



This module is designed to help family planning staff follow the *Providing Quality Family Planning Services: Recommendations of CDC and the U.S. Office of Population Affairs* to support clients in achieving a healthy pregnancy. This module outlines guidance for providing basic infertility services, preconception counseling, and other services to clients who wish to become pregnant.

WELCOME					
	Navigation tutorial				
	Disclosures				
	Welcome				
SECTIO	ON 1: SUPPORT FOR ACHIEVING PREGNANCY				
-	Discussing reproductive goals				
	Support for achieving pregnancy				
	Infertility				

- Counseling for achieving pregnancy
- Activity: Statement matching

SECTION 2: BASIC INFERTILITY SERVICES

Basic infertility services

Referrals for infertility services

SECTION 3: PRECONCEPTION HEALTH SERVICES

	B
	Preconception health
_	reconception nearth

- Preconception counseling
- Activity: Preconception health

Scenario: Tamara

- ? Quiz
- Conclusion
- References

Navigation tutorial

For the best experience, use Firefox or Chrome to view this course.

(i) You can leave and come back to this eLearning module at any time. If you exit the module and return to it later, select the lesson where you left off from the menu of lessons on the left. This will bring you back to your place in the course.

To learn how to navigate the module, click the play button below.



Disclosures

This nursing continuing professional development activity has been approved for a maximum of 0.5 contact hour by JSI Research & Training Institute, Inc. Activity # FPNTC20.

JSI Research & Training Institute, Inc. is an approved provider with distinction of nursing continuing professional development by the Northeast Multistate Division, an accredited approver of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

In order to receive contact hours for this session, participants must attend the session in its entirety and submit an evaluation.

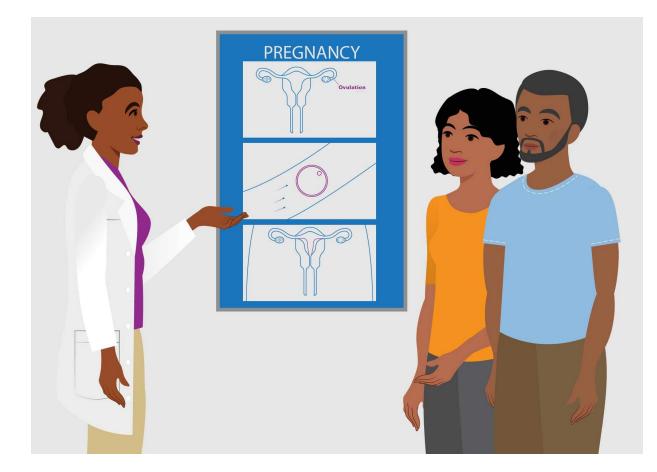
No individuals in a position to control content for this activity has any relevant financial relationships to declare.

There is no commercial support being received for this event.

Origination Date: 08/12/2020

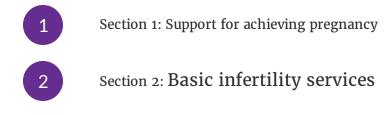
Expiration Date: 08/11/2022

Welcome



Welcome to the Support for Achieving a Healthy Pregnancy eLearning module.

This module includes:





Throughout the module, you will be asked to read new information and conduct interactive activities.

By the end of this module, participants will be able to:

Identify the scope of services related to achieving pregnancy, addressing basic infertility, and optimizing preconception health defined by *Providing Quality Family Planning Services: Recommendations of CDC and the U.S. Office of PopulationL Affairs* (QFP)

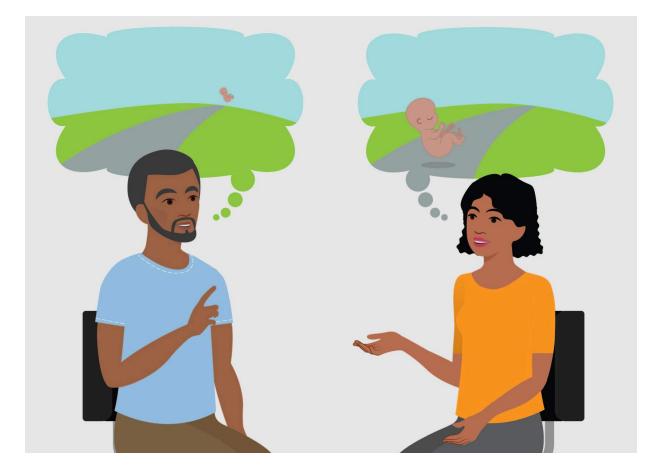
Assess a client's need for services related to achieving pregnancy and addressing basic infertility

