Clinical Education Initiative
Support@ceitraining.org

BEYOND THE PILL: ADOLESCENT & YOUNG ADULT CONTRACEPTION

Amy Realbuto, PNP, RN, CPNP-PC

01/25/2024

Beyond the Pill: Adolescent & Young Adult Contraception
[video transcript]

00:08
It's my pleasure to introduce my colleague Amy Realbuto. She is a nurse practitioner in the Division of Adolescent Medicine. She also serves as the outpatient clinic director and assistant professor of clinical nursing. Her specialty focuses on eating disorders gender, health and reproductive health in adolescents and young adults. Amy has also worked with children and teens in residential foster care and foster home homes. Her 17 years of experience has taught her the importance of reproductive health and autonomy in adolescents and young adults. So thank you again, Amy for joining us and I hand the mic virtually over to you.

00:47
Thank you so much, Dr. Bostick for that wonderful introduction. And as Dr. Bostick said, I am one of the nurse practitioners in the Division of Adolescent Medicine at Golisano Children's Hospital. And I am here to talk a little bit about

01:05
contraception in both adolescents and young adults, I'm hoping that I can build off of the knowledge that you already have. And maybe you're able to able to take home some information that will really help educate the patients that you take care of. So I have no disclosures. And running through the learning objectives for today, a big portion of what I'm going to be talking about is describing the different types of contraceptive options that are available to your patients, identifying what resources are available to guide patient selection for the various contraception options, and there's a lot of resources and guidelines out there. And third is summarizing elements of patient centered comprehensive contraception counseling. So I want to first start out by dispelling a lot of the myths that can create some barriers to patients maybe asking or pursuing contraception in just giving some information so that you can share with your patients. And the first and probably most common is that birth control will make me gain weight. And there is currently no link to hormonal birth control and weight gain. The only exception and I'll discuss this a little bit further is the Depo Provera shot. The second myth is that birth control will make me infertile. And this is not the case, although it does take time to return to previous fertility and different options that your patients might choose. The third is that I'm not sexually active. So I don't need birth control. We see many patients in our office who are talking to us about starting some sort of contraception simply for things like heavy menstrual bleeding or irregular periods, headaches, acne. So keeping in mind that we can use these options for lots of different things. The fourth is that I can't use an IUD because I've never had kids. And that may have been the thought years and years ago, but not having kids has no bearing on whether or not you can use an IUD. And there today there are newer and smaller IUDs as well for some of those patients who might be a little bit younger, who are a little bit nervous to have an IUD. And the fifth and final is that birth control will give me mood swings. And certainly there's can be some mood changes that often dissipate over time. But those huge mood swings really aren't proven in the use of contraception. So why talk about contraception, because it's very important for reproductive autonomy and our patients and they

have the right to make informed decisions about their reproductive health. And obviously, it's to help to help prevent unintended pregnancies. And a lot of feedback is that there's just so many to choose from, and that is, completely validate that but there are so many resources and evidence based guidelines available now to really help us as providers, in educating their patients. And it can be uncomfortable to talk about, especially in teens and young adults. And it really doesn't have to be the more informed you are an educated you are the more comfortable you will be with talking to your patients about this, building that rapport and having those conversations. Now the one thing that I want to highlight is that when you are talking to your patients, the contraceptive counseling really should be individualized. And not that you have to hit all of these checkmarks but really understanding why your patients are asking for contraception and what their what their goals are. I think that's really important to help guide them in one direction over the other. So obviously effectiveness is going to be really important of course having something that's almost 100% effective is going to be something that that many patients are going to want. But that doesn't necessarily mean that particular contraception will be right for that patient. hormones do patient want, do patients want hormones? Or are they looking for something that doesn't include hormones, menstrual cycle and bleeding? Do they want a menstrual cycle? Do they want to have any bleeding in the option that they choose? Certainly return to fertility, how quickly do they want to return to fertility and that that certainly is going to vary based on the options that you're looking at. And non contraceptive methods like we've already talked about, maybe they're not coming to, to avoid an unintended pregnancy, but they're really looking for contraceptive counseling around those non contraceptive benefits. Side effects, there are some patients that concern are concerned about side effects, certain side effects over others, and really understanding what that is for your patient. duration of use, how long are they looking to be on contraception, is it something that's pretty short lived, and if that's the case, maybe a longer acting reversible, contraception isn't necessarily the right choice. The need for privacy. So having you know, pillow packs laying around, may not provide a ton of privacy or having to go to the pharmacy every month or every few months to pick up your pill pack versus coming to the office and having a procedure done that will be good for duration of time. And obviously, that is also included in supplies as well. Normal bleeding pattern control over stopping the method. Certainly, when patients have control over things like pills or patch, it's going to be easier to stop versus having more of those longer acting reversible contraception ones. And then objects in body that certainly is a big thing that many of our teenagers and young adults will really talk about being fearful of. And so, you know, having that understanding of where that fear is coming from so that you can that you can educate your patient. So how do we do this sexual health is help. And we really need to be able to normalize that conversation. And I think a big piece is building a rapport with that adolescent or that young adult, because they're going to be more likely to really open up to you. And it still may take some time, I always say that when you're talking to teenagers, and sometimes young adults, sometimes your agenda is not their agenda. And it might take a little bit to get to a point where they feel comfortable opening up. And so in your visit, you know, they may give you the opportunity by asking the question or making a comment that will allow you to talk about their sexual health, which is great, it just gives that gateway to start the conversation. But sometimes it's not that easy. And you have to you as the provider need to bring up that conversation yourself. And really a good place to do this is when you're doing your heads assessment, you're part of your social history. And when you're going through each of these, and you get to sexual history, that is where you can ask some of these questions. And the beauty of that is that you can also include your gender identity screening in that in that space as well, if

