



## Standard Treatment Workflow (STW) for ANTE-NATAL MANAGEMENT OF NORMAL PREGNANCY ICD-11-QA42

### FIRST VISIT (PREFERABLY IN FIRST TRIMESTER)

ASK	EXAMINE	INVESTIGATIONS	DO
<ul style="list-style-type: none"> <li>Age</li> <li>LMP</li> <li>Calculate EDD</li> <li>Parity &amp; obstetric history</li> <li>Any complaints especially excessive nausea &amp; vomiting/ bleeding PV</li> <li>H/o medical illness : diabetes, hypertension, cardiac problem, TB, epilepsy or any other chronic illness</li> <li>Consanguinity, multiple pregnancy</li> <li>H/o blood transfusion and H/o prior surgical intervention</li> <li>Personal history : tobacco/ alcohol intake</li> <li>Family history : diabetes, hypertension, genetic disorders/ congenital problems, multiple pregnancy, infections including tuberculosis</li> </ul>	<ul style="list-style-type: none"> <li>Height, weight</li> <li>Calculate BMI (BMI=weight(kg)/height(m)<sup>2</sup>)</li> <li>Pallor, Jaundice, Pedal edema</li> <li>Pulse, BP, RR, temperature</li> <li>Thyroid</li> <li>Breast</li> <li>Respiratory and CVS exam - ination</li> <li>P/A examination, P/S and P/V examination</li> <li># If woman presents with bleeding per vaginum do P/A &amp; P/S to confirm amount of bleeding &amp; rule out local causes. All such cases to be referred to CHC or higher centre</li> </ul>	<p><b>ESSENTIAL TESTS</b></p> <ul style="list-style-type: none"> <li>Hemoglobin</li> <li>Urine R &amp; M</li> <li>ABO &amp; Rh grouping</li> </ul> <p><b>DESIRABLE TESTS</b></p> <ul style="list-style-type: none"> <li>VDRL/ RPR</li> <li>HIV</li> <li>HBsAg</li> <li>DIPSI test</li> <li>TSH in high risk cases (BOH, goiter, obesity or residing in iodine deficiency prone areas)</li> </ul> <p><b>OPTIONAL TESTS*</b></p> <ul style="list-style-type: none"> <li>Aneuploidy screen* by USG &amp; double marker</li> </ul>	<ul style="list-style-type: none"> <li>UPT if in doubt</li> <li>Fill up Mother and Child protection card or ANC card, make entry on RCH portal &amp; generate RCH number</li> <li>Give filled Mother and Child protection card &amp; safe motherhood booklet to woman</li> <li>Give Tab Folic Acid daily</li> <li>Give first dose of Td</li> <li>Single booster dose if received the first dose within last 3 years</li> </ul>

### SECOND VISIT (SECOND TRIMESTER)

ASK	EXAMINE	INVESTIGATIONS	DO
<ul style="list-style-type: none"> <li>Any complaints since last visit</li> <li>Quickening foetal movements</li> <li>Adherence to medications</li> </ul>	<ul style="list-style-type: none"> <li>Weight</li> <li>Pallor</li> <li>Pedal edema</li> <li>Pulse, BP in sitting position</li> <li>P/A examination for fundal height &amp; fetal heart auscultation</li> </ul>	<p><b>ESSENTIAL TESTS</b></p> <ul style="list-style-type: none"> <li>Hemoglobin</li> <li>Urine albumin</li> </ul> <p><b>DESIRABLE TESTS</b></p> <ul style="list-style-type: none"> <li>USG ( Level II between 18-20 weeks for gross congenital malformations)</li> <li>DIPSI test if &gt;24weeks &amp; at least 4 weeks have elapsed after 1st test</li> </ul> <p><b>OPTIONAL TESTS*</b></p> <ul style="list-style-type: none"> <li>Quadruple test as per availability</li> </ul> <p>*Should be performed only if adequate counselling facilities are available</p>	<ul style="list-style-type: none"> <li>IFA tablet one (if Hb &gt;11g%) or twice (if Hb &lt;11g%) daily with water or lemon juice</li> <li>Refer to higher centre if no rise in Hb after 4 weeks of oral tablets</li> <li>Calcium carbonate 500 mg with vitamin D 250 units twice daily with meals.</li> <li>Calcium Carbonate and IFA not to be given together</li> <li>Single dose of Albendazole 400mg</li> <li>Ensure compliance for investigations and treatment</li> <li>Discuss birth preparedness</li> <li>Give second dose Td at least four weeks after first dose</li> </ul>

