

**Course Name :An Overview on Maternal Health Antenatal, Intranatal and Postnatal Care**

**Professor Name: Dr. Barnali Ghosh**

**Department Name: Multidisciplinary**

**Institute Name: IIT Kharagpur**

**Week:11**

**Lecture:06**

Post-Natal care and postpartum contraception

Good morning students. Welcome to the online NPTEL certified course on the topic and overview on maternal health, the antenatal, intranatal and postnatal care. I am Dr. Barnali Ghosh, an obstetrician and gynecologist working as assistant professor at B.C.Roy Multispeciality Hospital and Medical Research Centre, IIT Kharagpur. So, we have been discussing the postnatal care that is the puerperium which extends after delivery up to 6 weeks and we have already discussed the normal puerperal changes occurring in the mother's body after the delivery as well as the different you know management portion and you know the abnormal presentations that may occur during the puerperal period, you know in the form of secondary postpartum hemorrhage, in the form of retained beats of conception, in the form of infection like as in case of puerperal sepsis, also sometimes in case of wound infection and wound breakdown right. So, today our class will revolve or involve the postnatal care which we do after the delivery after the patient has gone home, she is asked to to come to the clinic for postnatal care or postnatal follow up and there only we try to educate her regarding postpartum conception.

So, the concepts covered will be the postnatal care, the lactation very very important in the postpartum period, you know the different phases or the different procedures which are involved in lactation and how to improve lactation on the part of the mother as well as we will have a discussion regarding postnatal contraception. Keywords are as given coming to the class proper right. So, after the delivery after you know be it a case of vaginal delivery or a caesarean section, in case of vaginal delivery mostly the discharge is given on the third postoperative day that is after 72 hours. In case of caesarean section we prefer to discharge the mother on the fifth postoperative day right.

So, if it is all normal if there is no other complications, if there is proper wound healing, proper recovery and also both bowel and bladder clearance has resumed its normal presentation then the mother is asked to take discharge from the hospital and go for the postnatal care at home. What are the advice that is given on the discharge paper? Number one certain antibiotics right we give IV antibiotics in the hospital during the hospital stay mostly in the form of say

cephalosporins that is also you know sometimes ceftriaxone, injection xone very commonly prescribed injection in the postpartum period. So, ceftriaxone, metrogl and gentamicin these three broad spectrum coverage of antibiotics given for the first 3 to 4 days. After discharge they are converted to oral antibiotics in the form of cephalosporins so, ceftriaxone right or you can go for cefixime right or penicillin group in the form of amoxicillin plus clavulanic acid. So, these antibiotics so, antibiotics also to be given for say the next 5 days these are oral.

To improve the general health of the mother we will be prescribing IFA and calcium supplementation for another 21 days that is 3 weeks or up to 1 month postpartum. Postnatal exercises in the form of Kegel's exercise these are to be explained to the mother how she is going to do these pelvic exercises right. So, these are pelvic exercises that will prevent know the prolapse uterine descent right. So, these pelvic exercises prevent further uterine descent or future prolapse following vaginal delivery. Now, you ask the patient to contract the pelvic muscles around the urethra or the anal opening right.

Now, as in case of you know a very urgent micturition when there is an arch for micturition or arch for defecation the way we try to hold the urine or feces before we go to the toilet that same thing she will do voluntarily when the abdomen is empty when the bladder is empty or there is no urge for defecation in that case when she is sitting after say any meals when she is having a free time then she will go for these Kegels exercise. Number 3 is exclusive breastfeeding this should be continued for the next 6 months following delivery she should be counseled for maintaining of abstinence right. So, for the next 4 to 6 weeks this will help the episiotomy wound to get healed properly right. Family planning very very important that choices of contraceptive devices that are available and what is suitable for her you need to counsel the patient and you ask her to come for follow up after 4 to 6 weeks 6 weeks why because this 6 weeks is the period of puerperium. So, after 6 weeks when she comes you can evaluate whether the you know the puerperal changes or the involution of the different reproductive organ has taken place adequately right.