you haven't already addressed it in so it's you know, as you're presenting the HUDs assessment to your patients, just explaining to them that these are questions about your social history, it helps me understand and get to know you a little bit more what your interests are, how home life is how education is and including that sexual history piece. And so the dialogue with your patients, this is where some providers may feel a little bit uncomfortable. And each of these are an example of how you can address it with your patient. The one thing that I want to highlight here is it's always important to ask your patient permission, is it okay for us to talk about this. It gives your patient a sense of autonomy, to be able to have a little bit of control in that situation and not feeling like they're in front of the firing squad being asked these questions because in all likelihood, they will they will probably back down and not be as honest or maybe not even answer the question. So giving them a little bit of autonomy around asking those questions is definitely really important. And so may I ask you a few questions about your sexual health and sexual practices? I understand that these questions are personal, but they're important for your overall health. And the other piece in the next two questions is that I think it's important to make clear to your patient that these are questions that you ask all of your patients you are not targeting that particular patient. And so they may feel a little bit more comfortable talking about this. And then the second piece is making sure that they're are aware that the questions that you are asking are to remain confidential unless they are putting themselves at risk. or somebody else. And so again, it just creates that safe space for that patient to be able to talk about their sexual health. And I think another important piece is that, you know, following up on, after asking those questions, asking the patient if they have any questions, or they have any concerns about their sexual and reproductive health, so those are just some ways to be able to start the conversation very generalized and asking that permission, and really being able to assure them that you can, you know, maintain their competence. Excuse me, their, the confidentiality.

10:37
So this is a really good resource. This is an updated version of previous iterations from the CDC, and it's much more inclusive, and it's a very useful tool to obtain a sexual health history. And so when you're looking at obtaining that you're trying to remember the five Ps. And so the first is going to be partner. So asking for lifetime sexual activity, how many partners have you had, and it's really important to confirm that sex assigned at birth. The second is going to be sexual practices, the body parts used with sex, how they meet their partner's sex and drug and alcohol use and transactional sex, how they answer some of these questions are going to guide you to STI counseling are going to guide you to maybe providing resources if there's concerns and how they're meeting their sexual partners. And so these are some specific questions that you can ask, attract protection from STI is the strategies and the frequency used? How often are they using condoms? Is it all the time is it sometimes is it never, and it gives you an opportunity to discuss PrEP in your patients that would be appropriate, and potential vaccines that they've already had, or that they are due for the future? It's important to ask about past history of STIs when that was if they received treatment, and if they've been if they've had STI testing since. And then the last is going to be pregnancy and tension. And I think we can assume that that all patients, both adolescents and young adults want to avoid pregnancy. And so it's really important to intentionally ask that question and see where your where your patient is at. And so this is a survey from the high school youth risk behavior survey from 2021. In this sort of this highlights patients that did not use birth control pills before less sexual intercourse with opposite sex partner. Now, this excludes any sort of emergency

