BE CAREFUL IN ‘PREGNANCY’
ENJOY
HEALTHY MOTHERHOOD

AND

HEALTHY BABY
(A BUNDLE OF JOY)

By: DR. ALPANA AGRAWAL
OUR AIM

THE AIM OF THIS e BOOK IS TO GIVE COMPLETE KNOWLEDGE TO A WOMAN, WHO IS GOING TO BE PREGNANT AND ALSO TO ‘ALL’.


NOW A DAYS INCIDENCE OF ‘CONGENITAL DEFECTS’ (DEFECTS IN BABY SINCE BIRTH) ARE INCREASING. SO, ONE HAS TO BE
VERY CAREFUL IN 1ST THREE MONTHS OF PREGNANCY.

EVERY WOMAN WHO WANTS TO BE PREGNANT SHOULD TAKE ‘CARE AND PRECAUTIONS’ BEFORE PREGNANCY AS ONLY “A HEALTHY WOMAN DELIVERS A HEALTHY BABY”.

EVERY ‘PREGNANT’ WOMAN MUST ENJOY ‘HEALTHY MOTHERHOOD’ AND A ‘HEALTHY BABY’.

BY SINCERE CARE, WE CAN ‘PREVENT’ OR ‘DETECT’ THE RISKS EARLY AND CAN TREAT THEM & MINIMISE THE COMPLICATIONS (OUR GOAL).

EDITOR’S OPINION

This comprehensive book on Pregnancy care, Delivery of the Baby and Care of New Born
along with advice on Contraception is unique in a way that a doctor could write it in such a simple manner! It has got everything that a women who is planning a child would want to know! Only a knowledgeable and experienced mother could have written such a book!

I won’t be surprized, if, even the newly wed doctors, may find it useful! This book is a treasure for all newly wed couples!

It is not only a scientific document but much more than that! This is what your mother would want you to know when you are planning a baby! When you read the words you are sure to get that feeling!

All expectant mothers, newly weds, 1st time pregnants or multipara, even the mothers of the pregnants must read it.
Dr. Alpana Agarwal takes pride in being a most successful mother whose both sons are All India toppers in education. Through this book she wants other women also to become successful mothers!

‘Wow, what a book’! I myself felt enlightened after editing. The readers are advised to quickly scan through the book at first, then read that portion comprehensively which concerns them. Read Slowly- Enjoy It!

Dr. Vipul Kumar, M.D.
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THIS IS DEDICATED TO RESPECTED ‘TEACHERS’, ’PARENTS‘ & ‘HUMANITY’

MY SPECIAL THANKS TO MY HUSBAND DR VIPUL KUMAR AND SONS DIVYA AND AYUSH FOR SUPPORTING ME.

MY BEST WISHES & REGARDS TO “ALL”.
PART -1 PREGNANCY AND ANTE-NATAL CARE
1- PHASES OF PREGNANCY-

‘PREGNANCY IS NORMALLY 40 WEEKS DURATION AND DIVIDED IN 1ST, 2ND AND 3RD TRIMESTERS.

1ST TRIMESTER IS VERY IMPORTANT BECAUSE ORGANS (BODY PARTS ARE FORMED) IT IS OF FIRST 12 WEEKS. SOME SPECIAL INFECTIONS AND SOME MEDICINES CAUSE ‘CONGENITAL DEFECTS’ (BODY PARTS NOT FORMED NORMALLY). ABORTIONS ARE VERY COMMON IN THIS TRIMESTER.

ULTRASOUND AND OTHER SPECIAL TESTS ARE DONE TO DETECT ‘CONGENITAL DEFECTS’ IN THE FETUS, FETAL WELL BEING, GESTATIONAL AGE AND MULTIPLE PREGNANCIES.
2\textsuperscript{ND} TRIMESTER DURATION IS FROM 13th TO 28t WEEK. IN THIS PERIOD ORGANS ARE FORMED AND DEVELOPING. TAKE ADEQUATE PRECAUTIONS AS THE ‘ABORTIONS’ AND ‘GROWTH RETARDATION’ MAY OCCUR.
3rd trimester- ranges from 29th to 40th week. Main development of organs especially ‘brain’ occurs during this time. Take precautions as the ‘preterm baby’, ‘high blood pressure’ ‘growth retardation of the baby’ may occur during this period.
2. DIET IN PREGNANCY - IT IS VERY IMPORTANT TO EAT ‘CORRECT & HEALTHY FOOD’ SINCERELY FOR THE GOOD HEALTH OF ‘MOTHER AND BABY’. NEGLIGENCE CAUSES ‘LOTS OF PROBLEMS’. HIGH PROTEIN DIET IS ADVISED-SUCH AS SPROUTED PULSES, MILK, CURD, CHEESE, EGG, MEAT, FRESH FRUITS AND VEGETABLES, SOUPS, JUICES, ‘CLEAN DRINKING WATER’ (PREFERABLY BOILED) SHOULD BE TAKEN.
3-DIET RESTRICTION IN PREGNANCY - FRIED FOODS (CUTLETS, POORI, PARATHA, PAPAR, CHOPS), PUFFED RICE, CHUTNEY, PICKLES, SPICY FOOD. IN CASE OF ‘ACIDITY AND HEART BURN’ CITROUS FRUIT JUICES SHOULD BE AVOIDED.
PRECONCEPTIONAL COUNSELLING - COUNSELLING ABOUT PREGNANCY AND ITS OUTCOME WELL BEFORE THE TIME OF ACTUAL CONCEPTION IS CALLED PRECONCEPTIONAL COUNSELLING. IT PREVENTS MANY PROBLEMS.

IT ENSURES THAT A WOMAN ENTERS PREGNANCY WITH AN OPTIMAL STATE OF HEALTH WHICH WOULD BE SAFE BOTH FOR MOTHER AND FOR HER
FAETUS. IF THE WOMAN IS SEEN FIRST IN ANTENATAL CLINIC, IT IS OFTEN TOO LATE TO ADVICE AS ORGANOGENESIS IS ALREADY COMPLETED.

USES OF PRECONCEPTION COUNSELLING -

A. IDENTIFICATION OF HIGH RISK FACTORS BY DETAILED EVALUATION OF OBSTETRIC, MEDICAL, PERSONAL AND FAMILY HISTORY. RISK FACTORS ARE ASSESSED BY LABORATORY TESTS, IF REQUIRED.

B. BASELINE HEALTH STATUS AND BLOOD PRESSURE ARE RECORDED.

C. RUBELLA AND HEPATITIS IMMUNIZATION IN A NON IMMUNE WOMEN IS OFFERED.
D. FOLIC ACID SUPPLEMENTATION
(0.4mg /DAY IN LOW RISK WOMEN, 5mg PER DAY IN HIGH RISK WOMEN)
STARTING 6 WEEKS PRIOR TO CONCEPTION UP TO 12 WEEKS OF PREGNANCY CAN REDUCE THE INCIDENCE OF NEURAL TUBE DEFECT (BRAIN AND SPINAL CORD DEFECT).

E. MATERNAL HEALTH IS OPTIMISED PRECONCEPTIONALLY. PROBLEMS OF
PAPANICOLAOU SMEARS EVALUATED AND OVERWEIGHT, UNDERWEIGHT, ANEMIA, ABNORMALITIES TREATED APPROPRIATELY.

**F.** FEAR OF PREGNANCY IS REMOVED BY PRECONCEPTIONAL EDUCATION.

**G.** PATIENTS WITH MEDICAL DISORDERS AND COMPLICATIONS LIKE DIABETES AND HEART DISEASE SHOULD BE OPTIMALLY CONTROLLED BEFORE THEY TRY PREGNANCY (AS THERE ARE EFFECTS OF THE DISEASE ON PREGNANCY AND ALSO THE EFFECTS OF PREGNANCY ON THE DISEASE). IN EXTREME SITUATIONS—LIKE EISENMENGER’S SYNDROME, DIABETIC NEUROPATHY, THE PREGNANCY IS DISCOURAGED. PRE-EXISTING CHRONIC DISEASES (HYPERTENSION, DIABETES,
EPILEPSY) ARE STABILISED TO AN OPTIMAL STATE BY INTERVENTION BEFORE CONCEPTION.

H. DRUGS USED BEFORE PREGNANCY ARE VERIFIED AND CHANGED, IF REQUIRED, SO AS TO AVOID ANY ADVERSE EFFECT ON FOETUS DURING THE PERIOD OF ORGANOGENESIS. FOR EXAMPLE, ANTICONVULSANT DRUGS ARE CHANGED TO SAFER DRUGS. WARFARIN IS REPLACED WITH HEPARIN, ORAL ANTIDIABETIC DRUGS ARE REPLACED WITH INSULIN (THOUGH RECENT STUDIES HAVE SHOWN SAFETY OF METFORMIN AND GLIBENCLAMIDE DURING PREGNANCY.)

I. WOMEN SHOULD BE ENCOURAGED TO STOP SMOKING, ALCOHOL AND ADDICTIVE DRUGS INTAKE.
J. Genetic Counselling for Family with Past History of Genetic Disorder or Screening Positive for Genetic Disorder. The counselling should be done by the obstetrician in consultation with the physician and a geneticist.

Limitations- Unfortunately, only a small percentage of women take the advantage of preconceptional care due to

1. Lack of Public Awareness
2. Unplanned pregnancies
3. Teenage pregnancies
5- **PERCAUTIONS IN PREGNANCY**

A. **DO NOT TAKE ANY MEDICINE WITHOUT PRESCRIPTION OF THE DOCTOR.** BECAUSE, IT MAY CAUSE ADVERSE EFFECTS ON FOETUS (BABY). **BE VERY CAREFUL IN 1ST THREE MONTHS. IT CAUSES HARM TO**
FETUS, CONGENITAL DEFECTS MAY DEVELOP.

B. AVOID LIFTING HEAVY WEIGHT. ABDUCTION OR PRETERM LABOUR MAY OCCUR. AVOID INDULGING IN PROLONGED MANUAL WORK OR PARTICIPATE IN ACTIVITIES INVOLVING STRAIN ON BACK.

C. BATHING- THE PATIENT SHOULD TAKE BATH DAILY BUT SHOULD TAKE CARE AGAINST SLIPPING IN THE BATHROOM.
D. CLOTHING AND SHOES- IT IS ADVISABLE TO WEAR LOOSE COTTON CLOTHING IN TROPICAL CLIMATE AND AVOID SYNTHETIC MATERIALS NEXT TO THE SKIN. USE OF FOOTWEAR WITH HIGH HEELS (MORE THAN 1 INCH) SHOULD BE AVOIDED.
E. Don’t sit in squatting position. Abortion may occur.

F. Only eat ‘home made’ food because ‘market/ restaurant eatables’ may cause ‘infection’ and these also contain harmful preservatives and chemicals. These may be harmful for mother and fetus.

Mother’s nutrition should be good. She should eat well, and take vitamins prenatally.