Discuss with clients how they can maximize their fertility in order to achieve pregnancy

Provide recommendations for how clients can optimize their preconception health

Lesson 4 of 17

Discussing reproductive goals



To identify clients who may wish to become pregnant, providers can use the same PATH questions about reproductive goals introduced in the Determining the Client's Need for Services and Discussing Reproductive Goals eLearning module.

PATH is one client-centered approach to assess Parenthood/Pregnancy Attitudes, Timing of desired pregnancy, and How important is pregnancy prevention.

The **PATH** questions are:

- Do you think you might like to have (more) children at some point?
- When do you think that might be?
- How important is it to you to prevent pregnancy (until then)?

Clients who would like to have children sometime soon may benefit from support to achieve a healthy pregnancy. Some clients may not be ready to discuss becoming pregnant, while others may have many questions. You can let the client know that you are available to answer any questions they have about getting pregnant.

Determining the Client's Need for Services and Discussing Reproductive Goals eLearning



Client-Centered Reproductive Goals and Counseling Flow Chart



Lesson 5 of 17

Support for achieving pregnancy

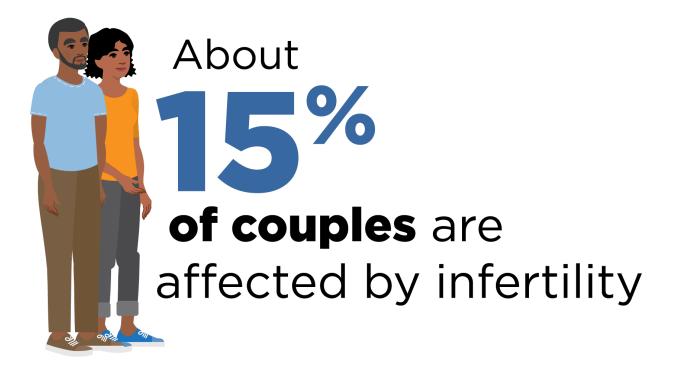


The QFP recommends that providers offer services that support achieving pregnancy to clients who say they would like to become pregnant sometime soon.¹

Ask the client (or couple) when they hope to become pregnant. If they have been trying to get pregnant for some time already, ask for how long they have been trying to get pregnant.

Lesson 6 of 17

Infertility

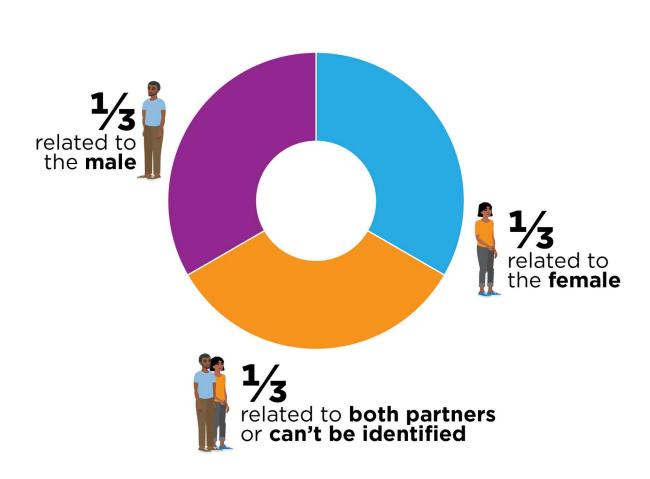


Infertility is commonly defined as the failure to achieve pregnancy after 12 months or longer of regular, unprotected vaginal sex.^{2,3}

Providers may assess infertility earlier than 12 months—such as after six months—for clients who:

- Are >35 years of age
- Have a history of infrequent menstruation
- Have a known or suspected uterine or tubal abnormality