contraception Plan B, or the morning after pill. But as you can see, it's a pretty high number, your blue is your total, the yellow is going to be female, and the red is going to be male. So this just really highlights that there is more of an opportunity for us to do education around, you know, counseling with contraception. This is also from the Youth Risk Behavior Survey from 2021. And some questions they asked patients who were in grades nine through 12, about sexual behavior. So the first is the percentage of students who had ever had sexual intercourse and so pretty close with male versus female 20% versus the 24%. The second is percentage of students who used a condom during last sexual intercourse among those students who were currently sexually active. And it's great to see that it's above half, but again, it is still gives us an opportunity for teaching around the importance of having protected sex. And then the last is the percentage of students who used a condom during the last six years sexual intercourse who did not identify as heterosexual and you see bisexual 40%, gay lesbian and bisexual 37% Other questioning 20%. And again, circling back to adolescent confidentiality and consent, so NYC l u.org. has some good resources for really approaching this with your patients. And when we're talking to patients about adolescent confidentiality in patients under the age of 18. I think it's really important to know that this is not about keeping secrets at all. It's really about respecting the privacy of your patient, allowing an inclusive, safe environment for this patient to really be able to discuss their sexual and reproductive health concerns. And so the minors have a right to consent for care for that, along with mental health concerns in drug and alcohol treatment. And as a 2018 Miners can now consent to HIV treatment and preventative services such as PrEP and PEP without appearance. or guardian. The one thing my approach oftentimes with patients is that if there is a guardian or a parent in their lives that they feel comfortable with and want to have a conversation together about this that is definitely encouraged because it is not again about keeping secrets, we have to remember that there are patients that just aren't in a space, either with their guardian in their home life, that is that is safe to be able to include their parents in this or their guardian, and those who are whoever that support person may look like in their life. And so although it is encouraged, it's sometimes not possible. And so you need to determine what is essential and negotiate what is optional. But this is another resource for you to use if you're if you're having any additional questions around this topic. This right here, some of you may be familiar with. And this is something that I use quite often. And this is the CDC MediCal eligibility criteria chart for contraceptive use, they really like it. And this is just a snapshot of one of the pages. But this is where you're going to go if you're looking to prescribe contraception to a patient of yours. And you're a little concerned based on a particular medical comorbidity that they may have. And this really sort of breaks it down into condition sub condition, and then each of the options that are available. And I'll discuss it a little bit more in depth as to what these colors are representing. And so as we look at this, like I said, there's the condition and the sub condition across the top, and then it also includes the different forms of contraception. So the first is going to be your copper containing IUD. The second is going to be your label Leivo nor gestural releasing IUD. The third is going to be your implant, which is your next splint on the fourth is going to be your depo provera shot, the fifth is going to be your progesterone only pill. And then the last column is going to be your combined hormonal contraceptives. So it's easy to sort of read to kind of go down and read over to see what's going to be appropriate for your patient. And now, taking a look at the colors to help you decide which is going to be the safest for your patient will be the next important step. And so numbers one, two and four are pretty self explanatory in that the darker green is going to be no restriction for use of that particular contraceptive method. Two is going to be that lighter green is going to be advantages of using the method generally

outweigh the theoretical or proven risks. And then four is absolutely not unacceptable health risk if the contraceptive method is used by the women with women with that condition, where it gets a little bit trickier is that number three, that pink line where it's theoretical, are proven risks of the method usually outweigh the advantages. And it's not usually recommended unless more appropriate methods are not available or acceptable. So you know, really having the understanding, is there another option for your patient? Or is this all we have? And what are the risks of moving forward with this particular option. And the beauty is that this also comes in an app that you can download on your phone, I use this often if I'm not in a space where I have access to a computer, I'm able to bring that up. And we're able to you're able to look as far as condition, you know, specific method, contraceptive option that that patient might be considering, and trying to figure out what the risks are with moving forward with that. So it definitely can come in come in handy. Now this next chart is something that we have posted in our exam rooms in our clinic because it we really like to highlight the importance of just the different options of contraception and how well each of them work. And so when we're doing teaching in the exam room, we're able to have that visual and point out and have the patient understand a little bit more of the effectiveness of each of these methods. And so the top, your top row is going to be your five stars. They work great, right it's going to be your long acting reversible contraception, which includes the implant, IUD, hormonal IUD copper IUD, sterilization, of course is going to be a little bit different, that's going to be a forever option. But each of these are going to they're hassle free. They work really well and your chance of getting pregnant is less than one in 100.

19:43
That next green line down is going to be more of your Forestar they work they work pretty well. And but a lot of these options are really going to the ownership is going to be on the patient to take the pill every day to place the patch every week to place the ring every month to go every three months to You know, get their depo provera shot from their provider. And the chance of getting pregnant in this row is six to nine in 100. And depending on the method, and then the last row is going to be your not really well, that's your three star. And that's going to include pulling out and the fertility awareness, which there are many different apps that help track your fertility awareness. And for each of these methods, it's really it's going to rely on the patient or their partner to use them every single time they are sexually active. And in that it sort of doubles your chance of getting pregnant from 12 to 24, and 100, depending on the method. Now, without using anything, birth control, without using any birth control over 90 and 100 young people get pregnant in a year. So something is better than nothing, we have to remember that we have to understand that is our patient's choice to be able to move forward. And with one particular option over the other. And again, their agenda might be different than our agenda in there, their choices may be different, what we think is best for them, it's just our job to educate them. So what do teens choose, this is from the contracept, the contraceptive choice project, and this is age ranging from 14 to 20. And as you can see, the longer acting reversible contraception is chosen more often than the shorter acting methods. And it's pretty comparable across the age span. And so now I want to really take a deeper dive into each of the contraceptive options that you will be able to offer your patient depending on what they're looking for. And how I'm going to present them to you today is really mirrors how I how I present to patients in the exam room and it starting out with, you know, the most effective method and sort of working our way down and, and really understanding the patient understand the gist in educating them around the risks benefits of each of these options. And so the long acting reversible