So, coming to postnatal care what do you mean by postnatal care this is actually the systemic examination of the mother as well as the baby because in the postnatal period there are 2 persons the mother as well as the baby which you have to look and give appropriate advice to the mother regarding their you know health status and also to maintain the adequate health of both of them right. So, you when she comes for follow up in the postnatal period you do certain examination what are they in the case of examination of the mother very very important is to check the vitals the pulse the blood pressure the respiratory rate the temperature all these are to be measured right. If she was having any heart disease then the pulse rate because in the puerperium after 6 weeks it reverts back to the normal right. So, now, the pulse the blood pressure even if it was a case of PIH it will revert back to the normal. So, if there is any abnormality if it is a case of chronic hypertension then the pressure will you know remain high and in that case you need to

continue the medication of antihypertensives and may sometimes need to refer her to a physician.

Respiratory rate in case of any infection it will signify or you know sometimes PIH may predispose to pulmonary edema. So, respiratory rate temperature any site of infection it will signify. So, all these you have to record then weight weight of the mother how much weight has decreased I have told that the maximum weight loss occurs at the end of the seventh the end of the second week right in the form of postpartum diuresis. So, weight how much weight has reduced and also then you have to go for the general examination. General examination what are they the general survey right height, weight, pallor, icterus, clubbing also blood pressure, pulse I have already told and here also pedal edema to be looked any associated skin infections which were present during pregnancy whether they have been cured because all these following the delivery of the baby they will get cured gradually right and the most important is the per abdominal examination what we look we look for the height of the uterus.

So, in the previous class we have learned that uterus which was an abdominal organ in the period of pregnancy immediately after delivery it comes at the level of the umbilicus or just below the umbilicus that is 22 weeks right just after delivery that is 13.5 centimeter from the symphysis pubis. So, if this is the umbilicus if this is the symphysis pubis. So, immediately after delivery the uterus is at this level or at this height you go for a per abdominal examination you feel the fundus of the uterus slowly slowly slowly the uterus will decrease in height will decrease in height and it will be at the level of the symphysis pubis or it will become a pelvic organ by 2 weeks following delivery and by 6 weeks the uterus now becomes or reverts back to the pre pregnancy way pre pregnancy height right. So, when she comes for the postnatal checkup after 4 to 6 weeks you need to look for know the uterus per abdomen and what you expect you expect you know that you cannot palpate the uterus because it has become a pelvic organ.

So, you need to look for the height of the uterus which is not palpable per abdominally ok. Next number 2 the know as a whole per abdomen whether it is soft or it is you know rigid or it is distended you need to look because soft meaning it is normal rigid or if there is any muscle rigidity muscle guard right why it should be there may be certain sometimes hematoma the rectus muscle hematoma in case of caesarean wound right caesarean section it can so happen distension, distension may be due to gaseous distension it may be due to fluid collection. So, we have to negate all these possibilities right number 3 what to see by per abdominal examination also you know any lump any lump per abdomen. So, that for that also you need to look right. So, all these by perabdominal examination and parvaginal examination as such we will not do parvaginal examination just look for any abnormal secretions per vagina.

I have told that the lochial discharge, lochial discharge is normal the first 4 days being the

lochia rubra converting to lochia serosa and ultimately to lochia alba which will persist for say 14 to 15 days following delivery maximum up to 3 weeks if it is prolonged after 3 weeks then there is chance of any associated lower genital tract infection. So, any excessive foul smelling, excessive foul smelling vaginal discharge if present we should go for a parvaginal examination to you know exclude the presence of any foreign body in the form of any cotton piece or gorge piece or sometimes any local infection or say if there was a small hematoma which may lead to pass formation if all these occurs then we need to you know intervene and treat her at the earliest. So, these were the examination of the mother and following her examination if all is normal now you ask to resume her day to day activities and also you need to give an education regarding the calorie intake because she should be counseled for breastfeeding. So, in lactation period she requires increased calorie intake and another very important concept which will be come across is the postpartum contraceptive methods. Now, coming to the examination of the baby this is ideally to be done by the pediatrician and what to look into the baby number one the color of the baby whether it is active whether it is you know the cry is normal whether it is active whether it is no pink in color right.

So, all these to be looked upon and general hygiene of the eyes right to take taking care of eyes taking care of genitalia taking care of the anal opening taking care of skin of the baby right all these you need to look whether it is all normal or not. Also the weight gain you need to go for the weight gain the first few days there will be weight loss of the baby for 2 to 3 days then gradually the baby will gain in weight also the number of times the baby is the urination number of times the baby is urinating or defecation because that will signify the level of hydration of the baby. Vaccination routine immunization we have the immunization protocol and we need to immunization. So, we need to counsel regarding the routine immunization of the baby against BCG you know against polio oral polio vaccine then hepatitis B vaccine then your all the all the vaccines that are given right. So, vitamin A in oil at 9 months you need to tell her right and then she will go and take the immunization from the pediatrician.