G. Fish and seafood should be avoided as some have mercury.

Meat if raw or not cooked properly, will cause infections.
AND PARASITIC INFESTATION LIKE TOXOPLASMOSIS

TOXOPLASMOSIS CAUSES BRAIN DAMAGE OF FOETUS. IT’S CAUSES ARE CAT’S FAECES, GARDEN SOIL, CARROT WITHOUT PEELING & RAW AND NOT PROPERLY COOKED MEAT. USE GLOOVES DURING GARDENING.
H. TRAVEL- SCOOTER/ MOTOR CYCLE (TWO WHEELER) RIDES MUST BE AVOIDED.

PREGNANT WOMEN SHOULD AVOID LONG TRAVEL IN THE FIRST TRIMESTER AND AFTER COMPLETING 32 WEEKS OF GESTATION. PROLONGED TRAVEL IN SITTING POSITION CAN CAUSE SWELLING OF THE FEET AND THROMBOPHLEBITIS. HENCE, DURING PROLONGED CAR
TRAVEL, IT IS ADVISABLE TO STOP EVERY 2 HOURS AND WALK AROUND FOR ABOUT 15 MINUTES. TRAVEL BY RAILWAY IS PREFERABLE TO BUS TRAVEL AND TRAVEL IN PRESSURISED AEROPLANE IS SAFE. AIR TRAVEL IS AVOIDED IN CASE WITH PLACENTA PREVIA, PRE ECLAMPSIA, SEVERE ANEMIA AND SICKLE CELL DISEASE.
I. GET REGULAR CHECK UPS AND INVESTIGATIONS DONE-TO FIND OUT HIGH RISK PREGNANCY. SO THAT IT CAN BE DETECTED EARLY AND TREATED CAREFULLY.

BLOOD PRESSURE SHOULD BE MEASURED

J. LABORATORY TESTS ARE DONE AFTER FIRST CHECKUP AS A ROUTINE AND SHE BRINGS THE REPORT ON NEXT CHECKUP.

BLOOD HAEMOGLOBIN (Hb) - THIS IS TESTED AND IF FOUND BELOW 10 gm%. SHE SHOULD TAKE IRON - FOLIC ACID CAPSULE ORALLY EVERY DAY JUST AFTER MEAL, NOT ON EMPTY STOMACH, FROM 20TH WEEK TILL AFTER DELIVERY. BEFORE DELIVERY HER Hb IS RETESTED TO EQUAL 11gm % OR MORE.
ABO/ Rh BLOOD GROUP - A/B/O OR AB BLOOD GROUP IS NORMAL.

IN INDIA 95% FEMALES ARE Rh POSITIVE, 5% ARE Rh NEGATIVE.

Rh POSITIVE IS NORMAL.

IF WOMAN IS Rh NEGATIVE, HER HUSBAND’S ABO/ Rh BLOOD GROUP IS TESTED. IF HUSBAND IS Rh POSITIVE ‘ANTI –D ANTIBODY’ IN MATERNAL BLOOD IS TESTED BY ‘INDIRECT COOMBS TEST’ AT 2ND AND 3RD TRIMESTER OF 1ST PREGNANCY.

BLOOD VDRL TEST - OF BOTH

- HUSBAND

- WIFE
PRE BREAKFAST BLOOD GLUCOSE-
(BLOOD SUGAR FASTING)

OR GLUCOSE CHALLENGE TEST IS DONE-

IT IS NORMAL WHEN IT LIES BELOW 110mg%. IT IS REPEATED AT 36\textsuperscript{TH} WEEK IF THERE IS HIGH RISK FACTOR FOR DIABETES MELLITUS IN THE FAMILY.

URINE ANALYSIS- FROM MID STREAM URINE FOR PROTIEN, SUGAR, AND
PUS CELLS. IF MORE THAN 5 PUS CELLS PER HIGH POWER FIELD, URINE CULTURE AND SENSITIVITY TEST IS DONE. WOMAN GOES TO LABORATORY TO PASS URINE IN ‘STERILE’ CONTAINER FOR CULTURE.

IN SUBSEQUENT CHECKUPS, URINE IS TESTED FOR PROTIEN & SUGAR.

OPTIONAL TESTS-

- HbsAg for Hepatitis B
- HIV
- THALASSEMIA SCREEN IN HIGH RISK CASES
- ULTRASOUND
- CERVICAL (PAP SMEAR, IF INDICATED)
- TRIPLE TEST AT 16-18 WEEKS FOR CONGENITAL ANAMOLIES SUCH AS ‘DOWN SYNDROME’.
QUAD TEST- TRIPLE TEST +INHIBINA
TARGETTED SCAN AT 18-20WEEKS

NORMAL PREGNANT MOTHER SHOULD BE CHECKED BY A DOCTOR IN ANTENATAL CLINIC ONCE A MONTH TILL 28 WEEKS, ONCE A FORTNIGHT UP TO 36 WEEKS AND WEEKLY
THEREAFTER TILL SHE DELIVERS. TO MINIMISE HIGH RISK PREGNANCY ‘MORE CHECK-UPS’ ARE NEEDED TO CONTROL PROBLEMS.

AS DURATION OF PREGNANCY INCREASES WE SHOULD BE MORE CAREFUL. LAST MONTHS OF PREGNANCY NEED FREQUENT CHECKUPS.
K. ADEQUATE VIT. D STORAGE SHOULD BE IN BODY. TAKE 10 MICROGRAM PER DAY. MULTIVITAMIN SUPPLEMENTATION SHOULD BE GIVEN. EXPOSURE TO SUNLIGHT TO SKIN IS VERY NECESSARY, ESPECIALLY IN MORNING AND EVENING. IT CAUSES SYNTHESIS OF VIT. D WHICH CAUSES ABSORPTION OF CALCIUM IN INTESTINE. CALCIUM IS VERY NECESSARY FOR BONES AND MUSCLES OF THE BABY.

L. BY THE ADVICE OF DOCTOR TAKE IRON AND CALCIUM TABLETS REGULARLY AND SEPERATELY BECAUSE BOTH TOGETHER ARE NOT ABSORBED PROPERLY AND FORM A COMPLEX.
NEVER TAKE IRON ON ‘EMPTY STOMACH’. ALWAYS TAKE IT AFTER FOOD BECAUSE ON EMPTY STOMACH IT CAUSES NAUSEA AND VOMITING.

DEFICIENCY OF IRON CAUSES ‘ANAEMIA’ IN MOTHER AND GREAT ‘RISK’ FOR MOTHER AND BABY.

DEFICIENCY OF CALCIUM CAUSES WEAK BONES OF MOTHER AND BABY.
M. ‘DENTAL HYGIENE’ . DO BRUSHING AFTER MEAL ESPECIALLY IN MORNING AND BEFORE SLEEP . DENTAL PROBLEMS LIKE GUM HYPERPLASIA, EPULIS, GUM BLEEDING ARE COMMON IN PREGNANCY. DENTIST MUST BE CONSULTED AT THE EARLIEST, THIS WILL FACILITATE EXTRACTION OR FILLING OF THE CARIES OF TOOTH, IF REQUIRED, PREFERABLY IN THE 2ND TRIMESTER WHICH IS THE BEST TIME FOR SUCH PROCEDURES.
N. BE CAREFUL ABOUT ‘VARICOSE VEINS’. THESE ARE BLUISH AND DILATED VEINS OF LEGS. AVOID LONG STANDING. DURING REST KEEP LEGS AT HIGHER LEVEL THEN THE REST OF BODY. LIE IN LEFT LATERAL POSITION. USE A PILLOW UNDER THE FEET.
O. AVOID CONSTIPATION. THERE IS TENDENCY OF CONSTIPATION DURING PREGNANCY. WHICH MAY CAUSE BACKACHE AND ABDOMINAL DISCOMFORT. FOR EASY STOOLS ‘ISAPGULA HUSK’ 2 TEASPOONFUL OR ‘MILK OF MAGNESIA’ 4 TEASPOONFUL CAN BE TAKEN AT BED TIME. ADJUST THE DOSE ACCORDING TO YOUR BODY RESPONSE.
Avoid vigorous sexual intercourse. It may cause abortion, preterm labour, antepartum haemorrhage. Coitus should be avoided during the first trimester preferably during the time of missed periods and also during the last 6 weeks. Coitus is avoided if there is risk of abortion or preterm labour. Otherwise, it is not harmful and is allowed.
Q. Tablets of ‘Folic Acid’ (500 micro gram per day) should be taken regularly. It is better to start before planning the pregnancy. Deficiency of folic acid cause neural tube defect (defect in brain and spinal cord). Don’t ‘forget’ its intake. It is one of the ‘most important’ supplement during pregnancy.
R. SMOKING SHOULD BE STOPPED IF IT ‘S NOT POSSIBLE TO STOP IT SHOULD BE MINIMISED.

SAME WITH ALCOHOL AND CAFFEINE’.

S. IN 1ST 3 MONTHS THERE MAY BE PROBLEM OF ‘MORNING SICKNESS’. TAKE 2 BISCUITS IN THE EARLY MORNING WITH SWEETENED WATER. IN INITIAL PERIOD IF MOTHER FEELS ‘NAUSEA’, SHE MUST TAKE ‘SMALL DIET’ AT FREQUENT INTERVAL
INSTEAD OF TAKING ‘LARGE MEAL’. IF VOMITTINGS CONTINUE - CONSULT THE DOCTOR.

T. MOTHER’S WEIGHT GAIN SHOULD BE CHECKED REGULARLY. IT SHOULD INCREASE BY 10 KG DURING FULL TERM OF PREGNANCY. NOT MORE OR LESS. IT SHOWS GOOD FETAL (BABY) GROWTH. CONSTANT WEIGHT IS NOT GOOD. INCREASE IN 10 Kg MATERNAL
WEIGHT GIVES NEAR 3 Kg Wt BABY. IN WORKING MOTHER IF WEIGHT IS NOT INCREASING THEN SHE SHOULD TAKE ‘LEAVE’.

**U.BREAST** SHOULD BE PREPARE FOR BABY FEEDING. MASSAGE OF BREAST WITH OIL TO BE DONE DAILY AND RETRACTED NIPPLE SHOULD BE CORRECTED BY MANIPULATION IN THE LATER MONTHS OF PREGNANCY. COLOSTRUM ESCAPES FROM ABOUT
34 WEEKS AND SHOULD NOT BE EXPRESSED. WEARING TIGHT BRASSIER SHOULD BE AVOIDED. IT SHOULD BE KEPT CLEAN.

V. ‘REGULAR FETAL MOVEMENT’ SHOULD BE FELT BY MOTHER AFTER CERTAIN PERIOD OF PREGNANCY (USUALLY 4 TO 6 MONTHS OF PREGNANCY). IT IS ‘VERY IMPORTANT’ AS IT SHOWS ‘FOETAL (BABY) WELL BEING’. EXCESS, LESS
OR NO MOVEMENT IS ‘VERY RISKY FOR THE LIFE OF FETUS. IMMIDIATLY CONSULT THE DOCTOR!