contraception and the larks are going to be your IUDs and implants, they really are the most effective in greater than 99% effectiveness, they are the safest because they do not contain estrogen. And really the contrary indications are very rare. They tend to have the highest patient satisfaction, so 80% of Lark versus 50% of that shorter acting. And because of that, you're going to see the highest continuation rates with the works. So 86% Compared to 55%, of short acting, and it provides long term protection depending on what you are what method you're choosing, and can last anywhere from three to 12 years. And with each of these methods, there's a rapid return to fertility. So again, addressing with your patient, how important that is for them, and this would be a good method to choose. They are the most cost effective, although a little bit more expensive upfront, certainly over time with how long that they are effective, it is the most cost effective. And although it did show you that graph that larks are oftentimes picked over short acting with teens, sometimes it can be their least likely to be used by teens in general, just because it involves a procedure. And so as we know, any type of procedures and some of our teenagers can be very anxiety provoking and so we're going to talk a little bit about how it's important in your role to be able to even if you're not doing the procedure in your office, just setting them up for success and in having some teaching points around the procedure itself. So I first want to start out with the Merino, excuse me there were Murena the lethal nerve gestural IUD, and so this became available in the United States in 2001. It's a long acting progestin only IUD method, and it is highly effective. There's FDA approval for use up to eight years. It has sort of a T shaped reservoir. Sometimes I describe it as like a little fish bone that's placed within the uterine cavity. And in those first five years, it does release 20 micrograms, I believe of your gestural and then after the five years, that rate decreases a little bit to 10 micrograms, but still very effective. And there's many studies to prove that. Obviously, the one piece of education you want to give your patients is that it will require an office visit whether it's in your own office or if you have to refer your patient to somewhere else. It is really good for patients of all reproductive age who are really seeking more of like a long term highly effective contraceptive option. and convenient as well. As far as the bleeding pattern is concerned with the with the IUD is in the during the first three to six months, women may experience an increase in the number of bleeding and spotting days irregular bleeding patterns. But after that the number of bleeding and spotting days usually decreases. But bleeding may remain irregular, and amen Korea develops in approximately half of these patients by that first year. And so, you know, I think that's very important for patients to know and understand because as you'll see, with a lot of these options, that sort of unpredictable nuisance bleeding can sometimes be the reason for early disk or early discontinuation of these methods of contraception. As far as the IUD is concerned, it really helps menstrual symptoms and women who have uterine fibroids and can be used safely in women who are lactating and contraindications for a Murena would be unexplained vaginal bleeding, so really needing to evaluate that a little bit more before initiating the IUD current breast cancer, endometrial cancer, uterine fibroids with distortion of the uterine cavity that's going to be a contraindication current pelvic inflammatory disease and current predicament service itis or chlamydia or gonorrhea infection as well. So keeping that in mind as you're doing the education around the IUD. There are other options as well. The Bilotta is going to be equivalent to the Moreno it's a little less expensive and it doesn't have it does have a different inserter. The Kaleena in the Skyla are going to have less micrograms per day. And the duration is going to be a little bit different compared to the marina and with a Skyla there is going to be some are breakthrough bleeding that is experienced. So how do hormonal IUDs work and so the mechanism of action of the IUD is similar to that the implant or the progestin only mini pill, so it's really thickening of

that cervical mucus and inhibition of sperm motility and function is really the primary mechanism of action. And then in addition to that, there's this endometrial atrophy that is a consequence of those high endometrial levels of the level no just drawl that leads to that substantial decrease in the menstrual flow and absence of bleeding in some patients who use this IUD. And the other teaching point with this particular method is that it is really good for patients with those painful crampy periods because that IUD really works as a smooth muscle relax and on that uterine wall to help interrupt some of those symptoms. And it's really important sometimes to have a patient understand that it prevents fertilization rather than disrupts implantation.