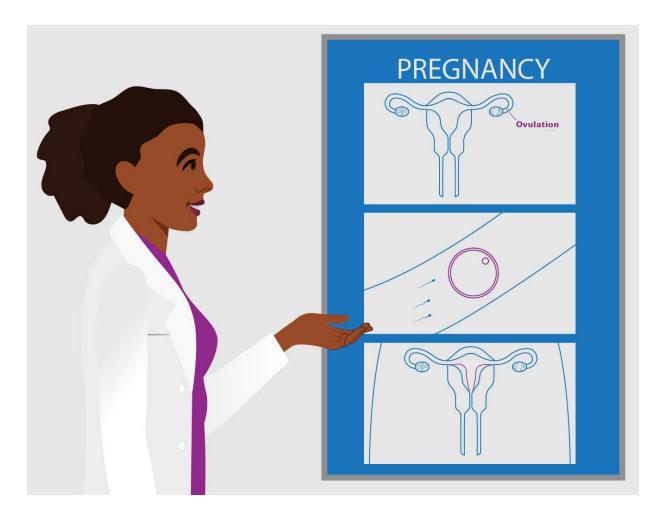
• Have a partner who is known or suspected to be subfertile or who has risk factors of infertility



Infertility can be caused by many factors.

Causes of infertility include abnormalities related to hormones, reproductive tract anatomy, eggs and ovulation, and sperm count, function, and delivery. These abnormalities can prevent conception or the ability to carry a pregnancy to term. Lesson 7 of 17

Counseling for achieving pregnancy



For clients who do not meet the definition of infertility, offer counseling about how to maximize their chances of becoming pregnant.

Remind clients about how pregnancy occurs, which is discussed in detail in the *Introduction to Reproductive Anatomy and Physiology* eLearning module. Ovulation occurs when the ovary

releases an egg into the fallopian tube, about midway through each menstrual cycle. The egg can then live and be fertilized for about 24 hours after ovulation. After being ejaculated during sex, sperm can survive in the female reproductive tract for about five days. This means that clients have the best chance of getting pregnant if they have sex during a six-day window— the day of ovulation and the five days beforehand.

To increase the chances of fertilization, share the following facts and strategies with clients.

Likelihood of pregnancy

Explain that clients in their 20s and early 30s who have regular, unprotected vaginal sex have about a 1 in 4 chance of becoming pregnant each menstrual cycle.

The likelihood of pregnancy declines with age, starting when a woman is in her early 30s. By age 40, a woman has a less than one in 10 chance of getting pregnant each menstrual cycle. A man's fertility also declines with age, though not as predictably. Within six months of having regular, unprotected sex, about 80 out of 100 couples conceive. About 85 out of 100 couples conceive after a year of regular, unprotected sex.

Peak days of fertility

Educate clients about peak days of fertility. Remind clients that day 1 of the cycle occurs with the onset of menstruation and that ovulation occurs midway through the cycle. For women who have menstrual cycles that are 26–32 days long, days 8–19 are considered fertile.

Physical signs of fertility

Educate clients about physical signs of fertility: increased vaginal secretions and basal body temperature. In the six days leading up to ovulation, vaginal secretions become wet, slippery,

stretchy, and clear. By observing their vaginal secretions, clients can reliably predict ovulation and when they are fertile.

The TwoDay Method uses observation of these "fertile secretions" to indicate fertility. To use this method, the woman asks herself each day, "Did I have fertile secretions today?" and "Did I have fertile secretions yesterday?" If she answers yes to either question, she can consider herself fertile today. A rise in basal body temperature—the temperature of the body at rest, taken upon waking and before getting out of bed in the morning—is also a sign of fertility. Body temperature rises 0.5–1°F with ovulation and stays elevated until menstruation. By tracking basal body temperature daily, clients can predict ovulation and fertility.

Frequency of sex

Advise clients with regular menstrual cycles that sex every one to two days beginning soon after the menstrual period ends increases the likelihood of becoming pregnant. Timing sex to occur around ovulation greatly increases the chance of conception. Couples can maximize their likelihood of achieving pregnancy by having unprotected sex in the six days leading up to ovulation.

Tools to predict ovulation

Clients may consider using a tool that helps predict ovulation.

- CycleBeads[®] is a visual tool that helps clients track their menstrual cycle to predict the timing of ovulation and fertility.
- Over-the-counter ovulation kits detect a surge in luteinizing hormone, the hormone that causes the ovary to release an egg, which indicates ovulation.
- Mobile applications—such as the FDA-approved Natural Cycles[®] app—can be used to track days of the menstrual cycle or predict ovulation based on temperature readings.