W. SHE MUST KNOW ‘METHOD OF CONTRACEPTION’ TO CONTROL FAMILY SIZE.

ADVICE FOR 2 CHILDREN FAMILY AND INTERVAL BETWEEN THEM SHOULD BE 4 - 5 YEARS.
X. REST- 2HRS IN AFTERNOON AND 8 HRS SLEEP IN NIGHT IS NECESSARY TO INCREASE MATERNAL WEIGHT AND PROPER DEVELOPMENT OF FETUS. WORKING WOMEN CAN TAKE REST AFTER RETURNING TO HOME. IF HER WEIGHT IS NOT INCREASING SHE SHOULD TAKE LEAVE.
**Y. VACCINATION** -

**INJECTION** **TETANUS** VACCINE IS GIVEN TO MOTHER AND HUSBAND TO PROTECT THEM AND THE BABY FROM TETANUS DEATH IN THE POST NATAL PERIOD.

**OTHER VACCINES** ARE ALSO GIVEN ON EXPOSURE SUCH AS ‘HEPATITIS -B’ AND ‘HEPATITIS- A’ VACCINE, ‘ANTIRABIES’ VACCINE. NEWBORN DELIVERED OF HEPATITIS-
B CARRIER MOTHER IS ALSO GIVEN VACCINE FOR HEPATITIS-B.

Z. OTHER PRECAUTIONS-

❖ SOME SPECIAL ANTENATAL EXERCISES, ALWAYS DONE AFTER ADVICE OF DOCTOR. MEDITATION IS ALSO GOOD.

❖ HIGH ALTITUDE- IT HAS MANY RISKSON PREGNANCY ESPECIALLY IF MOTHER
SHIFTED FROM LOW ALTITUDE TO HIGH ALTITUDE (MORE THAN 8000 FEET), BECAUSE OF LACK OF OXYGEN. RISKS ARE PREECLAMPSIA, PREMATURE RUPTURE OF MEMBRANE, GROWTH RETARDATION, CONGENITAL ANAMOLIES.

**SAUNAS AND HOT TUBS** SHOULD BE AVOIDED BECAUSE HIGH TEMPERATURE THIS MAY DAMAGE FAETUS.

**VIDEO DISPLAY TERMINALS** - IT IS NOT CONFIRMED BUT IT SHOULD BE AVOIDED.

**COMPUTER** - AVOID IN 1ST TRIMESTER. LATER ON PROLONG EXPOSURE SHOULD BE AVOIDED AND TAKE
FREQUENT BREAK FROM SCREEN.

⚠️ AVOID CHEMICALS AROUND MOTHER. IT IS HAZARDUS TO FAETUS.

⚠️ OTHER HEALTH RELATED EDUCATION TO MOTHER IS ALSO GIVEN.
SAFE ‘DRUGS IN PREGNANCY-

( DRUG PRESCRIPTION IF NOT URGENTLY NEEDED SHOULD BE POSTPONED DURING 31-71 DAYS OF PREGNANCY BECAUSE THIS IS THE PERIOD OF ORGANOGENESIS IN FOETUS.)

A. PARACETAMOL IS SAFE IN HEADACHE AND FEVER,
B. HAEMETINIC,
C. ANTHELMINTICS(PYRANTAL,PIP ERAZINE)
D. LAXATIVE,
E. ANTACIDS,
F. METRONIDAZOLE IS NOW PRESCRIBED DURING PREGNANCY INCLUDING FIRST TRIMESTER IN ACUTE DIARRHOEA.
G. MECLIZINE (ANTIMETIC) IS SPARINGLY USED.

H. ANTIBIOTICS - PENICILLIN, AMPICIILIN, AMOXYCILLIN, CEPHALOSPORIN, ERYTHROCIN, REFAMPICIN, ETHAMBUTAL, ISONIAZID, NITROFURANTOIN (IN E. COLI IN URINARY INFECTION)

I. ANTIMALARIAL.

J. ANTIHYPERTENSIVE - METHYL DOPA, FUREMIDE (LASIX),

K. ELTROXIN, ANTETHYROIDS,

L. INSULIN,

M. HEPARIN

N. DIAZEPAM, LORAZEPAM,

O. CHLORPHENORAMINE,

P. CORTICOSTEROID

DRUGS OF DOUBTFUL BENEFIT -
ALLYSTRENOL (GESTIN)
ISOXSUPRINE (DUVADILON)
(USED IN THREATENED ABORTION)

DRUGS ‘AVOIDED’ DURING PREGNANCY-

TETRACYCLINE, LARGE DOSES CAUSES YELLOW DISCOLOURATION OF PRIMARY TEETH IN NEW BORN.

7- DRUGS ‘CONTRAINDICATED’ DURING PREGNANCY-( not given)

QUINOLONE DERIVATIVE-

NORFLOXACIN,

NALIDIXIC ACID.

CIPROFLOXACIN.
THALIDOMIDE (ANTIEMETIC),
WARFARIN (ANTICOAGULANT)
CYTOTOXIC DRUGS.

8. HIGH RISK PREGNANCIES—
THESE ARE—
THREATENED ABORTION,
ABORTION, ECTOPIC PREGNANCY,
HYDATIDIFORM MOLE, TWIN OR
MULTIPLE PREGNANCY, HYDRAMNIOUS, SEVERE ANAEMIA, INTAUTERINE GROWTH RETARDATION, PREECLAMPSIA, ECLAMPSIA, MALPRESENTATION, POST CAESARIAN PREGNANCY AND OTHER OPERATIVE PROCEDURES, PREGNANCY IN RH NEGATIVE MOTHER, GRAND MULTIPARA( WITH MORE THAN 4 PREVIOUS VIABLE PREGNANCIES), PREGNANCY WITH ASSOCIATED MEDICAL DISEASES ( DIABETIES HEART DISEASE, JAUNDICE, CHRONIC RENAL DISEASE AND OTHERS ALSO), PREGNANCY WITH ‘BAD OBSTETRIC HISTORY’ (DEAD
BABY, STILL BIRTH, REPEATED PREGNANCY LOSS).

PREGNANCY IN TEENAGE (10 TO 19YRS) OR AT OR ABOVE 35YRS, MATERNAL HEIGHT BELOW 145 CM (4’-10’’), PREGNANCY IN ‘UNWED’ OR ‘UNPLANNED’ PREGNANCY, OVERDATED PREGNANCY,

PREGNANCY WITH FETAL MALFORMATION, HAEMORRHAGE IN PREGNANCY, PREGNANCY WITH LEAKING LIQUOR.
9. DANGER SIGNALS OF PREGNANCY—

FOR WHICH SHE WILL IMMEDIATELY REPORT TO CARE CENTRE (DOCTOR).

1. VAGINAL BLEEDING
2. SWELLING OF FACE OR FINGER.
3. CONTINUOUS HEADACHE.
4. DIMNESS OF VISION.
5. ABDOMINAL PAIN.
6. PERSISTENT VOMITING.
7. FEVER.
8. DYSURIA (BURNING SENSATION DURING PASSAGE OF URINE)
9. PASSAGE OF FLUID PER VAGINA.
10. MARKED CHANGE IN FETAL MOVEMENT, SLOWING OR NO MOVEMENT IN 6 HRS.

LACK OF ADEQUATE COMMUNICATION TO PREGNANT WOMEN DURING ANTENATAL CARE AND NON-COMPLIANCE OF ALL THE ABOVE EDUCATION BY PREGNANT
WOMEN AND HER RELATIONS LEAD TO ‘IMPROPER ANTENATAL CARE AND POOR RESULTS.

10. BENEFITS, VALUE OF ANTENATAL CARE-

FOR MOTHER-

1. WEIGHT GAIN IMPROVES HER HEALTH.
2. HIGH RISK PREGNANCIES - ANAEMIA AND ECLAMPSIA ARE PREVENTED. THEY CAN BE DIAGNOSED AND TREATED EARLY.

3. HIGH RISK PREGNANCIES ARE BROUGHT DOWN TO NEARLY 15% LEVEL.

4. MATERNAL TETANUS IS PREVENTED ON DELIVERY.

5. MATERNAL DEATH CAN BE ELIMINATED.

6. HEALTH EDUCATION ON PREGNANCY CHECK UPS, DIET, BOILED WATER, AFTERNOON REST, LABOUR, DELIVERY, BREAST FEEDING, CONTRACEPTION FOR 1-2 CHILD FAMILY AND INFANT IMMUNIZATION, MEDICAL TERMINATION OF PREGNANCY IS ADVISED BY 10TH WEEK.
(PROGNOSIS OF HIGH RISK PREGNANCY - IT IS IMPORTANT CAUSE OF MATERNAL AND FETAL DEATH AND MORBIDITY. IT CAN BE MOSTLY PREVENTED BY PROPER ANTENATAL CARE.)

FOR FETUS (BABY) ---

1. BIRTH WEIGHT IS RAISED TO 3 KG AND INCIDENCE OF LOW BIRTH WEIGHT IS REDUCED.
2. **FETAL MALFORMATION** (BODY PARTS NOT FORMED NORMALLY) IS REDUCED.

3. **BIRTH ASPHYXIA** (BREATHING PROBLEM) IS MINIMISED. IT IS ‘RISKY’ TO BABY’S LIFE.

4. **HIGH RISK FETUS** - (FETAL MALFORMATION, DISPROPORTION, PRETERM, INTRAUTERINE GROWTH RETARDATION, MALPRESENTATIONS, TWINS, RH IMMUNIZATION) IS IDENTIFIED EARLY AND PROPERLY TREATED.

5. **PERINATAL DEATHS** (BEFORE AND AFTER DELIVERY) ARE REDUCED.
11. EXPECTED DATE OF DELIVERY (E.D.D.)

AS PER NAEGELE’S RULES, NORMALLY LABOUR OCCURS IN 5% ON E.D.D. AND IN REST 95 % CASES EITHER 2 WEEKS EARLIER OR LATER THAN E.D.D.

HOW TO CALCULATE E.D.D.- STARTING FROM 1ST DAY OF LAST MENSTRUAL PERIOD, IT IS 280 DAYS. (NEARLY 9 MONTHS 7 DAYS PROVIDED THE MENCES ARE REGULAR AND NORMAL 28 DAYS CYCLE)

12. EDUCATION ON LABOUR,

CHILD BIRTH PROCESS, HOW TO RECOGNISE ONSET OF LABOUR, REGISTRATION OF CLEAN PLACE OF DELIVERY BY TRAINED BIRTH
ATTENDANT, (NO FOOD OR DRINK IS TAKEN WHEN LABOUR STARTS EXCEPT WATER), POSTURE OF DELIVERY, RELAXATION BETWEEN LABOUR PAINS. (DURATION OF LABOUR SHOULD NOT BE PROLONGED AS IT IS DANGEROUS TO BABY. IT MAY CAUSE “FITS” TO BABY.)
WHAT IS NORMAL LABOUR-

-IT IS THE PROCESS OF EXPULSION PER VAGINA OF MATURE FOETUS WITH VERTEX PRESENTING FOLLOWED BY EXPULSION OF AFTERBIRTHS (PLACENTA, MEMBRANES, UMBLICAL CORD) WHEN THE PROCESS IS SPONTANEOUS, UNCOMPLICATED AND NOT DELAYED.

