60	70	95
Folate (μg)	180	400	280
Niacin (mg)	15	17	20
Riboflavin (mg)	1.3	1.6	1.8
Thiamine (mg)	1.1	1.5	1.6
Pyridoxine B_6 (mg)	1.6	2.2	2.1
Cobalamin B_{12} (μg)	2.0	2.2	2.6
Minerals			
Calcium (mg)	1200	1200	1200
Phosphorous (mg)	1200	1200	1200
Iodine (μg)	150	175	200
Iron (mg of ferrous iron)	15	30	15
Magnesium (mg)	280	320	355
Zinc (mg)	12	15	19

6. Bunyi Jantung Anak




240
210
180
150
120
90
60
30
Late
decelerattion
100
75
50
25
0

7. Presentasi Janin



8. TES LABORATORIUM

1) Pemeriksaan golongan darah
2) Pemeriksaan kadar hemoglobin darah (HB)
3) Pemeriksaan protein dalam urine
4) Pemeriksaan kadar gula darah
5) Pemeriksaan darah malaria
6) Pemeriksaan tes sifilis
7) Pemeriksaan HIV
8) Pemeriksaan BTA

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: • category II evidence, or • extrapolated recommendation from category I evidence
C	Directly based on: • category III evidence, or • extrapolated recommendation from category I or II evidence
D	Directly based on: • 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.*

A

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.

A

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

Cytomegalovirus

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

B

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.*

A

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

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.

D

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.

B

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.

C

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.*

C

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.*

A

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.*

C

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.*

A

MUAL & MUNTAH

- Terjadi 50 % pd T1
- Berat → hipermesis gravidarum
- Management MM ringan :
  - Hindari makanan berlemak
  - Makan sedikit tapis ering
  - Minum teh 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.

B

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.*

B

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').

B

Traveling abroad during pregnancy

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

GPP

GUIDE LINE ANC & POST PARTUM CARE

Recommendation	6-8 weeks	14-16 weeks	24-28 weeks	32 weeks	36 weeks	38 weeks	39 weeks	40 weeks	41 weeks	Post partum 4-6 weeks after delivery
Social and medical history (*update at each visit*)	X	X	X	X	X	X	X	X	X	X
Assessment (dental and nutritional health, weight, physical and sexual activity, alcohol and drug abuse, tobacco use **[A]**, domestic violence, environment, genetic risk factors, medications, transportation, seatbelt use **[B]**, infant car seat use **[A]**, childbirth education, adequate social support, coping skills, financial resources, knowledge of available resources, mental health, ability to comprehend information or care provided) *(update at each visit)*	X	X	X	X	X	X	X	X	X	X
Education and counseling (need for early [first trimester] and consistent prenatal care; prevention of unintended pregnancy; benefits and methods of breastfeeding; assessment and referrals for ongoing parenting education and early childhood care)	X				X					X[1]
General physical exam	X									X
Pelvic exam	X					X	X	X	X	X
Blood pressure **[B]**, weight, body mass index (BMI)	X	X	X	X	X	X	X	X	X	X
Fundal height, weeks gestation	X	X	X	X	X	X	X	X	X	
Routine urinalysis, culture **[A]**		X								
Urine for glucose and albumin	X	X	X	X	X	X	X	X	X	
Fetal position, fetal heart tones		X	X	X	X	X	X	X	X	
D (Rh) type, blood type, antibody screen **[A]**	X									

Recommendation	6-8 weeks	14-16 weeks	24-28 weeks	32 weeks	36 weeks	38 weeks	39 weeks	40 weeks	41 weeks	Post partum 4-6 weeks after delivery
Pap smear **[A]** *(if not performed in past 12 months)*	X									
Human immunodeficiency virus (HIV) counseling/testing **[A]** **Repeat at 36 weeks if previous negative test in prenatal care or women who have never been tested*	X				X					
Sexually transmitted diseases (STD) screening (gonorrhea [GC], chlamydia, Venereal Disease Research Laboratory [VDRL] **[A]**) for high-risk patients *(e.g., new or multiple sexual partners, history of sexually transmitted diseases, not using condoms consistently or correctly)* **Rescreen in third trimester if at continued risk.*	X		X (28-36 weeks+)							
Hepatitis B **[A]** and rubella screening **[B]**	X									
Hemoglobin and hematocrit **[B]**	X		X		X					
Maternal serum alpha fetoprotein/multiple marker screening **[B]**		X (16-20 weeks)								
Screening for gestational diabetes *(test earlier if previous history gestational diabetes)*			X							X^2
Influenza vaccine *(second or third trimester during flu season)*		X	X							
Group B strep cultures *(vaginal and rectal)*					X (35-37 weeks)					
Folic acid (0.4 to 0.8 mg one month prior to conception through 1st trimester) **[A]**	X	X								

Wassalamu 'alaikum Wr Wb