28:25
So the next IUD is going to be your copper IUD also known as Paragard. Now this is your non hormonal option. It is it uses copper ions, and it is good for 10 to 12 years of use. The cost for this is around 150 to $475. And one thing to keep in mind and we'll talk a little bit about this at the end is that it can also be used and highly effective in emergency contraception as well. The difference with this is that the bleeding pattern is going to be very different compared to the IND Mirena IUD. Many times patients are choosing the copper IUD because progestin and estrogen is contra indicated or there's just a preference of not using something that contains hormones, but really have in helping them understand that if they're looking to achieve a meta Ria, that will not happen with a copper IUD. And in fact, those that cycle could become heavier, longer and crampy especially in those first few months being on the copper IUD. And the mechanism of action is going to be that it's a spermicidal. So which IUD is the best choice and that's, again, really up to your patient but with the copper IUD this these are for patients who want those regular periods and who will either our country indicated or just are not interested in in in taking any sort of hormones to prevent an unintended pregnancy, but it's not going to be good For a patient who has a history of dysmenorrhea or metta Raja, on the flip side of that the Mirena IUD this is this is for patients who are okay with some irregular bleeding patterns, at least initially, and are okay with achieving the Amen rehab and again, are good for those patients who have those heavy, crappy long periods. So again, like I said before, even if you're not doing these procedures in your office, I think it's really important to highlight what to expect when a patient does come in for an IUD insertion. And really, overall, most patients do really well with the placement, especially if they've had all of this counseling, and all of their questions have been answered, It really sets them up for success. The one, the one thing that we really encourage our patients to do is to take 600 800 milligrams of ibuprofen about 30 minutes to an hour before the procedure that's going to help with some of the post procedural cramping that they may experience. The other, the other thing that we really want to highlight is no unprotected sex seven days prior to having the IUD inserted. So that's going to be really important as well. And another teaching point is that when a patient is having an IUD insertion, there's going to be some cramping, three, three cramps to be specific. And so there will be a speculum exam so that the provider can visualize the cervix, the first crimp is going to be when that tenakee alum stabilizes the cervix, the second is going to be when the introducer is inserted to measure the depth of that uterine cavity. And then that third cramp is going to be when the IUD is actually inserted. And so we encourage for these patients, anything that is going to help get them through their procedure, whether it be a support person listening to music, hot packs after the IUD is placed, or while the procedure is going on. Anything that they that they feel is going to really be comforting to them. And if you're educating them, that is something that you could also, you know, encourage them to think about before the procedure is

done. And so looking at intrauterine devices, complications are rare. And so as far as rates of expulsion, they range anywhere from two to 10%, which have been reported and most expulsions are going to occur really within the first few months following insertion and really decreases in frequency after that. As far as uterine perforation, yes, it is possible one per 1000 insertions or fewer. And if it's going to happen, it's oftentimes going to happen at the time of insertion. So keeping that in mind if a patient is you know, is worried about that and asking you those questions. Some counseling points additional counseling points is that this patient may have some progestin related side effects such as mood changes, acne, headache, breast tenderness, and sometimes some follicular ovarian cysts. But all of these really decrease over time. So encouraging them to, you know, sort of hang in there, they're able to certainly if they're, they're done, they're done. But if they can hang in there, many times they will see some of these symptoms subside. Okay, the next, the next contraceptive option I want to talk about is the next one on. And this, again, is a progesterone only method. And it is effective per FDA for three years. But we have lots of studies that show effectiveness to the five year mark. So when we are doing counseling in our office, that is what we tell our patients that it is good for five years, the cost is around 300 to $600. And the mechanism of action is that it inhibits ovulation. The one thing that I really focus on when I'm doing education around next one on is this third, a third, a third a third, because I will say that a lot of discontinuation with the next one on is because of this persistent nuisance bleeding. So I would like to be very upfront as I'm doing the education. So a third of patients will go on to have no period, a third will have monthly later periods. And a third will have this unpredictable breakthrough bleeding. And it's easier when you know it's coming. But when it's so unpredictable, it definitely can be a little bit of a challenge and can impact quality of life and we just want to be very upfront that this could potentially be an option. I can't look at you and know for certain that you're going to be that third that's going to experience that but really having them understand that that could potentially be an option if they're looking for full a metal Rio. And again, if you're if a pickup patient of yours is really considering this and you're referring them out, sort of reviewing what the process might look like up in that right hand corner is going to be the device that is used to insert the implant. And really the longest part of this whole procedure is waiting for the Lidocaine and epinephrine to set in. That is really all that patient will feel is that little beasting of the needle, and a little bit of stinging and burning when the Lidocaine and the epinephrine are going in. I like to wait a good 10 minutes before I even consider trying to put the implant in just to make sure that they're super numb and they feel nothing. If you're able to get the inserter in fairly quickly, it takes probably about five to 10 seconds to get everything done once the patient is numb. And most patients will say I can't believe how quick that was. So really, it's just the waiting around for that area to be now which is which is takes the longest to be honest with you. And so once it's in and you pull back on that retractor, your implant is in place, and we cover that needle site with some butterfly. And we will wrap it up. And we typically say no showering, keep it wrapped for 24 hours and just let those butterflies just fly right off. In in that those should fall off within a few days. And they may feel a little bit sore for the first one to two days, they can use some ibuprofen as needed some hot packs, and we obviously counsel them on looking for any signs and symptoms of infection. Moving on to next option is the Depo Provera shot. And this is a three month injectable that is typically intramuscular that can go with they're typically into the deltoid, sometimes into the gluteus as well that is indicated every 12 ish weeks, I twist a 12 ish just because there are some patients who will require having a depo a little bit earlier, especially if they're having a lot of just nuisance breakthrough bleeding that is really problem some for them. And 14 After 14 weeks is when it obviously is begin to become a

little bit of concern and a patient is going to need to use a backup method. So when a patient comes in, I really like to time it around the 1112 week mark so that if they miss their appointment, we have a little bit of wiggle room to get them back in before that 14 weeks is up. And so the mechanism of action of action is as with other progestins, it not only prevents ovulation, it can also reduce the ovarian production of estradiol. This is a really good choice for patients who want to reversible non daily contraception. But if a patient is really looking for a quick turnaround, when returned to fertility, it's going to be a little bit more difficult with a depo just because it takes about 10 months after the last shot is given on average for that to return.