WHAT IS ABNORMAL LABOUR OR DYSTOCIA-

-IT IS A COMPLICATED LABOUR.

STAGES OF LABOUR-

3 STAGES--
1. FIRST STAGE-
FROM ONSET OF LABOUR TO FULL DIALATATION OF CERVIX (CERVICAL DIALATING STAGE)

DURATION – PRIMIGRAVIDA - AVERAGE 10 HRS. MULTIGRAVIDA AVERAGE 5 HOURS WITH VARIATIONS.

2. SECOND STAGE-
FROM FULL DIALATATION OF CERVIX TO THE EXPULSION OF FETUS FROM BIRTH CANAL (EXPULSIVE STAGE OR STAGE OF DELIVERY)

DURATION –
PRIMIGRAVIDA AVERAGE 1 HOUR,
MULTIGRAVIDA AVERAGE ½ HOUR.
3. **THIRD STAGE**

FROM BIRTH OF BABY TO EXPULSION OF PLACENTA, UMBLICAL CORD AND MEMBRANES (AFTERBIRTHS).

**DURATION** - NORMAL 3\textsuperscript{RD} STAGE IS OVER BY 5 MINUTES IN PRIMI GRAVIDA AND MULTIGRAVIDA.

**TOTAL DURATION**. NORMAL LABOUR IN PRIMIGRAVIDA IS COMPLETED BY ABOUT 12 HOURS AND THAT IN MULTIGRAVIDA BY 6 HRS.
13. HOW TO RECOGNISE ONSET OF LABOUR:

SOME TIMES IT IS DIFFICULT.

1. CYCLICAL ABDOMINAL AND BACK PAINS INCREASING IN DURATION, INTENSITY AND FREQUENCY.

2. SHOW (MAY SEE BLEEDING PER VAGINA)
3. HARDENING OF UTERUS DURING PAIN.

4. PROGRESSIVE DIALATATION OF CERVICAL OS FROM 2 CM.

5. PROGRESSIVE EFFACEMENT OF THE CERVIX.

6. BULGING OF FOREWATER DURING A PAIN.
14. HOW TO DIFFERENTIATE ONSET OF ‘TRUE LABOUR’ FROM ‘FALSE LABOUR’ -

FALSE LABOUR MEANS ONSET OF ‘PAINFUL CONTRACTIONS’ DURING LATER WEEKS OF PREGNANCY WITHOUT CERVICAL DILATATION.

DISTINCTION OF TRUE & FALSE LABOUR FEATURES -

1. PAINFUL CONTRACTIONS -
   IN TRUE LABOUR - REGULAR
   IN FALSE LABOUR - IRREGULAR

2. INTERVAL BETWEEN PAINS -
   IN T. L. - GRADUALLY SHORTENS
   IN F. L. - REMAINS LONG
3. INTENSITY -
IN T.L.- INCREASES
IN F.L.- SAME

4. SITE OF PAIN -
IN T.L. - BACK AND ABDOMEN
IN F.L. - CHIEFLY LOWER ABDOMEN

5. CERVICAL DILATATION AND EFFACEMENT -
IN T.L. - PRESENT
IN F.L. - ABSENT

6. BULGING OF FOREWATER -
IN T.L. - PRESENT
IN F.L. - ABSENT

7. SEDATION -
IN T.L. - PAIN NOT STOPPED
IN F.L. - USUALLY RELIEVED

8. ENEMA -
IN T.L. - NOT RELIEVED
IN F.L. - RELIEVED
15. HIGH RISK LABOUR -

1. LEAKING OF MEMBRANES AND DRAINAGE OF LIQUOR AMNII PER VAGINA FOR 24 HOURS REGARDLESS OF WHETHER OR NOT MOTHER IS IN LABOUR.

2. FIRST STAGE IS MORE THAN 12 HOURS. EXPULSIVE STAGE MORE THAN 1 HOUR. PLACENTA IS RETAINED MORE THAN 1 HOUR.

3. PRETERM LABOUR BELOW 36 WEEKS UNDER TOCOLYTIC DRUGS.

4. PASSAGE OF MECONIUM.

5. PRESENTING PART ON SOFT VAGINAL EXAMINATION.

6. UNENGAGED VERTEX IN PRIMIGRAVIDA.
7. FETAL HEART RATE ABOVE 160 OR BELOW 120/min.

8. HYPERTENSIVE, PROTEINURIA OR ‘FITS.’

9. HIGH TEMPERATURE.

10. BLEEDING FROM VAGINA IN 3\textsuperscript{RD} OR 4\textsuperscript{TH} STAGE OR FROM CORD STUMP.
16. CAESARIAN SECTION-

This is the ‘abdominally delivery of the baby’ by ‘laparotomy and section of the uterus after 28 weeks of pregnancy. (Operative procedure in the hospital operation theatre).

It does not include laparotomy for removal of foetus in ruptured uterus or secondary abdominal pregnancy.

INDICATIONS OF CEASAREAN SECTION-

Common current indications-

1. Postcaesarean pregnancy 28%

2. Failure to progress in labour (labour dystocia) - 25%
3. MALPRESENTATIONS (BREECH, FACE, BROW, TRANSVERSE) 10%

4. ANTEPARTUM HAEMORRAGE 7%

5. FETAL DISTRESS 6%

6. CEPHALOPELVIC DISPROPORTION 3%

7. PREECLAPSIA 5%

8. GROWTH RESTRICTED FETUS 3%

9. OBSTRUCTED LABOUR 3%

10. OTHER HIGH RISK PREGNANCIES AND FOETUS (DIABETES, Rh IMMUNISATION, POST DATED PREGNANCY. TWINS, CORD, PROLAPSE etc.) 10%

CONTRAINDICATIONS OF C. S. – MATERNAL COAGULATION DEFECT.
17. ‘PRECAUTIONS’ AFTER DELIVERY- TO REPORT FOR POSTNATAL CARE ON 6TH WEEK AFTER DELIVERY.

COUPLE HAS TO COME TO ACCEPT ‘CONTRACEPTION’ FOR 1-2 CHILD FAMILY. COUPLE IS EDUCATED THAT SPACING OF BIRTH BY CONTRACEPTION BRINGS SAFETY TO CHILD AND GOOD HEALTH TO MOTHER.
AFTER DELIVERY **PERINEAL EXERCISE** IS VERY NECESSARY BECAUSE IT TIGHTS THE LOOSE MUSCLES, LIGAMENT, AND KEEP UTERUS IN ITS POSITION OTHERWISE ‘PROLAPSE OF UTERUS’ AND DIFFICULTY IN SEXUAL INTERCOURSE MAY HAPPEN.

EARLY MOBILISATION. HEAVY WEIGHT LIFTING IS NOT PERMITTED, IT MAY CAUSE PROLAPSE.

**BALANCED DIET** IS VERY NECESSARY BECAUSE OF FEEDING TO THE BABY. DIET SHOULD BE RICH IN PROTIENS (PULSES, MILK, PANEER (CHEESE) EGG, FRUITS, VEGETABLES, MEAT AND SOUPS.

‘POOR DIET’ DEFFICIENT IN PROTEIN AND VITAMINS WILL CAUSE ‘ANAEMIA’
(LESS BLOOD) IN MOTHER AND IMPROPER GROWTH OF BABY.
PART- 3 CARE OF NEW BORN BABY
18. CARE OF NEW BORN -

1. BABY SHOULD BE LEAST HANDLED. KEEP IT CLEAN IN ‘CLEAN ENVIRONMENT’, BABY ROOM TEMPERATURE MUST BE WARM (30 - 33 DEGREE CENTIGRATE).

2. BREAST FEEDING TECHNIQUE AND TAKING CARE OF BREAST-

BREAST FEEDING SHOULD BE STARTED WITH IN ONE HOUR OF DELIVERY AFTER CLEANING THE BREAST EXCEPT IN SOME CASES WHEN IT IS NOT ALLOWED.

3. BABY SHOULD BE LIE WITH MOTHER IF SHE IS NORMAL.

4. INFANT IMMUNIZATION- FULL RANGE SHOULD BE STARTED - BCG, POLIO, DPT, MEASELS AND ITS BOOSTER DOSES.
19. HIGH RISK NEONATES -

THEY NEEDS SPECIAL CERE -

1. PRETERM BABY

2. RESPIRATORY DISTRESS SYNDROME

3. SMALL FOR DATE BABY (INFANT LESS THAN 2Kg. WEIGHT)

4. ASPHYXIA NEONATORIUM (APGAR SCORE 4-6)

4. MECONIUM ASPIRATION
5. CONVULSION IN NEW BORN
6. HAEMORRHAGIC DISEASE IN NEW BORN
7. BIRTH INJURIES
8. NEONATAL JAUNDICE
9. HYDROPS FOETALIS
10. ALIMENTARY TRACT DISORDERS
11. PERINATAL INFECTION
12. CONGENITAL DEFECTS REQUIRING SURGERY.

TREATMENT is to diagnose early and refer the mother to specialist centre and treat appropriately.
20. NEONATAL CARE (CARE OF NEW BORN BABY)-

OUR AIM IS TO GET ‘FULLTERM’ BABY (AFTER 38 WEEKS AND NOT MORE THEN 40 WEEKS) OF 3 KG WEIGHT. IF BABY IS BORN ‘EARLY’, LOW WEIGHT, RETARTED GROWTH. PROLONGED LABOUR, IT NEEDS ‘MUCH CARE’. THEY ARE VERY PRONE TO ‘INFECTIONS’ AND MAY BE ‘LESS INTELLIGENT’. 
ROUTINE CARE DURING NEONATAL PERIOD:

1. BATH- THE MATURE BABY OF AVERAGE SIZE CAN HAVE DAILY BATH AT HOME. DURING BATH, MECONIUM SHOULD BE REMOVED FROM THE BUTTOK, EXTERNAL GENITALIA BUT CARE SHOULD BE TAKEN TO KEEP THE CORD DRY.