So, all these things are to be checked in the baby in case mostly rash in the skin is very common in the postpartum period and it gradually goes away without any intervention right. Also sometimes you know jaundice breastfeeding is called as breastfeeding jaundice that is also you know mild jaundice can be there then also breastfeeding should be continued, but if it is more if the palms and soles of the fetus is also yellow in color that means, the level of bilirubin is very high and in that case it may be required to be given phototherapy. So, in that case you need to refer her to the pediatrician. So, that was regarding the examination after the examination if all examination is normal then what advice to be given examination found to be normal. Now what advice to be given to the mother? Yes she can resume her normal activities the her usual activities she can now resume she can go to her day to day you know if she is working she can join the work or you know she can go for little bit of exercises right.

So, this postpartum exercises to continue for next 4 to 6 weeks actually pelvic exercise or kegel's exercise they have you know they are advised to start in the antenatal period itself in the last trimester from say around 35 weeks and then it can be followed also in the postnatal period for another 4 to 6 weeks to prevent uterine prolapse or to gain regain the strength of the vagina thereby preventing relaxed perineum. Number 3 vaccination of the baby I already told evaluate the progress of the baby periodically progress meaning you know increase in weight of the baby increase in height of the baby also gradually there will be no more activity more response from the part of the baby and all this should be evaluated the number of time she is urinating or the number of time the baby is defecating that is also important to look into for any signs of dehydration whether the breastfeeding is adequate or not and very very important yes you should always counsel that she should be motivated for exclusive breastfeeding for the next 6 months from birth of the baby because there are different advantages of breastfeeding. Say in case the examination there are some problems problems in the form of irregular vaginal bleeding sometimes we have studied in the secondary PPH that is the most common cause what is the most common cause that is the retained products of conception after vaginal delivery. So, in case if there is any part of the placenta or after membranes which have you know which are persistent inside the uterine cavity that will lead to intermittent vaginal bleeding irregular vaginal bleeding even in the postnatal period. So, what is the treatment go for an USG evaluation look inside the uterine cavity to note any RPOC right.

So, to note for any retained products of conception or to note for any placental poly formation or say any type of uterine arteriovenous malformation any type any foreign body which may be present in the uterine cavity during the process of delivery all these can be seen under USG guidance and if present we need to go for exploration of the uterine cavity under USG guidance that is dilatation and cure attach right. So, that we need to go. Leukorrhea is abnormal vaginal discharge which may be due to any infection and you need to treat that after you know inspecting after inspecting the cervix and the vagina by Cascospeculum then you treat in case of cervical ectopy or erosion. You know for the next 12 weeks even if there is you know any type of ectopy or erosion which has developed due to the hormonal changes that is occurring during the period of pregnancy it will get cured by itself following delivery. So, the next 12 weeks you need to do nothing even if there is an ectopy after next 12 weeks if ectopy persists then you can treat in the form of your cauterization.

Backache very very important sometimes following spinal anastasia or due to the vaginal delivery there is compression on the sacral plexus. So, that will lead to certain backache you need to go for physiotherapy and also sometimes you give certain supplementation calcium vitamin D supplementation and sometimes some painkillers to relieve the backache. Retroversion after the delivery if the uterus gets retroverted that also can lead to backache and so, it must be treated by pessary right. Slight degree of uterine descent. So, sometimes after delivery there is a relaxed perineum and that can result to slight degree of uterine descent or

cystocele or sometimes there is a associated stress incontinence in the postnatal period if any of this happens then you need to first know exclude the cause of infection.

If the infection is controlled or there is no signs and symptoms of infection then you can give your the exercise Kegels exercise you can educate the mother to do go for this Kegels exercise and also sometimes your estrogen equine estrogen ointment per vaginal ointment that will also help to regain the strength of the vaginal muscles. Incontinence in the form of urinary incontinence or anal incontinence right. So, in case there is fistula formation prolonged labor can lead to vesico vesico vaginal fistula or recto vaginal fistula following your third and fourth degree perineal tear and if it is happens so, happens then we need to you know diagnose we need to detect it and if present then treat it treat the fistula treat the fistula in the OT under anesthesia under aseptic condition and it should be ideally done after 3 months postpartum. Why? Because before 3 months it you know that area the episiotomy wound or the signs of infection need to subside and after 3 months you call the patient and go for the repair. Most importantly if the repair if the fistula is detected during the delivery itself then it should be repaired at that time itself and that has the best prognosis right.