Advise clients that fertility rates are lower among women who have a body mass index (BMI) outside the normal range (i.e., women who are very thin or obese) and those who consume high levels of caffeine (more than five cups per day). Discourage smoking, consuming alcohol, using recreational drugs, and using most commercially available vaginal lubricants because these might reduce fertility.

Introduction to Reproductive Anatomy and Physiology eLearning

CLICK HERE



STATEMENT MATCHING

Match the statements to create key messages about how clients can maximize natural fertility.

CYCLEBEADS AND SOME MOBILE APPLICATIONS	 a) rises 0.5-1 F with ovulation.
PEAK FERTILITY DAYS	 b) can be used to track days of the menstrual cycle.
BASAL BODY TEMPERATURE	 c) is associated with reduced fertility.
BMI OUTSIDE OF THE NORMAL RANGE	 d) are days 8-19 of the menstrual cycle for clients who have cycles that are 26-32 days long.
VAGINAL SECRETIONS	 e) couples conceive within six months of having regular, unprotected sex.
ABOUT 80 IN 100	 f) are wet, slippery, stretchy, clear, and more abundant during times of increased fertility.

Correct Responses:

CycleBeads and some mobile applications (b); Peak fertility days (d); Basal body temperature (a); BMI outside of the normal rage (c); Vaginal secretions (f); About 80 in 100 (e)

Lesson 9 of 17

Basic infertility services



Basic infertility care focuses on determining potential causes of infertility and making referrals for any needed specialist care.

For clients who meet the definition of infertility, offer basic infertility services in accordance with QFP recommendations.¹ Begin evaluation of both partners at the same time.

The American College of Obstetricians and Gynecologists (ACOG) and American Society for Reproductive Medicine (ASRM) recommend that infertility visits for women include:



- **Medical history**, including prior surgeries and hospitalizations, serious illnesses or injuries, medical conditions associated with reproductive failure (e.g., thyroid disorders, hirsutism, or other endocrine disorders), and childhood disorders; results of cervical cancer screening and any follow-up treatment; current medication use and allergies; and family history of infertility.
- **Reproductive history**, including how long the client has been trying to achieve pregnancy; frequency and timing of sex, level of fertility awareness, and results of any previous evaluation and treatment; gravidity, parity, pregnancy outcomes, and associated complications; age at menarche, cycle length and characteristics, and onset/severity of dysmenorrhea.
- **Sexual history**, including pelvic inflammatory disease (PID), history of sexually transmitted disease (STD), or exposure to STDs.
- **Review of systems** with an emphasis on symptoms of thyroid disease, pelvic or abdominal pain, dyspareunia, galactorrhea, and hirsutism.
- **Physical exam**, as indicated, that includes vital signs and examinations of the thyroid, breast, and pelvis.

ACOG and the American Urological Association (AUA) recommend that infertility visits for men include:



- **Medical history**, including systemic medical illnesses (e.g., diabetes mellitus), prior surgeries and past infections; medications (prescription and nonprescription) and allergies; and lifestyle exposures.
- **Reproductive history**, including methods of contraception, frequency and timing of sex; duration of infertility and prior fertility; sexual history; and gonadal toxin exposure, including heat.
- **Sexual history**, including history of STDs, problems with sexual dysfunction, and history of sexual partners with PID.

- **Physical examination** with particular focus given to: 1) examination of the penis, including the location of the urethral meatus; 2) palpation of the testes and measurement of their size; 3) presence and consistency of both the vas deferens and epididymis; 4) presence of a varicocele; 5) secondary sex characteristics; and 6)Ia digital rectal exam.
- Semen analysis, the first and most simple screen for male fertility. If this test is abnormal, refer the client for further diagnosis (i.e., a second semen analysis, endocrine evaluation, post-ejaculate urinalysis, or other necessary diagnostic) and treatment.

Basic Infertility Protocol



Lesson 10 of 17

Referrals for infertility services



As needed, refer clients to specialists for infertility treatment.

Depending on the issues identified during the assessment, infertility may be treated through:⁴

• **Lifestyle changes** to achieve a healthy weight, eat a healthy diet, and eliminate smoking, drugs, and alcohol.