2. EYES, MOUTH AND NOSE ARE INSPECTED DAILY FOR ANY ABNORMALITY THAT MAY DEVELOP.

3. TEMPERATURE IS RECORDED AT INGUINAL REGION (SURFACE TEMPERATURE) AND WHEN NECESSARY PER RECTUM (CORE TEMP.)

4. THE ROOM WHERE THE BABY IS KEPT SHOULD BE WELL VENTILLATED
AND WARM (30-33 DEGREE CENTIGRADE).

5. THE NUMBER AND DESCRIPTION OF THE STOOL PASSED IN EACH 24 HOURS SHOULD BE RECORDED. SIMILARLY, IT SHOULD BE NOTED WHETHER OR NOT BABY PASSES URINE NORMALLY.

6. ANY PERSON HAVING CONTACT WITH THE BABY SHOULD WASH THEIR HANDS AND WEAR A MASK BEFORE HANDLING THE CHILD. ANY ADULT KNOWN TO HAVE A RESPIRATORY INFECTION AND ESPECIALLY ANY STAPHYLOCOCCAL SKIN INFECTION MUST BE EXCLUDED FROM CONTACT WITH THE BABY.

7. EACH BABY SHOULD HAVE ITS OWN TOILET ARTICLES AND SEPARATE THERMOMETER.
8. In the hospital, the present day trend is to keep the baby in a cot beside the mother throughout day and night whenever possible. This bedside baby keeping helps in successful breast feeding and proper development of mental health in child.

9. Weighing should be done regularly as a routine after bath, on every week - upto sixth week and then monthly. Regular monitoring of weight is useful tool for growth of infant.
PHYSIOLOGICAL PHENOMENON SEEN IN INFANT NORMALLY-

1. WEIGHT LOSS IN THE FIRST WEEK- NORMALLY BABIES LOOSE 8-10% OF THE BIRTH WEIGHT IN THE FIRST 3-5 DAYS, WHICH IS REGAINED BY 7-10 DAYS OF AGE.

2. CRYING BEFORE MICTURITION
3. REGURGITATION OF SMALL AMOUNT OF CURDED MILK SOON AFTER FEEDING IS NORMAL AS LONG AS THE BABY IS GAINING WEIGHT AND PASSING URINE 6-8 TIMES A DAY.

4. FREQUENT STOOLS - FREQUENCY OF SMALL VOLUME STOOLS JUST AFTER FEEDS DUE TO ENHANCED GASRRO-COLIC REFLEX IS NOT DIARRHOEA AND DOES NOT REQUIRE TREATMENT.

5. PHYSIOLOGICAL JAUNDICE - THIS APPEAR AT 2-3 DAY OF LIFE. IT REACHES A PEAK ON 4-5 DAYS AND DISAPPEARS BY 7-10 DAYS SPONTANEOUSLY. HOWEVER, IT MAY REQUIRE TREATMENT WHEN ASSOCIATED WITH CERTAIN RISK FACTORS.
21. COMMON NEONATAL PROBLEMS -

1. UMBILICAL SEPSIS (OMPHALITIS) -
It present as periumbilical erythema (redness around umbilicus), edema (swelling) or induration and results from unclean handling or application of unclean substances to the cord. It may progress to ‘life
THREATENING SEPSIS’. TREATMENT INCLUDES ANTIMICROBIAL THERAPY (EFFECTIVE AGAINST STAPHYLOCOCCUS AUREUS AND ESCHERICHIA COLI) AND SUPPORTIVE CARE. ADDITIONALLY, TOPICAL APPLICATION OF TRIPLE DYE/BACITRACIN HAS ALSO BEEN SUGGESTED.

2. PYODERMA- PYODERMA ARE PUS FILLED SKIN LESIONS MOST COMMONLY FOUND IN SKIN CREASES LIKE BACK OF NECK, THIGHFOLDS etc. IF THESE ARE <10 IN NUMBER AND THERE ARE NO SIGN OF SEPSIS, CLEAN WITH AN ANTISEPTIC SOLUTION FOLLOWED BY LOCAL APPLICATION OF 0.5% GENTIAN VIOLET (FURACIN OINTMENT). IF THERE ARE >10 LESION, SIGNS OF SEPSIS OR NON RESOLUTION AFTER TOPICAL
TREATMENT, TREAT AS FOR SEPSIS WITH ANTIBIOTICS.

3. ORAL THRUSH - THIS APPEARS AS STOMATITIS IN NEW BORN CAUSED BY A FUNGUS (MONILIA ABILICANS) ACQUIRED FROM BOTTLES, TEATS, DUSTS, MOTHER’S NIPPLES AND VAGINA. THIS ORAL SEPSIS USUALLY APPEARS AT THE END OF 1ST WEEK OR DURING 2ND WEEK AND THERE IS DIS-INCLINATION OF THE BABY TO
FEEDING. LOCALISED OR EXTENSIVE WHITE PATCHES ARE VISIBLE ON THE TONGUE, PALATE, AND ORAL MUCOUS MEMBRANE. THE RUBBING OF THE WHITE PATCH LEADS TO A BLEEDING SURFACE. IN A SEVERE CASE, THE INFECTION MAY SPREAD DOWN TO THE ALIMENTARY AND RESPIRATORY TRACTS WITH FATAL RESULTS.

TREATMENT-

PROPHYLAXIS,

CLEANLINESS OF THE SOURCES OF INFECTION PARTICULARLY MATERNAL VAGINA.

CURATIVE  -

ORAL HYGIENE BY WASHING MOUTH WITH BOILED WATER (COOL TO NORMAL TEMPERATURE) AFTER
EVERY FEEDING SHOULD BE ENSURED. GENTIAN VIOLET 1% (NYSTATIN) IN AQUEOUS SOLUTION IS GENTLY PAINTED ON THE ORAL MUCOUS MEMBRANES AFTER A FEED TWICE DAILY, TILL TWO DAYS AFTER THE LESION IS CLEARED OFF. CLOTRIMAZOLE (CANDID MOUTH PAINTS) IS PAINTED ON TONGUE AND MOUTH TWICE DAILY FOR 5 DAYS. IT IS ALSO APPLIED ON MOTHER’S BREAST SO RECURRENT INFECTION CAN BE PREVENTED.

4. DIAPER RASH-

DIAPER RASH IS OF COMMON OCCURRENCE IN NEONATES. TREATMENT INCLUDES KEEPING THE NAPKIN AREA DRY AND CLEAN. BARRIER OINTMENTS LIKE ZINC OXIDE MAY BE REQUIRED. NYSTATIN APPLICATION FOUR TIMES A DAY TILL
RESOLUTION, IS REQUIRED FOR CANDIDAL RASH.

5. EYE DISCHARGE - THE VARIOUS CAUSES FOR EYE DISCHARGE CAN BE AS FOLLOW-

A. **STICKY EYES** - A NON-INNOCUOUS CONDITION DUE TO CLEAR OR MUCOID DISCHARGE FROM EYES NOT ASSOCIATED WITH REDNESS OR EDEMA.
B. **NASO-LACRIMAL DUCT BLOCKAGE**- NASO-LACRIMAL DUCT BLOCK RESULTS IN OVERFLOW OF TEARS. THE DUCT MAY OPEN SPONTANEOUSLY OR BY DIGITAL MASSAGE OVER THE DUCT.

C. **OPHTHALMIA NEONATORUM**- IT IS BILATERAL CONJUNCTIVITIS IN A NEONATE. IT CAN BE DUE TO VARIOUS CAUSES AS FOLLOWS--

1. **GONOCOCCAL CONJUNCTIVITIS**- GONORRHOEA IS A SEVERE INFECTION DUE TO THE BACTERIA ‘NEISSERIA GONORROHOEAE’. IT PRESENTS AS COPIOUS PURULENT DISCHARGE FROM RED SWOLLEN EYES ON 3-6 DAYS OF LIFE. IF UNTREATED, IT CAN CAUSE CORNEAL PERFORATION AND BLINDNESS. TREATMENT IS WITH INJECTION CEFRIAXONE, 50mg/Kg GIVEN INTRAMUSCULARLY OR
INTRAVENOUSLY, WITH LOCAL EYE CLEANING, WITH ANTIBIOTIC EYE DROPS.

2. **CHLAMYDIA CONJUNCTIVITIS**—AT PRESENT, IT IS THE MOST COMMON FORM OF OPHTHALMIA NEONATORUM. IT CAUSES A MILD BUT CHRONIC FORM OF CONJUNCTIVITIS WHICH IF UNTREATED, PROGRESSES TO CORNEAL SCARRING AND BLINDNESS. ONSET IS BETWEEN 3-12 DAYS OF LIFE WITH INITIALLY A WATERY AND LATER A PURULENT DISCHARGE. TREATMENT IS WITH ORAL ERYTHROMYCIN IN ADDITION TO EYE TOILET AND ERYTHROMYCIN EYE OINTMENT. (IT IS A W.H.O. RECOGNIZED MAJOR EYE INFECTION WORLDWIDE.)

3. **OTHER INFECTIONS**—STAPHYLOCOCCUS, STERPTOCOCCUS HEMOLYTICUS, STREPTOCOCCUS
PNEUMONIAE. HERPES SIMPLEX TYPE-2

4. **CHEMICAL AGENTS** - ANTIBIOTIC EYE DROPS, SILVER NITRATE.

22. **BREAST FEEDING MANAGEMENT OF NEW BORN** -

**ADVANTAGES OF BREAST MILK** -

1. IT IS NATURE’S GIFT TO BABY AND IS MEANT FOR HUMAN INFANT.
2. IT IS ECONOMICAL FOR POOR COMMUNITY.

3. IT IS EASILY DIGESTIBLE BY INFANT.

4. IT IS ALWAYS AVAILABLE AT RIGHT TEMPERATURE.

5. IT IS STERILE, FREE OF BACTERIAL CONTAMINATION WITH LESS CHANCE OF GASTROENTERITIS IN INFANTS.

6. BREAST MILK COMPOSITION IS IDEAL FOR INFANT BECAUSE OF ITS COMPOSITION.

7. BREASTFED BABY BECOMES LESS OBESE AND SUFFERS LESS FREQUENTLY FROM RESPIRATORY INFECTIONS.

8. HYPOCALAEMIC CONVULSION IS LESS COMMON AS IT CONTAINS LESS PHOSPHORUS.
9. MILK ALLERGY IS RARE WITH BREAST MILK.

10. MOTHER - CHILD BONDAGE BECOMES BETTER.

11. UTERINE INVOLUTION BECOMES BETTER.

12. SOLE BREAST FEEDING FOR 3 MONTHS WITH LACTATIONAL AMENORRHOEA ACTS AS A NATURAL CONTRACEPTIVE WITH PREGNANCY FAILURE RATE OF 3-10%.

   THEREFORE, ALL MOTHERS HAVE TO FEED THE BABY ON BREAST SINCE BREAST MILK FOR 4-6 MONTHS IS SUPERIOR TO ANIMAL AND COMMERCIAL PREPARATIONS OF BABY FOOD.