So, that was regarding the postnatal care the advice given to the mother as well as to the baby during the postnatal follow up. Now, coming to another important part that is the exclusive breast feeding or lactation in the postnatal period. Now, what is the physiology of lactation? There are different terminologies right. So, 4 phases of lactation number 1 is the mammogenesis which is nothing, but preparation of the breast which has already started from the period of pregnancy. So, from the antenatal period.

So, from the antenatal period the breast undergoes hypertrophy, hyperplasia under the action of prolactin. Next is lactogenesis which is synthesis and secretion from the breast alveoli right. Synthesis meaning synthesis of milk lactogenesis. So, synthesis and secretion this is brought about by prolactin. To note here very important I have already discussed in the physiological changes of pregnancy that the prolactin will increase as sorry it will increase as the pregnancy you know as a pregnancy continues right.

So, this prolactin the level of prolactin increases and at 36 weeks or 39 weeks when there is delivery it is at the peak. After delivery the prolactin will decrease after delivery the prolactin will decrease and then persist at that level in the postnatal period. So, this is the prolactin levels and this is the duration of pregnancy. So, see if this is the time of delivery that is at 39 weeks or say 40 weeks it is at the peak, but in antenatal period there is no milk production why? Because estrogen is high. Estrogen is high and this high levels of estrogen will have an inhibitory effect on the prolactin that will prevent galactorrhoea or lactation or milk secretion from the breast in antenatal period.

Following the delivery the estrogen decreases there is drop in the level of estrogen and progesterone and this inhibitory effect goes away and so, the level of prolactin though somewhat decreases following delivery there will still be synthesis of milk from the breast that is lactogenesis. So, this is from the alveoli right and galactokinesis ejection of milk ejection of milk from the ductules. So, there are two there the alveoli and then the ductules and these ductules they have the muscles around right. So, these ductules are surrounded by the smooth muscles and when these smooth muscles they contract there will be ejection of milk from the nipple. So, that is galactokinesis and this is brought about by your oxytocin right and lastly is galactopoiesis which is nothing, but maintenance of lactation.

Now, that is by thyroid the different you know hormones thyroid insulin all these will try to maintain even the prolactin will also help to maintain the galactopoiesis or the lactation which is maintained for you know next 2 years right. Sometimes the mother can breastfeed the child for 2 years after that there will be gradually decrease in breast milk production. So, and the cascade is you know the previous cascade which was you know the normal pituitary hypothalamo ovarian axis that is established and that will you know further lactation is then stopped right. So, these are the 4 phases of lactation. So, this is just a pictorial representation of the lactation arc see what happens.

So, this is the pituitary very important and this is the hypothalamus pituitary has 2 lobes the anterior lobe and the posterior lobe from the anterior lobe this is the prolactin this pink line is the prolactin. So, anterior lobe of pituitary this will secrete the prolactin right and the from the posterior lobe will be the release of oxytocin right and this prolactin will act on these are the alveoli these are the sorry breast alveoli which will result in your for synthesis of breast milk right. So, prolactin acts here on the mammary gland and there will be galactopoiesis sorry galactokinesis is ejection. So, there will be lactogenesis. So, prolactin will help in lactogenesis that is production of milk in the alveoli of the mammary gland and these are the ductules these are the ductules and these ductules have smooth muscle cells surrounding them and that will be acted upon by this oxytocin right.

So, this oxytocin will act on these muscles and that will help in ejection of the milk galactokinesis that will help in ejection of the milk and this milk will be you know sucked by the fetus. So, this milk will be sucked by the fetus and this suckling this suckling event of the baby this suckling even not the fetus the baby the infant. So, when the baby sucks from the mother's nipple that is the stimulus that will lead to infant and mother bonding and that is the stimulus that goes to the hypothalamus as well as to the pituitary to cause more production of prolactin and oxytocin. So, in the postnatal period suckling by the infant or suckling by the infant is the most important stimulus to maintain lactation both to maintain the production as well as secretion of milk from the breast. Another is from this suckling you motivated to help the baby latch onto the breast and there are techniques how to go for that latching right in a very

comfortable peace serene environment where only the mother and the baby are present and there you know try to you know make a bond with the infant and try the you know make the baby understand that it has to suck from that breast.