- **Surgery** to repair blocked or damaged fallopian tubes, treat endometriosis (commonly associated with female infertility), or remove polyps or fibroids in the uterus. For male clients, surgery can be used to treat swollen veins in the scrotum, a common problem that leads to male infertility.
- **Medication** to treat hormonal imbalances and stimulate ovulation (i.e., aid the ovaries in releasing an egg). Infertility specialists consider using ovulation stimulation when a client's ovulation is not regular or does not happen at all and when they have ruled out other causes of infertility.

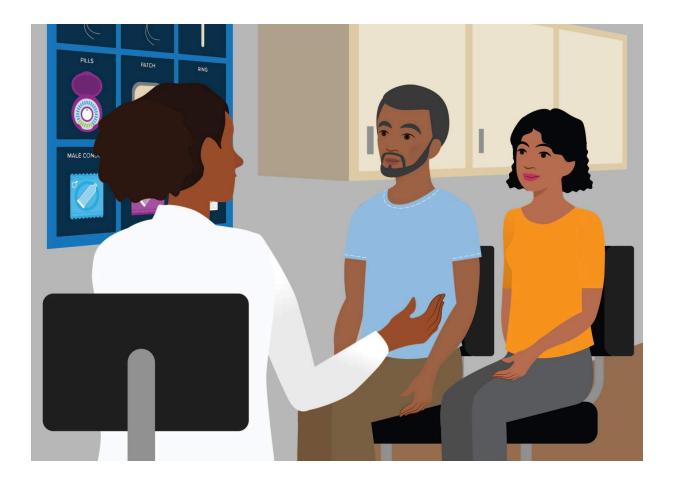
It is also important to consider the emotional and educational needs of clients with infertility. Consider referring clients for psychological support, infertility support groups, or family counseling.

Establishing and Providing Effective Referrals for Clients: A Toolkit for Family Planning Providers



Lesson 11 of 17

Preconception health



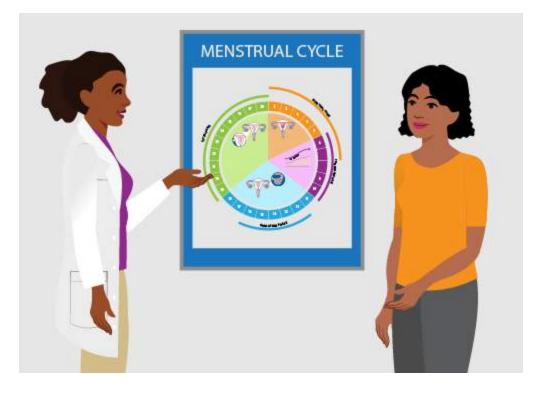
The term preconception describes any time that a client of reproductive potential is not pregnant but may become pregnant or cause pregnancy.

Any visit with a client who has reproductive potential is an opportunity to counsel on how to optimize preconception health and provide education and other preconception health services to address modifiable risk factors.¹ Improving preconception health is particularly importantL for clients who wish to become pregnant or are actively seeking pregnancy.

Optimizing preconception health helps to reduce pregnancy-related adverse outcomes—such as low birthweight, premature birth, and infant mortality—as well as improve clients' general health and well-being, regardless of whether they want to get pregnant.

Lesson 12 of 17

Preconception counseling



After discussing your client's reproductive goals, introduce a preconception counseling conversation by asking, "Would you like to talk about ways to be prepared for a healthy pregnancy?"

To help clients be prepared for a healthy pregnancy, ACOG recommends covering the following topics in preconception counseling:⁵

Folic acid can help prevent birth defects of the baby's brain and spinal cord. Advise all clients who may become pregnant to take a prenatal vitamin with 400 mcg of folic acid daily for at least one month before conception and throughout their pregnancy.

Medical conditions

Some medical conditions—such as diabetes mellitus, chronic hypertension, hypothyroidism, bariatric surgery, and mood disorders—impact a client's ability to have a healthy pregnancy. If needed, refer clients to a primary and/or specialty care provider to make changes to treatment and manage the condition before pregnancy.

Family history

Refer clients with a family history of genetic disorders—such as cystic fibrosis, Fragile X, hemoglobinopathies, Tay–Sachs, Canavan, and familial dysautonomia—birth defects, or other disorders for genetic counseling.

Medications

Some prescription and over-the-counter medications, supplements, and herbal products can harm a developing fetus and are unsafe during pregnancy. If needed, refer clients to a primary and/or specialty care provider to adjust their medications.