( BREAST FEEDING IS BEST FOR MOTHER AND BABY )
CONTRAINDICATIONS (WHEN BREAST FEEDING IS ‘NOT’ RECOMMENDED):

A- MOTHER- 1. PULMONARY TUBERCULOSIS WHERE DISEASE IS EXTENSIVE AND PROGRESSIVE. BABY IS SEPARATED FROM MOTHER.

2. POORLY CONTROLLED EPILEPSY.

3. BREAST ABSCESS

B- INFANT(BABY)-

1. MARKED IMMATURITY OF INFANT WHEN IT CAN NOT SUCK. IN THIS CASE MOTHER’S MILK IS EXPRESSED OR MOTHER’S BANK MILK IS FED TO BABY.

2. VERY ILL BABY.
MANAGEMENT OF BREAST FEEDING-

TIME OF FIRST FEEDING. BABY IS PUT TO MOTHER’S BREAST IMMEDIATELY WITHIN AN HOUR AFTER BIRTH-- AS SOON AS MOTHER BECOMES FIT. BABY HAS HIGHEST ABILITY TO SUCK JUST AFTER BIRTH.

FEEDING SCHEDULE (ORAL)-
1. DEMAND SCHEDULE -

FEEDING IS GIVEN WHEN BABY APPEARS HUNGRY. THIS SCHEDULE IS CURRENTLY FAVOURED SINCE BABY ALTHOUGH TAKES BREAST FREQUENTLY AT THE BEGINNING BUT GRADUALLY GETS FEEDS EVERY 3-4 HOURS.

2. TIME SCHEDULE -

HEALTHY BABY IS FED AT 3-4 HOURS GAP BY THE CLOCK. HERE BABY CRIES IF HUNGRY PRIOR TO FIXED TIME OF FEEDING.

DURATION OF EACH FEEDING -

ON THE 1ST DAY 2-3 MINUTS AT A TIME PER BREAST, BOTH BREASTS ARE FED ONE AFTERANOTHER, THEN INCREASING THE DURATION BY A MINUTE PER BREAST PER DAY TILL 7-
10 MINUTES PER BREAST AT A TIME BY 7-10 DAYS TIME. BREAST FEEDING SHOULD NOT BE MORE THAN 15-20 MINUTES AT A TIME, SOME BABIES DRINK FAST, OTHER SLOWLY. ALTERNATE BREAST IS GIVEN AS THE FIRST ONE FOLLOWED BY THE OTHER.

AFTER FEEDING BOTH BREAST MUST BE EMPTY OTHERWISE BECAUSE OF ENGORGEMENT OF MILK MOTHER WILL SUFFER WITH FEVER AND OTHER COMPLICATIONS.

TECHNIQUE OF BREAST FEEDING-

BREASTS ARE PROPERLY EXPOSED, NIPPLE AND AREOLA ARE CLEANSED WITH BOILED LINEN IN WATER, BEFORE AND AFTER EACH FEED.

THE MOTHER FEEDS BABY ON SITTING UP POSITION BY HOLDING THE BABY ON HER LAP AND SUPPORT
THE BABY’S HEAD ON HER FOREARM IN SLIGHTLY INCLINED POSITION. SHE SUPPORTS HER BREAST BY OTHER PALM AND PRESSES ON THE AREOLA BY HER FINGERS. BABY’S NOSE IS KEPT FREE OF BREAST, NIPPLE AND AREOLA ARE PRESSED TO SQUEEZE MILK AND THEN PROJECTED INTO THE BABY’S MOUTH. BABY SUCKS NIPPLE DEEP INTO HIS MOUTH.

PARTICULARLY AT NIGHT, IT IS PREFERABLE TO FEED IN LYING DOWN POSITION, AS BOTH THE MOTHER AND BABY CAN GO OFF TO SLEEP AFTER FEED.

WILL THE BABY BE FED AT NIGHT? IF BABY BECOMES HUNGRY BREAST FEEDING IS GIVEN AT NIGHT SINCE BABY DOES NOT RECOGNISE DAY OR NIGHT.
BURPING (BREAKING UP WIND) -

AT THE END OF FEEDING EACH BREAST, BABY IS HELD IN UPRIGHT POSITION EITHER ON LAP OR SHOULDER AND TO GENTLY PAT THE BABY AT THE BACK THUS HELPING HIM TO BRING OUT SWALLOWED AIR FROM STOMACH. TIME OF BURPING IS 5 MINUTES.
AMOUNT AND COMPOSITION OF BREAST MILK-

(BREAST MILK INCREASES ON REST AND AFTER A MEAL.)

ON AN AVERAGE BREAST MILK YEILD IS 850ml/day. INDIAN MOTHER PRODUCES 400-600ml MILK/day DURING 1ST YEAR. CALORIE VALUE OF BREAST MILK IS 71 CALORIES PER 100ml.

BABY NEEDS 100 CALORIES/KG AND 150ml MILK/KG OF BODY WEIGHT DAILY.
## INTERVALS OF BREAST FEEDING-

<table>
<thead>
<tr>
<th>BABY’S AGE</th>
<th>BREAST FEEDING PER 24 HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIRTH TO 1 MONTH</td>
<td>6-8 TIMES</td>
</tr>
<tr>
<td>1-3MONTHS</td>
<td>5-6 TIMES</td>
</tr>
<tr>
<td>4-6 MONTHS</td>
<td>4-5 TIMES[plus solid food]</td>
</tr>
<tr>
<td>7-12 MONTHS</td>
<td>3-4 TIMES[plus solid food]</td>
</tr>
</tbody>
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### QUANTITY OF MILK REQUIRED PER FEED

<table>
<thead>
<tr>
<th>Age</th>
<th>Quantity</th>
</tr>
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<tbody>
<tr>
<td>1-2week</td>
<td>50-75ml (2 oz)</td>
</tr>
<tr>
<td>3week-2mnths</td>
<td>100-125ml (4-5 oz)</td>
</tr>
<tr>
<td>2-3months</td>
<td>125-150ml (5-6 oz)</td>
</tr>
<tr>
<td>3-4months</td>
<td>150-175ml (6-7 oz)</td>
</tr>
<tr>
<td>5-12months</td>
<td>175-225ml (7-8 oz)+solid food.</td>
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</tbody>
</table>
HOW TO DECIDE WHETHER BABY HAD ADEQUATE BREAST MILK-

1. BABY FALLS ASLEEP AFTER A FULL FEED.
2. FISTS ARE UNCLENCHED.
3. LIGHT COLOURED URINE.
4. REFUSE TO DRINK ANY MORE.
5. GAINING IN WEIGHT.
DURATION OF BREAST FEEDING IS-ON AN AVERAGE 10 MONTHS - UPTO 2 YEARS WITH WEANING FOOD FROM 4 MONTHS (SOME SAY WEANING - AFTER 6 MONTHS).

IN RURAL INDIA, BREAST FEEDING IS CONTINUED FOR 24 MONTHS ALONG WITH SOLID FOOD. ON PROLONGED BREAST FEEDING FOOD INTAKE OF MOTHER SHOULD BE ADEQUATE.

AFTER 6 MONTHS, EVERY WEEK, COW’S OR DAIRY MILK IS GIVEN TO BABY IN PLACE OF ONE BREAST FEEDING A DAY THUS IN 3-4 MONTHS, BREAST FEEDING CAN BE GRADUALLY STOPPED.

COMPLEMENTARY FEEDING (TOP UP) - IT IS ADDITION OF COW’S MILK OR DAIRY OR TINNED MILK TO BREAST FEEDING.
SUPPLEMENTARY FEEDING OF ADDITIONAL MILK IS GIVEN REPLACING ONE OR TWO BREAST FEEDING.

HOW TO PROMOTE BREAST FEEDING?

1. PREGNANT WOMEN SHOULD RECEIVE INFORMATION DURING ANTENATAL CARE ON BENEFITS OF BREAST FEEDING AND ENCOURAGED TO BREAST FEED HER NEW BORN.
2. ALL MOTHERS ARE GIVEN BABIES TO INITIATE BREAST FEEDING WITHIN ONE HOUR OF NORMAL DELIVERIES AND WITHIN 4 HOURS OF CAESAREAN SECTION.

3. NEWBORNS ARE GIVEN NO FOOD OR DRINK OTHER THAN BREAST MILK. EXCLUSIVE BREAST FEEDING IS PROMOTED FOR 4-6 MNTHS.

4. BABIES REMAIN WITH THEIR MOTHERS 24 HOURS DAILY EXCEPT FOR MEDICAL REGIONS.

5. ALL BABIES ARE BREASTFED ON DEMAND SCHEDULE.

6. NO BOTTLES, PACIFIERS, RUBBER NIPPLE, NIPPLE SHIELD SHALL BE ALLOWED IN THE HOSPITAL. EVEN THE LITERATURE PROJECTING ALL THESE
AND COMMERCIAL INFANT FOOD ARE NOT PERMITTED.

7. MOTHER IS TAUGHT HOW TO MAINTAIN LACTATION BY PUTTING THE BABY ON BREASTS.

COMMON ‘DRUGS’ AND BREAST FEEDING - ESSENTIAL MEDICINES FOR THE MOTHER ARE TAKEN DURING OR IMMEDIATELY AFTER BREAST FEEDING, TO AVOID DRUG CONCENTRATION IN BREAST MILK DURING FEEDING.
24. DRUGS WHICH ARE ‘SAFE’ DURING BREAST FEEDING -.

CHLOROQUINE
PARACETAMOL
PENICILLINE
ERYTHROMYCIN
CHEPHALOSPORIN
METONIDAZOLE (STANDARD DOSE)
RIFAMPICIN
ANTACIDS
CONTRACEPTIVES (PROGESTRON -E ONLY)
IRON AND VITAMINS
25. DRUGS WHICH ARE ‘NOT SAFE’ DURING BREAST FEEDING -

ALCOHOL

CHLORAMPHENICOL

TETRACYCLINE

ORAL CONTRACEPTIVES

CORTICOSTEROIDS (HIGH DOSE)
WEANING IS THE GRADUAL CHANGE OVER FROM BREAST FEEDING TO SOLID FOOD AND OTHER MILK (COW’S, TINNED). MILK GIVEN WITH SOLID FOOD IS UNDILUTED. IT IS ALSO CALLED WEANING PERIOD FROM 4-12 MONTHS (RECENTLY SAYS AFTER 6 MONTHS).
WEANING IS NECESSARY, OTHERWISE INFANT (BABY) WILL NOT GROW

WEANING FOODS ARE-

A RIPE BANANA IS SMASHED IN A BOWL, ONE TEASPOONFUL IS GIVEN TO BABY. QUANTITY OF BANANA IS GRADUALLY RAISED TILL ENTIRE BANANA IS BEING TAKEN BY THE INFANT (IN 2-3 WEEKS TIME). OTHER THAN BANANA, RIPE PAPAYA AND BOILED APPLE CAN BE MASHED AND GIVEN TO INFANT, GRADUALLY HALF CUP OF SMASHED FRUIT IS GIVEN. WITHIN A FEW DAYS OF FEEDING FRUITS, CEREAL AND DAL (PULSES) FEEDING IS STARTED. SMASHED BOILED RICE AND DAL (KICHRI), VEGETABLE SOUP OR CHAPATI (BREAD) AND MILK IS GIVEN STARTING FROM 2 TEASPOONFUL TO HALF CUP.
IN 2 WEEKS TIME. CEREAL IS GIVEN AT 9-10 am AND FRUIT IS GIVEN IN THE AFTERNOON. GRADUALLY BREAST MILK IS REPLACED BY SUPPLEMENTS OF COW’S MILK OR COMMERCIAL BABY FOOD. BY 7-8 MONTHS, FOUR TIMES SOLID FOOD IS GIVEN PER DAY ALONG WITH 500 ml MILK.