It has to latch onto the breast nipple and then suck and if it starts sucking if it is a term neonate if it is a normal neonate of normal body weight right it will suck because it has that reflex which you know which is present in the fetus it will suck and this suckling is actually the afferent stimuli for that will help in synthesis of prolactin and oxytocin and help in maintenance of lactation for the rest of the period right. Another thing is oxytocin it acts on the breast yes after its release it will act on the gastrointestinal system that will increase the GI hormones and as well as increase the GI motility and in the uterus in the puerperal period it will help in involution and this oxytocin will also cause after pain because there is contraction of the uterine muscles. So, every time she breastfeed she feels certain pain in the abdomen which is called as the after pain which is nothing, but due to oxytocin secretion that acts upon the uterus that causes the uterus to contract and that also helps in uterine involution. So, this is the lactation arc that is taking place. Cerebral cortex through the limbic system also has a part to play and so, you know serene environment which I was telling serene peaceful you know mother should be in peace of mind she should have that bonding she should be motivated and you have that bonding.

So, that there is different chemical parameters or the neurotransmitters that are being secreted from the cerebral cortex will activate the hypothalamus and pituitary to release prolactin and oxytocin ok. So, that was regarding breastfeeding. Now, coming to the advantages of breastfeeding for the baby it will decrease the chance of asthma it has been shown that breastfed infants have less chance of obesity have less chance of diabetes have less chance of ear infection why because the breast milk has antibodies. It has antibodies, it has vitamins, it has fats all those who are required for the normal growth of the fetus also it has water to quench the thirst and these antibodies actually provide natural immunity to the baby to prevent the different infections ear infection, GI infection, respiratory tract infection and also it gives immunity that will prevent in the long run in the know any type of asthma or lifestyle disease that is diabetes or obesity. Another thing is it will also increase the IQ the intelligence quotient of the baby right.

So, this was for the baby for the mother it has been shown that the mother who breastfeed her children they have less chance of ovarian cancer they have very very important there is a less chance of breast cancer. So, in multiparous women who have all know breastfeed their infant to you know they have 2 to 3 pregnancies and they have breastfed all their babies they have less chance of breast cancer they she herself will have less chance of type 2 diabetes also high blood pressure and this is your exclusive breastfeeding and contraception. So, lactation is as such a method of natural contraception why because during the period of lactation when there is breastfeeding or exclusive breastfeeding then there is high prolactin and this high prolactin will inhibit the release of FSH and LH. FSH will prevent ovulation ovulation will be hampered right

or recruitment of the follicles right LH surge will also prevent ovulation. So, both these hormones are not present they are of no less quantity that will decrease that will inhibit ovulation there is absence of ovulation and that will help in maintaining contraception.

But to note that if there is your exclusive breastfeeding then also she will have ovulation after you know by 3 months. So, up till 3 months she can she if she is exclusively breastfeeding she can avoid any other contraceptive device, but she needs to start contraceptive device from third month postpartum ok. So, lastly regarding the postpartum contraception the different methods which we use it is can be numbered 1 your combined oral contraception that is OC pills right both estrogen and progesterone then your progesterone only contraception progesterone only contraception and your another method is your barrier methods right coming to one by one condom or male or female condom this is your barrier method number 1 or if you see this one cervical cap or diaphragm which are used by the female these are also a type of barrier methods and right here the types ok. Spermicides these are actually used with male condoms to increase the efficacy of the condom. So, these are also your coming under the barrier contraception.

Contraceptive patch so, combined contraception combined meaning both estrogen and progesterone are present in the contraceptive patch they are present both estrogen and progesterone in the vaginal ring both estrogen and progesterone are present in the birth control pills. So, 4, 5, 6 these are combined pills only progesterone containing devices are the intrauterine device that is the LNG IUS right. So, this is 7 also birth control injection DMPA injection this is only progesterone containing contraception and these 7 and 8 this is your progesterone only contraception. So, there are different types of contraceptive methods and if she is not using any type of contraception if after an act of unprotected sex she can go for emergency contraceptive pills in the form of LNG levonorgestrel right.