38:15
And so side effects, menstrual irregularities, just like with the next one on can certainly happen. And in the first several months of being on the Depo Some patients will experience sort of the unpredictable and prolonged spotting. But usually after about a year about 40 to 50% of patients experience a minor Ria. And after five years that goes up to 80% that no longer men straight. So just you know, keeping that in mind that if they can sort of wait that out, and they're okay with some of that and consistent leading that eventually, that should subside. But 20 to 25% of patients continue discontinue the use because again of those menstrual issues. So I want to talk a little bit about depo and bone health. Obviously, things have changed as it relates to this many years ago, it was a very big fear. I know that in my patients, I was prescribing, you know, additional calcium supplementation, you know, limiting them to only three months on depo because there was just so much concern around this. But the new data has shown that the use of depo is associated with a slight decrease in an EMD. But it is reversible. And there should be no limit to the length of use of time. No limit to the length of time that depo is to be used regardless of the women's age. So keeping that in mind if they want to continue it and they're happy with it, we should be able to support that and measuring the BMD on DEXA is not recommended. And what they have found is that bone loss associate associated with depo has ever been shown to increase the risk of fracture or any other clinical outcome. And so a lot more about As data to kind of support this, which is definitely reassuring. And as we talked about before, certainly there's a lot of concern around weight gain, the Depo, being very clear that not all depo users gain weight 25% of users gain excessively and other users will gain minimal weight if they're going to at all. An early weight gain at six months predicts excessive weight gain. So average of 15 pounds more over three years. And there really is no clear association between caloric intake and weight gain as well. The one thing to keep in mind is that this patient will be coming in to see a provider whether it's you or someone else every three months to have that injection. And so at that time, if it's something that asking the permission of the patient, if it's something they're worried about, can we discuss this? Is it something that you feel comfortable discussing, those would be the times where you could check in with your patients to see if it's something that's very distressing, and distressing enough that they don't want to continue the Depo. Or if it's something that they can, you can continue to check in with them about. And moving on to the vaginal ring, this is going to be the first option that contains both estrogen and progestin. So the other name for this is noubar ring, and it was approved by the FDA back in 2001. And this ring is a very flexible, transparent, typically colorless, and it almost looks like a hair tie. Sometimes what I will describe to patients and it comes in one size fits most patients, there's no fitting that's required. And how it's typically prescribed is the ring isn't for three weeks out for one week. The beauty is that there's actually four weeks of medication in each ring. So you can use it off label as continuous use in your patients who

really are interested in the ring, but don't want to have that that leading pattern happen once a month. And so that's something that you can talk to your patient about. So as far as initiation of the ring, so when patients that are previously not using any sort of hormonal contraception should insert the ring on or before day five of their cycle, counting that first day of bleeding as day one. Backup concert contraception is recommended for the first day of review. So if these are for patients who've been on nothing previously and are starting fresh with the ring, now women's switching in patients switching from a combination oral contraceptive, they may insert the ring anytime within the seven days after they've taken their last pill. But no later than the day that a new cycle of pills would have been started. So they have those seven days to be able to insert that ring. If that happens, no backup method is needed. The mechanism of abstraction is going to be very similar to combined oral contraceptive and inhibits ovulation and sperm motility. It can be very convenient, you know, patients put it in for three weeks or four weeks if they prefer the continuous Youth use in there then they're able to take it out and replace it with the new one. The insertion piece is you know fairly self explanatory and easy but we you know have to be sensitive to patients who want to try it but are a little squeamish on you know, the insertion process. It really can be placed anywhere in the vagina but the deeper it's placed, the less of the patient will feel the ring and is far another counseling piece for your patients is there is a possibility that the ring can be expelled either when a patient takes their tampon out or you know, they're straining during toileting and that sort of thing. So being able to, you know, finding that rinsing it off and in replacing it immediately will be will be really important. And so again, sort of breaking down insertion reassertion and if the ring falls out insertion, you can you know, if your patient feels comfortable with you, and you want to help them that's great, kind of practicing the insertion and the RE insertion, advising patients to reinsert the ring on the same day every month to increase that compliance. And certainly if they're using the continuous method, replacing it on the first of the month to promote that confiance as well. So if the ring follows out during week one and two, rinsing it off with warm water and reinserting that ring. During the third week though the recommendation is to insert a new ring or wait for withdrawal bleed and insert a new ring after seven days. And in all cases using backup method for seven days and the ring can be easily removed for up to three hours a day. I don't often encourage this because patients then maybe forget to put it back in but It is safe to keep out for three hours a day. The next on our list is going to be the transdermal patch. And again, this was first available in the United States back into those into the other name for it is ortho ROM. And this is going to be a beige colored patch which is applied once a week either to the abdomen, the buttocks, the upper outer arm or the upper torso. It needs to be in in a clean, dry area wherever the patient is going to be placing it. Once that patch is removed, folding it over with the hormone beside in and then disposing it in the trash. The one thing that I will sort of encourage patients when they're using this to avoid areas on the body that may have you know some areas of friction, whether it might be the waist of pants or a bra strap, because that could certainly you know irritated enough where it may peel off it's very sticky and if placed appropriately, will last for that for that week. And as far as initiating the patch, it should be initiated within the first 24 hours of the menstruation and know if that happens, there's no backup that is recommended. However, if it's after this, this 24 hours, then a non hormonal backup method is recommended. As far as the concerns that some patients will report is irritation on their skin, especially if they have really sensitive skin, I always encouraged them to rotate spots give that area of their body a little bit of a break, they can if it's really itchy, they can use an over the counter hydrocortisone cream. Sometimes that can be helpful, but making sure that that area is dry and clean and will really help with