FROM 2ND MONTH OF WEANING ALONG WITH CEREAL, DAL (PULSES) AND MILK, BOILED GREEN VEGETABLES, ARE MADE TO PULP, LITTLE SALT AND BUTTER ARE MIXED AND GIVEN TO INFANT.

IN URBAN CENTRES, PRECOOKED INFANT WEANING FOOD IS STARTED AS MILK CEREAL (8 LEVEL TEASPOON AND 200ml WATER MAKES A FEED)
ARTIFICIAL FEEDING-

CAN BE FROM-

1. ANIMAL MILK (COW’S, BUFFALO, GOAT, DAIRY)

2. BABY FOOD FORMULA (TINNED MILK)

INDICATIONS- THESE ARE VERY FEW-

1. MOTHER HAS NOT ENOUGH MILK,
2. BREAST MILK HAS DRIED UP,

3. SEVERE RETRACTED NIPPLE, BREAST ABSCESS.

CRACKED NIPPLE IS TEMPORARY CONTRAINDICATION.

4. MOTHER IS ILL.

5. BABY IS ILL OR TOO PREMATURE THAT CAN NOT SUCK. ALL PREMATURE SHOULD HAVE EXPRESSED BREAST MILK OR MILK FROM BREAST MILK BANK.

HOW MOTHER DECIDES TO GO FOR MILK SUPPLEMENTS-

SHE OBSERVES FOR A WEEK. BABY BECOMES HUNGRY AT SHORT INTERVAL, BREASTS ARE FELT LIGHT, BABY DOES NOT PASS STOOL FOR A
DAY OR TWO AND PASSES URINE LESS FREQUENTLY.

**ANIMAL MILK** (FRESH COW’S OR BUFFALLO OR GOAT’S OR DAIRY MILK) IS USED.

**INTRODUCTION OF COW’S MILK**- FROM BIRTH TO 4TH WEEKS -

THE BABY IS GIVEN 1 PART MILK AND 1 PART WATER (1:1 DILUTION) WITH ADDED SUGAR TO BRING CALORIC VALUE TO 18-20 CALORIE PER 25ML. COW’S ORIGINAL MILK HAS APPROX. 20 CALORIES PER 25 ML. (THAT MEANS ADDITION OF 2.5 gm SUGAR TO 25 ML OF DILUTED MILK).

5TH WEEK ONWARDS- 2:1 DILUTION ALONG WITH SUGAR

9TH WEEK ONWARDS- 3:1 DILUTION
13TH WEEK OR AFTER 3 MONTHS- NO DILUTION.

HOW TO PREPARE A FEED-

BOIL THE DILUTED MILK AND COOL IT TO BODY TEMPERATURE. PREPARE 50 ML FEED AT A TIME FOR 1ST WEEK AND INCREASE THE AMOUNT LATER ON.

TO PREPARE FEED FROM TINNED POWDER-

ADD 1 MEASURE SPOON FUL OF MILK POWDER TO AN OZ (25 ML) OF PRE BOILED AND LUKE WARM WATER. HANDS SHOULD BE CLEAN AND BOTTLE, BOWL, SPOON SHOULD ALSO BE BOILED.

- BY SINCERE CARE WE WILL GET GOOD RESULTS.
PART 5 – CONTRACEPTION
27. CONTRACEPTION METHODS-

BREAST FEEDING IS NOT A SAFE METHOD OF CONTRACEPTION. PREGNANCY MAY OCCUR, SO USE OTHER ‘CONTRACEPTIVE METHODS’. 

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HERE ARE FEW IMPORTANT METHODS OF CONTRACEPTION.

A. SAFE PERIOD-

SEXUAL ABSTINENCE DURING FERTILE PERIOD OF 11-21ST DAYS OF MENSTRUAL CYCLE (WHEN MENSTRUAL CYCLE IS 28 DAYS PERIOD - COUNT FROM IST DAY OF LAST MESES). ONE WEEK BEFORE THE COMING MENCES IS ABSOLUTELY SAFE WHEN CYCYL IS REGULAR AND RELATIVELY SAFE ONE WEEK AFTER STARTING THE MENSES.

B. COITUS INTERRUPTUS (WITHDRAWAL METHOD)- THIS IS OLD AGE PRACTICE OF PULLING OUT OF ERECTED PENIS FROM VAGINA JUST BEFORE EJACULATION. THIS IS COMMONLY PRACTISED. THIS HAS A
FAILURE RATE OF 35/100 WOMAN YEARS.

C..VAGINAL SPERMICIDE -

DELFIN CREAM – WHITE CREAM, 5% NON OXYNOL 9 AS SPERMICIDE(2.5 ml) IS INTRODUCED IN VAGINA BEFORE EACH COITUS.

TODAY- VAGINAL CONTRACEPTIVE PESSARY INTRODUCED IN VAGINA 5 MINUTES BEFORE THE COITUS. IT GIVES PROTECTION FOR AT LEAST ONE HOUR .

EFFECTIVENESS- FAILURE RATE IS 15 PER 100 WOMAN YEAR.

SIDE EFFECTS- VAGINAL WARMTH IS FELT BY FEW. VAGINAL AND PENILE ALLERGY IS RARELY POSSIBLE.
D. CONDOM-

THIS IS A THIN MALE RUBBER CAP CONTRACEPTIVE THAT COMPLETELY COVERS THE ERECTED PENIS DURING INTERCOURSE AND PREVENTS EJACULATION INTO VAGINA.

PROCEDURE OF USE - ONE CONDOM IS ROLLED ON ERECTED PENIS IS FULL LENGTH BEFORE COITUS (FORESKIN RETRACTED, IF UNCIRCUMCISED).
CONDOM CAN BE REMOVED - BUT NOT BEFORE EJACULATION. ON EJACULATION, CONDOM-RIM AT ROOT OF PENIS IS HELD BY FINGERS WHEN FLACCID PENIS IS WITHDRAWN. CONDOM IS REMOVED FROM PENIS THEREAFTER. ONCE USED IT IS THROWN AWAY. ANOTHER CONDOM IS USED FOR REPEAT COITUS.

FOR BETTER PROTECTION DELFEN CREAM OR TODAY TABLET IS PRIOR INTRODUCED BEFORE CONDOM (NIRODH) PROTECTED COITUS

BENEFIT OF CONDOM-

1. SIMPLE METHOD EASY TO USE. MALE INVOLVEMENT.

2. SAFE- NO SIGNIFICANT MORBIDITY. NO SYSTEMIC EFFECT
3. PROTECTS AGAINST SEXUALLY TRANSMITTED DISEASES PARTICULARLY A.I.D.S.

4..PROTECTS FROM CERVICAL NEOPLASIA AND FROM PELVIC INFLAMMATORY DISEASE.

5..PREVENTS PREMATURE EJACULATION.

6. ACCEPTIBILITY. WIDELY USED THROUGHOUT THE WORLD. IT IS SUITABLE FOR NEWLY MARRIED.

**DISADVANTAGE OF CONDOM-**

1. HAMPER SEXUAL PLEASURE.

2..SIDE EFFECTS. RUBBER ALLERGY TO VAGINA OR PENIS RARELY OCCURS.
3..Pregnancy failure 6-10 per 100 women years due to leakage or rupture or slipping out of condom. When combined with vaginal spermicide, pregnancy failure rate comes to 3 per 100 woman year.

E. Oral contraceptive pill (steroid contraceptive)
IT IS LOW DOSE HORMONE PILL, A COMBINATION OF OESTROGEN-PROGESTOGEN. WHEN TAKEN ORALLY AND REGULARLY IT ACTS AS THE MOST EFFECTIVE CONTRACEPTIVE FOR WOMAN AGED 15-40 YEARS.

O.C. PILL TAKING.- MALA- D (21 WHITE HORMONE +7 IRON TABLETS), OVRAL L(21),TRIQUULAR (21) ONE HORMONE TAB IS TAKEN WITH WATER AT BED TIME DAILY FROM 5TH DAY OF MENSES TILL ALL 21 WHITE TABLETS ARE CONSUMED. IF ONE TABLET IS MISSED, NEXT DAY TWO TABLETS SHOULD BE TAKEN. IF 2 DAYS MISSED THE WHOLE CYCLE WILL BE UNSAFE. IN MALA- D (28 TABLETS) FOLLOWING 21 WHITE HORMONE TABLETS, LAST 7 IRON TABLETS ARE TAKEN ONCE A DAY DURING WHICH MENSES STARTS.
SECOND AND SUBSEQUENT COURSES ARE FROM 5TH DAY OF MENSES. O.C. CAN BE REGULARLY TAKEN CONTINUOUSLY.

INDICATIONS- ADOLESCENT GIRL, REPRODUCTIVE AGE WOMAN, WOMAN BEYOND 35 YEARS (WHO DOES NOT SMOKE) CAN TAKE O.C. IT CAN BE STARTED FROM 5TH DAY OF ABORTION, MTP OR FOLLOWING A MENSES AFTER 6 MONTHS OF LACTATING WOMAN OR EARLIER IF NOT LACTATING.

DURATION OF O.C. TAKING, 3-5 YEARS IF NO SIDE EFFECTS.

CONTRAINDICATIONS-

1. ABSOLUTE- 1. HISTORY OF LIVER DISEASE OR JAUNDICE WITHIN ONE YEAR SINCE O.C. IS METABOLISED IN LIVER.
2. THROMBOEMBOLIC DISORDERS OR ITS HISTORY.

3. EPILEPSY

4. CARCINOMA OF BREAST, CERVIX OR UTERUS.

5. UNDIAGNOSED GENITAL BLEEDING.

2. RELATIVE-

MIGRAINE, SEVERE ALLERGY, HYPERTENSION, DIABETES, WOMAN AGED BEYOND 35 YEARS WHO SMOKE.

EFFECTIVENESS- O.C. PILL IS HIGHLY EFFECTIVE BIRTH SPACING CONTRACEPTIVE WITH PREGNANCY RATE AS LOW AS 0.1 PER 100 WOMEN YEARS WHEN REGULAR O.C. PILL IS TAKEN CONTINUOUSLY.
F. CENTCHROMAN (SAHELI) IS A WEEKLY ORAL CONTRACEPTIVE PILL.