So, levonorgestrel 1.5 milligram or she can use copper T or she can use ulipristal acetate. So, these 2 are not so, much used LNG is more frequently used in the form of emergency contraceptive pills right and this implant implant is also your. So, this is 9 implant is also a type of only progesterone contraception right. So, these are the types of contraceptive methods which can be used. Now, coming to the efficacy of different contraceptive methods see these the contraceptive methods in the upper tier.

So, these are more effective less than 1 pregnancy per 100 women in 1 year and as we go down these are less effective right these are less effective. So, this is you know tier 1 tier 1 most effective the efficacy of implants the failure rate of implants is less than 0.05 right less than 0.05. So, they are very very efficacious there is very high chance you know that it is very efficacy in the in the meaning that there is less chance of unwanted pregnancy or contraceptive failure right.

So, implants having etonogestrel right and sometimes levonorgestrel they can be placed just below the skin on the arm in the you know medial aspect of the arm and can be kept for another 3 years. Also IUD I have told copper T is a you know intrauterine contraceptive device and you know levonorgestrel containing intrauterine device is called as Mirena. And permanent sterilization, female sterilization or tubal sterilization bilateral tubal excision right. So, that is timbales female sterilization and in case of males it is vasectomy. If vasectomy is done additional contraception to be you know used additional contraception to be used for next 3 months.

Important to note after vasectomy she when the male partner should use condom for the next 3 months. So, that she the semen the semen discharge have no spermatozoa. So, this is tier 1. tier 2 is the next one that is the injectables DMPA injection, lactational amenorrhea right. So, lactation during this period exclusive breastfeeding is a type of natural contraception.

Peels the combined oral contraceptive pills or in the form of patch or vaginal ring these every these pills pills are 21 day pill with 7 days gap. Patch also you give it on the skin for 3 weeks and then you remove the patch for 1 week when she will be having the withdrawal bleed and again a new patch is again attached. Vaginal ring is taken in the vagina for 3 weeks and then after 3 weeks she needs to take out the vaginal ring for 1 week when there will be withdrawal bleeding and then again a new vaginal ring is again reintroduced inside the vagina. So, these are all tier 2. Tier 3 they are less efficacious there is more chance of contraceptive failures in case of male condoms or diaphragm.

So, these are variant methods female condoms because it you know it needs a lot of education on the part of both the partners on its use and also motivation right. So, these have a failure higher failure rate and tier 4 is your withdrawal technique and certain spermicides non-oxynol 9. So, these have lesser efficacy and more chance of contraceptive failures right and just how to make more effective I have told implants have the maximum efficacy right intrauterine devices, female sterilization because these can be after you take an implant after you give a copper T inside the uterine cavity she does not have to do anything. There is no compliance required on the part of the mother after say some if she now wants to become pregnant because not planned she can wear for 3 years, copper T she can wear for 5 years. So, if after say 2 years now she wants to be pregnant you just take out the implant or you take out the copper T right.

Female sterilization is a type of permanent sterilization vasectomy in for the females and that is used for you know males and with vasectomy after vasectomy the partner needs to use condom for the first 3 months right I have told. Then coming to the injectable repeat the injection DMPA injection given every 3 months. So, it needs to be repeated. Lactational and Amenorrhea method that should be for 6 months and it should be exclusive breastfeeding day in and day out as per the demand of the baby. Pills in the form of combined oral contraceptive pills to be taken each day at the same time patch or ring kept in place and changed on time after

every 3 weeks.

Condoms and diaphragm these are barrier methods and should be used correctly every time during the sex. Fertility awareness method that means, that you know abstaining from sexual activity on the fertile days or during the fertile days using condoms these have very less efficacy and there is mostly contraceptive failure. Spermicides also will have less efficacy. So, that is regarding the contraceptive methods and mostly which is you know that should be you know taken the decision the type of contraception to be used should be the decision should be taken by the female, but you are there to guide her you are there to educate her regarding the advantage the disadvantage and what is best for her which is which contraception is having the more efficacy you know that is the work of the doctor or the guiding obstetrician. And she should always be motivated for birth spacing at least 2 years right 1 to 2 years because you know very frequent birth if occurs then there will be more chance of IUGR more chance of nutritional deficiency more chance of complications in the next pregnancy.

So, that is regarding the postpartum contraception ok. So, that is all regarding the postnatal care and your postpartum contraception. References has been taken from the D.C. Dutta book of obstetrics, the Williams book on obstetrics and your James book on high risk pregnancy. So, thank you all for hearing and keep reading and keep jotting down, we will meet in our next video. Thank you.