that avoiding that moisture underneath. Another big complaint sometimes is breast tenderness. And oftentimes this can happen in the beginning. But we'll certainly dissipate as time goes on. The typical prescribing for the patch is three weeks on one week off. But the you can use it off label for continuous use as well. And keeping in mind that each patch is nine days of medication. So if your patient calls freaking out because they forgot to change their patch. That's okay, as long as they're within that that 48 hours after the patch was due to change, you should be good to go just to go move forward and placing a new patch. And the mechanism is that inhibits ovulation.

47:39
And so, application we have talked about that talked about the different areas not on the breast must stick directly to skin reapplication. Obviously, in patients who want that withdrawal bleed no patch during that fourth week, and applying a new patch after day seven, even if the bleeding is still occurring. So really encouraging that so they're not waiting for that bleeding to stop and then adding the patch. In then as far as the continuous use, you're just doing patch after patch after patch back to back. Now a missed or late patch. Again, if it's on for greater than nine days, if it's offered greater than seven days, or if it falls off for greater than 24 hours, you're going to want to make sure that your patient knows to use that backup method. In incorporating combined hormonal contraception, CoCs are really effective because they prevent pregnancy through you know, three different means. And primarily, they are preventing pregnancy by suppressing ovulation and how they do this is by inhibiting the production of both FSH and LH and the progestins. And the CoCs provide secondary mechanism that includes altering the cervical mucus to prevent that sperm penetration. And so they can be highly effective if used appropriately. And then we're looking at ch C's Those include oral contraceptive pills, contraceptive patch and the ring. We've already talked about the patch and the ring. And so now I want to touch on the oral contraceptive pills containing both estrogen and progestin. Okay, what's great about the new pills is that there's newer formulations that have a lower concentration of estradiol, which really helps a provider to see what their patients are most worried about with side effects if it's the nausea, or if it's the bloating, starting on that lower end of the 20 micrograms might be helpful. But also realizing that as you're doing this education with your patients, there's a good chance that some breakthrough bleeding and menstrual irregularities may occur. If that is the case, if they were using that lower end but you have a little bit more wiggle room and with these Over concentrations of the extra dial, it certainly is overall decreasing the health risks that that are associated with CoCs. And it's one of eight available progestins. And the mechanism of action is going to be that it inhibits ovulation. So, when used correctly and consistently, the failure rate for combined oral contraceptive pills is less than 1%. But of course, it requires daily maintenance. So this is not something that your patient really is able to do and many patients will tell you, efficacy rates are for typical adult use is around 8%. And then typical adolescent use is about five to 25%. And that's again, mainly due to poor compliance and adherence. And then we touched a bit on non contraceptive health benefits. So combined oral contraceptive pills have many non contraceptive benefits. And many patients will come to us because they just they just need some relief with their menstrual disturbances, they have heavy crappy periods. They maybe have anemia as a result of that. It helps improve acne and hirsutism. It can reduce menstrual related PMS symptoms, and it's it also, there's some evidence to show that it can reduce endometrial, ovarian cancer risk and benign breast conditions as well. So lots of different non contraceptive benefits. And the beauty of oral contraceptives is that you can do extended cycling with this method as well. And it can certainly