### THIRD (28 – 34 WEEKS) AND FOURTH VISIT (36 - 40 WEEKS)

ASK	EXAMINE	INVESTIGATIONS	DO
<ul style="list-style-type: none"> <li>Same as above</li> <li>Record POG</li> </ul>	<ul style="list-style-type: none"> <li>Same as above</li> <li>Auscultate FHS</li> <li>Measurement of abdominal girth and Symphysiofundal Height</li> </ul>	<ul style="list-style-type: none"> <li>Hemoglobin</li> <li>Urine albumin</li> <li>Optional USG for fetal growth and liquor</li> </ul>	<ul style="list-style-type: none"> <li>Continue IFA and calcium tablets and ensure compliance</li> <li>If non compliant or Hb &lt; 9g% give parenteral iron sucrose therapy (not &gt; 200mg at one time &amp; not &gt; 3 times a week) and refer patient with Hb &lt; 7g% to higher centre</li> <li>Refer to higher centre if any discrepancy between fundal height and period of gestation or danger signals</li> </ul>

### DANGER SIGNALS FOR PATIENT TO REPORT TO HEALTH FACILITY

- Fever
- Persistent vomiting
- Abnormal vaginal discharge
- Palpitations, easy fatigability and breathlessness at rest and/ or on mild exertion.
- Generalized swelling of the body/ puffiness of the face**
- Vaginal bleeding
- Decreased or absent fetal movements at > 28 weeks gestation
- Leaking of watery fluid per vaginum (P/V)
- Severe headache/ blurring of vision/ convulsion
- Passing lesser amounts of urine and/ or burning sensation during micturition
- Itching all over the body

### HIGH RISK PREGNANCY

- Any H/o medical illness, previous caesarean section, past obstetric mishap or congenital malformation
- Past H/o PPH
- Age > 35 years or < 19 years or parity > 4
- Malnourished (BMI < 18.5 kg/m<sup>2</sup> or > 30 kg/m<sup>2</sup>)
- Hemoglobin < 7g%
- BP > 140/90mm Hg on 2 occasions 6 hours apart
- APH
- Discrepancy between fundal height and period of gestation > 4 weeks
- GDM/ overt DM
- Multiple pregnancy
- Malpresentation at term
- Previous uterine surgery

\* High risk pregnancy to be delivered at district hospital/medical college  
\* Preferably to have antenatal care also at these centres

### COUNSELLING AT ALL VISITS

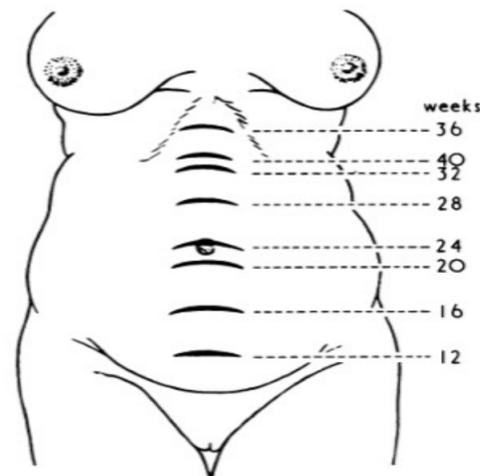
- Timing and place of next ANC visit based on presence or absence of risk factor
- Rest, nutrition, balanced diet and exercise
- Counselling for HIV testing
- Danger signs
- Institutional delivery
- Birth preparedness
- Early & exclusive breastfeeding for six months
- Post partum contraception

### BIRTH PREPAREDNESS MUST INCLUDE IDENTIFICATION OF THE FOLLOWING

- Facility for delivery
- Support persons
- Birth companion
- Means of transport in emergency (Including contact number)
- Blood donors (if required in emergency)

### ASSESSMENT OF FUNDAL HEIGHT & ITS CORRELATION WITH GESTATIONAL AGE

- At 12<sup>th</sup> week : Just palpable above the symphysis pubis
- At 16<sup>th</sup> week : At lower one-third of the distance between the symphysis pubis and umbilicus
- At 20<sup>th</sup> week : At two-thirds of the distance between symphysis pubis and umbilicus
- At 24<sup>th</sup> week : At the level of umbilicus
- At 28<sup>th</sup> week : At lower one-third of the distance between the umbilicus and xiphisternum
- At 32<sup>nd</sup> week : At two-thirds of the distance between the umbilicus and xiphisternum
- At 36<sup>th</sup> week : At the level of xiphisternum
- At 40<sup>th</sup> week : Sinks back to the level of the 32<sup>nd</sup> week, but the flanks are full, unlike



### ABBREVIATIONS

**ANC:** Antenatal Care  
**APH:** Antepartum Haemorrhage  
**BOH:** Bad Obstetrics History  
**CVS:** Chorionic Villus Sampling  
**EDD:** Estimated Due Date

**FHS:** Foetal Head Station  
**GDM:** Gestational Diabetes Mellitus  
**PPH:** Post Partum Haemorrhage  
**RCH:** Reproductive and Child Health  
**Td:** Tetanus Diphtheria

**TSH:** Thyroid Stimulating Hormone  
**UPT:** Urine Pregnancy Test  
**USG:** Ultrasound Sonography

### REFERENCES

WHO Standard Of Care for Antenatal Care

### CARING FOR EVERY STEP OF YOUR MOTHERHOOD JOURNEY

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit our web portal ([stw.icmr.org.in](http://stw.icmr.org.in)) for more information.

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