IT IS A NONSTEROID LOW OESTROGENIC CHEMICAL COMPOUND AVAILABLE IN 30 mg WHITE TABLET.

ADMINISTRATION FOR FIRST 3 MONTHS - ONE TABLET IS TAKEN ORALLY WITH WATER AT BED TIME STARTING ON 1ST DAY OF MENSES, THEN ONE TABLET EVERY 3 DAYS APART ON WEDNESDAY AND SUNDAY.
AFTER 1ST 3 MONTHS ONE TABLET IS TAKEN AT BED TIME EVERY SUNDAY FOR CONTINUOUS 3 YEAR OR MORE. IF A TABLET IS MISSED IT IS TAKEN AS SOON AS POSSIBLE. IF MENSES IS DELAYED FOR 15 DAYS AND PREGNANCY IS CONFIRMED, SAHELI IS DISCONTINUED. NO EFFECT ON PREGNANCY COULD BE FOUND.

EFFECTIVENESS- IT HAS A FAILURE RATE OF 4 PREGNANCIES/100 WOMAN YEAR.

CONTRAINDICATIONS- RECENT HISTORY OF JAUNDICE, ALLERGY, POLYCYSTIC OVARIAN DISEASE, CERVICAL DYSPLASIA, NURSING MOTHER FOR 6 MONTHS,

SIDE EFFECTS- NO METABOLIC, CARDIOVASCULAR, ENDOCRINE EFFECT COULD BE FOUND. NO HEALTH INCOVENIENCES AS
SICKNESS, VOMITING, WEIGHT GAIN COULD BE FOUND ON ITS USES. DELAYED CYCLES OCCURS IN 8% OR MORE. IT IS QUITE SAFE NEWLY INVENTED ORAL CONTRACEPTIVE.

G. LONG ACTING HORMONAL CONTRACEPTIVES-

THESE ARE LONG ACTING INJECTABLES.
ONLY PROGESTIN INJECTION -

1. INJ. DEPOMEDROXY PROGESTERONE ACETATE (DMPA) - DEPOPROVERA (UPJOHN) 150 MG IN AQUEOUS SOLUTION IS GIVEN IN THE ARM EVERY 3 MONTHS.

2. INJ. NOR ETHISTERONE ENANTHATE -NET EN (NORISTERAT SCHERING) 200MG OILY IS GIVEN ON THE BUTTOCK EVERY 2 MONTHS.

THESE INJECTIONS CAN BE GIVEN CONTINUOUSLY 3 YEARS OR MORE.

STARTING INJECTABLE. THIS IS GIVEN DURING LACTATION FROM 6TH WEEK AFTER DELIVERY AND 5TH DAY OF MENSES.

MODE OF ACTION - IT SUPPRESSES OVULATION, MAKES CERVICAL
MUCUS HOSTILE AND CAUSES ENDOMETRIAL REGRESSION.

PREGNANCY FAILURE 1/100 WOMAN YEAR.

IT DOES NOT EFFECT ON LACTATION THUS CAN BE GIVEN 4 WEEKS POSTPARTUM.

SIDE EFFECTS- MENSTRUAL IRREGULARITIES IN HALF TO TWO THIRD CASES - AMENORRHOEA, SPOTTING, HEAVY MENSES. THESE ARE APPROVED IN 90 COUNTRIES.

H. INTRAUTERINE DEVICES (IUCD)-

EXAMPLES- Cu T200, MULTILOAD COPPER DEVICES, HORMONE BEARING IUCD (PROGESTASERT (T DEVICE WITH 38 mg PROGESTERONE) CHANGED YEARLY (LESS BLEEDING), LEVONORGESTREL IUCD.
INDICATIONS - IN A PAROUS WOMAN WITH A LIVING BABY, IUCD IS THE MOST POPULAR SPACING CONTRACEPTIVE USED IN INDIA. IN NULLIPAROUS WOMAN, THIS IS NOT USED IN OUR COUNTRY.

TIME OF INSERTIONS - IT IS INSERTED AT 1.6 WEEKS POSTPARTUM (AFTER DELIVERY)

2. POST MENSTRUATION - IN INTERVAL PERIOD
3. AT THE END OF MEDICAL TERMINATION OF PREGNANCY (MTP) OR EVACUATION OF SPONTANEOUS ABORTION.

4. POST PLACENTAL INSERTION FOLLOWING DELIVERY IS DONE IN LESS MOTIVATED WOMAN.

5. POSTCOITAL CONTRACEPTION WHEN IUCD IS INSERTED WITHIN 5 DAYS OF UNPROTECTED SEX.

**CONTRAINDICATIONS**-

**A. ABSOLUTE**-

1. PELVIC INFECTION,

2. KNOWN OR SUSPECTED PREGNANCY

3. UTERINE FIBROID

4. PELVIC ENDOMETRIOSIS.
5. UTERINE MALIGNANCY.

**BENEFITS OF IUCD-**

1. **BEST BIRTH SPACING CONTRACEPTIVE** THAT CAN SERVE AS PERMANENT BIRTH SPACER FOR 12-15 YEARS ON CHANGE OVER OF A DEVICE EVERY 5-7 YEARS. THIS CAN ACT AS AN ALTERNATIVE TO FEMALE STERILIZATION.
SIDE EFFECTS OF COPPER IUCD-

1. PAIN AND BLEEDING –
   MENORRHAGIA (MORE BLEEDING), SPOTTING ARE THE COMMONEST SIDE EFFECT. PELVIC PAIN, DYSMENORRHOEA (PAIN DURING MENSES) DEVELOP IN SOME. IUCD IS REMOVED IF MEDICAL TREATMENT DOES NOT IMPROVE THE SYMPTOMS.

2. EXPULSION- WOMAN IS INSTRUCTED TO FEEL THE THREAD AT MOUTH OF CERVIX AT THE END OF EACH MENSES.

3. PREGNANCY- THIS VARIES FROM 2-4/100 WOMAN USERS FOR THE FIRST YEAR. THEREAFTER THE RATE FALLS.

4. ECTOPIC PREGNANCY
COMPLICATIONS-

1. PELVIC INFLAMMATION- THIS OCCURS IN 1.3-2.5 PER 100 WOMAN USER AT END OF TWO YEARS. THE INFECTION IS LESS WITH COPPER DEVICES. IN CASE OF IUCD USER DEVELOPING P.I.D., ANTIBIOTIC IS GIVEN AND IUCD IS REMOVED AFTER 48 HOURS.

2. PERFORATION- THIS OCCURS IN 1 IN 2000 INSERTIONS IN INDIA. THIS OCCURS DURING INSERTION OR LATER PARTICULARLY IN POSTPARTUM INSERTION, IN TRANSLOCATED IUCD. THIS OCCURS WITH PAIN OR SILENTLY WITHOUT PAIN.

BENEFITS-

1. ONE TIME REVERSIBLE BIRTH SPACING METHOD, NO SYSTEMIC SIDE
EFFECT. IT CAN BE PERMANENT BIRTH SPACER. ON CHANGE EVERY 5-10 YRS.

2. HIGHLY EFFECTIVE FOR YEARS HAVING PREGNANCY RATE OF 2% WOMAN YEAR.

3. QUITE SAFE AND LOW COST. FERTILITY IS RESTORED ON REMOVAL OF IUCD.

4. ACCEPTABILITY HIGH.

DISADVANTAGES-

1. NEEDS INSERTION BY TRAINED PERSONNEL.

2. NEEDS FOLLOW UP.

3. IT NEEDS REMOVAL UPTO 10% WHEN SIDE EFFECTS DEVELOP.
I. POSTCOITAL (EMERGENCY) CONTRACEPTION-

INDICATIONS-

1. UNPROTECTED SEXUAL INTERCOURSE.

2. CONDOM BREAKAGE.
3. MISSED PILLS

4. RAPE

CONTRACEPTIVE USED-

1. LOW DOSES ORAL PILLS (OVRAL L)

FOUR TABLETS ARE TAKEN AS EARLY AS POSSIBLE (WITHIN 72 HOURS) FOLLOWED BY ANOTHER 4 TABLETS AFTER 12 HOURS.

FAILURE RATE IS UPTO 2%.

2. COPPER IUCD

IS INSERTED WITHIN 5 DAYS OF UNPROTECTED SEX.

THIS HAS FAILURE RATE UPTO 1%.

3. NORLEVO (LEVONORGESTREL) PILL (750 MICROGRAM)
IS TAKEN ORALLY AS SOON AS POSSIBLE AFTER UNPROTECTED SEX WITHIN 72HOURS, SECOND PILL WITHIN 12-24 HOURS OF THE 1\textsuperscript{ST} PILL.

IT IS EFFECTIVE IN 98.8% BUT NO SIDE EFFECT.

4. MIFEPRISTONE (RU486) - 

ANTIPROGESTOGEN ACTS ON PROGESTERONE RECEPTORS AND PREVENTS EMBEDDING OF BLASTOCYST ON ENDOMETRIUM. SINGLE DOSE OF 10mg IS TAKEN ORALLY WITHIN A FEW DAYS OF UNPROTECTED SEXUAL INTERCOURSE. THIS THERAPY IS FOUND TO BE EFFECTIVE.
J. Permanent Methods — are surgical procedures for permanent contraception.

These are most popular contraceptive methods in India.

It comprises about 80% of all contraceptives accepted by a couple.

2. VASECTOMY (CLOSURE OF VAS DEFERENCE) IN MALE.

CONRAINDICATIONS-- THERE IS NO ABSOLUTE CONTRAINDICATION. TEMPORARY CONTRAINDICATIONS ARE SEVERE ANAEMIA (Hb BELOW 8 gm%) DIABETES, HEART FAILURE, SEVERE HYPERTENSION, LOCAL SKIN DISEASES.

TIMING-

1. BEST TIME FOR TUBECTOMY IS POSTPARTUM (ANYTIME WITHIN A WEEK OF CHILD BIRTH).

2. POST-MTP AT THE END OF MTP OR POST TERMINATION OF SPONTANEOUS ABORTION.

3. INTERVAL- POSTMENSTRUATION WITHIN 1ST WEEK TO AVOID LUTEAL PHASE PREGNANCY. VASECTOMY IS BEST PERFORMED CLOSE TO ABOVE EVENTS.
SO, BY SINCERE

‘PRECONCEPTIONAL COUNCELLING’, ADEQUATE ‘PREGNANCY CARE’, SAFE ‘DELIVERY’
PRUDENT ‘POSTNATAL CARE’ AND TENDER ‘CARE OF THE NEW BORN’

WE CAN ACHIEVE ‘OUR GOAL’ THAT IS

‘HEALTHY MOTHER’ AND ‘HEALTHY BABY’
DR ALPANA AGRAWAL (MBBS, DGO)

INDIA.

THANKS!

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