decrease those hormonal shifts and number of menses. It's definitely about you know, convenience, treating dysmenorrhea and other cyclic symptoms. And please keep in mind, it does not need to be that brand specific extended cycling product like seasonal or seasonique. You can use any monophasic pill, and you can take active pills until breakthrough bleeding occurs and then stop those pills for five days and then restart the continuous use. You can extend duration of active pills from six weeks up to 12 weeks and beyond. It's really up to your patients and patients every few months like to take a break and allow for some of that, you know that breakthrough bleeding and then restart again. So really it's up to your patient and be specific with your prescribing because insurance will push back if you're not writing for continuous use and skipping those inactive pills because they will run out before their due. Advantages as for combined oral contraceptives are affected their say safe, again, quick return to fertility, if that's something your patient is interested in certainly some health benefits. Disadvantages requires that daily adherence can certainly be semi private patients going to have to pick up their specialty patients under the age of 18. Having go to the pharmacy and pick up their pillpack either every month every three months. And certainly the estrogen related risks and side effects. I'm just going to quickly go through progesterone only contraceptives and these can be used in patients who prefer a daily oral contraceptive pill. But maybe estrogen is contra indicated. The mechanism of action is that it thickens cervical mucus, there is no placebo week with these particular pills. Timing can be you know, very crucial. And it is one huge teaching point that we give to our patients who are being prescribed a progestin only oral contraceptive is that if they're later than three hours late a backup, contraception is needed for 48 hours. They're very sensitive, much more sensitive than the combined oral contraceptive. They can also experience breakthrough bleeding if they're late if they're just using it for menstrual suppression. And so it's a big teaching point that patients are really that they're aware of the importance of timing I usually say I don't care when you take it morning noon or night just figure out a time of day that works for you that you can be the most consistent and quickly talking about emergency contraception which is really important if you have a patient who you've gone through all the contraceptive options and they're like I'm just not really interested at this point but they are sexually active you are worried about them. Certainly considering emergency contraception, excepted substance use me that they can have as backup. The most effective is the Paragard IUD Of course you can't prescribe that to them so that they can pick that up at a pharmacy but certainly it is something that if they call your office and really worried about you know having unprotected sex as long as it's within five days it is almost 100% effective. The second is going to be your Ella it's less effective if over at the patient is over 195 pounds. That works better there sooner you take it up to five days and then taking the pill as soon as you get it remember to have it do you use it every time that the your patients use it every time they have unprotected sex, and this? Where can you get that from a doctor, nurse or clinic and then plan B one step, it's going to be a little less effective if over 165 pounds works better, the sooner you take in up to three days. And you know getting it's at a pharmacy and no prescription is needed. And then just the last piece that I want to talk about how to reasonably be certain that your patient is not pregnant. So if they have no symptoms or signs of pregnancy in any one of the following criteria, I think this is really important and sometimes can be a little anxiety provoking for a provider is less than seven days after the start of their normal menses has not had sexual intercourse since the start of their last normal menses has been correctly and consistently using a reliable method of contraception is less than seven days after spontaneous or induced abortion is within four weeks postpartum, or is fully or nearly fully breastfeeding, amen, or react in less than six months postpartum. And I am going to

stop there, because I know that we are at the one o'clock mark. And I am happy to answer any questions.

56:23
Thank you so much. That was that was really terrific. And so comprehensive. There are no pump, no questions in the chat. But um, I had a question, actually, when you addressed the sort of the longer acting contraceptive methods of several years and urine and adolescent practice. So I imagine Often the patient transitions out of your adolescent practice, sort of, in the middle of that timeframe, how do you advise patients to you know, say they're they have an IUD at five years, and you expect it to last eight years? What's your sort of counseling as they exit your practice?

57:03
Right? That's a really good question. Of course, they all come with the little cards, but what are the chances that these patients are going to have their cards 5678 years later, right. And so, you know, it's sometimes if you know, they are able to put it in their calendar right on their phone, because these patients are always going to have a phone, certainly phones kind of change in and out, but oftentimes, when they get a new phone, they're able to transfer all of their stuff over to their new phone. So then it's able to sort of trigger them to know when they're due or when they actually had it placed so they can look back, if there's ever any question around that.

57:40
And also just add that, at least in our adolescent medicine practice, we tend to like hold on to people. And so oftentimes, if we place it, we will, I mean, unless they're like, 50. Okay, you know, we will, we will honor the removal, if they prefer otherwise, we can do a warm handoff, or something like that, to really remind folks, we don't have a tracking system. I don't know if anyone who does. That might be concerning, in some ways, as well. But certainly, we will try to like close the loop, if you will, depending on age. I just wanted to say and sort of emphasize what Amy said that I know sometimes there's Miss conceptions about like certain pills or methods actually promoting abortion. And really, aside from emergency contraception, specifically the Ella brand or the crystal ball, none of these methods short of the IUD, which sort of mechanically can disrupt the endometrium would in effect in any way, implantation as part of sort of the overall early pregnancy things. And the last thing is just to counsel also on sort of the biggest fear factor and risk factor with estrogen containing methods are blood clots. And so and we're out of time, but always being sure that we counsel folks on those signs and symptoms as well. But thank you also, Amy, I want to reiterate what Dr. Urban said this was really helpful and comprehensive and we so appreciate your time.

59:14
Thank you for attending, and thank you to our speaker for a really terrific,

59:20
organized, you know, really clear presentation. Thank you so much.

[End Transcript]