Immunizations

Being up to date on immunizations can prevent women and developing fetuses from developing serious problems. If needed, refer clients to update their hepatitis B; influenza;

measles, mumps, rubella; Tdap; HPV; and varicella immunizations.

Infectious disease screening

If needed, refer clients for recommended infectious disease screening, such as screening for STDs (chlamydia, gonorrhea, syphilis), tuberculosis, hepatitis C, HIV, Zika, and toxoplasmosis.

Exposure to environmental toxins

Some environmental toxins—such as plastics with bisphenol–A (BPA), lead paint, asbestos, pesticides used in agriculture, organic solvents and heavy metals used in manufacturing, dry cleaning solvents, organics and radiation used in health care—can harm the client and/or the fetus. If needed, refer clients to explore alternative options or to occupational medicine programs.

Alcohol, nicotine, and illegal drug use

No amount of alcohol is considered safe during pregnancy. Using tobacco products, prescription drugs for nonmedical reasons, and illegal drugs during pregnancy can result in serious adverse outcomes. If a client has a substance use disorder, consider referring them for treatment before they become pregnant.

Intimate partner violence (IPV)

IPV can harm a woman's overall health and well-being and may result in unintended or unwanted pregnancies. Violence may begin or escalate during pregnancy and the postpartum period. If a client is experiencing IPV, refer them to IPV service sites that can provide ongoing support. If a client is in immediate danger, connect them with crisis intervention resources.

Nutrition and physical activity

Advise clients that high or low BMI is associated with infertility and pregnancy complications. Encourage clients to eat a diet rich in fruits, vegetables, protein, and whole grains, and to get at least 30 minutes of moderate physical activity each day. If needed, refer clients to nutrition counseling and behavioral services.

Interpregnancy intervals

Interpregnancy interval refers to the time between delivery and the beginning of a subsequent pregnancy. To promote optimal health outcomes, advise clients to avoid interpregnancy intervals shorter than six months and counsel them about the risks and benefits of a repeat pregnancy within 18 months.



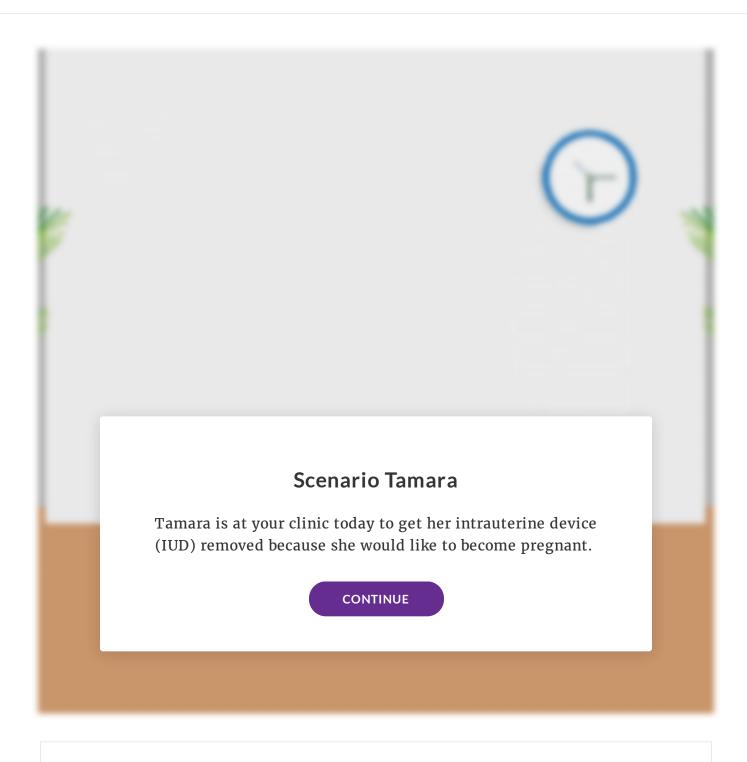
PRECONCEPTION HEALTH

Consider the statements below about preconception health and determine whether the behavior is recommended for clients to prepare for a healthy pregnancy.

	Recommended	Not Recommended
Take a daily multivitamin with folic acid.		
Manage existing medical conditions that may affect pregnancy.		
Stop taking all prescription medications immediately.		
Achieve a healthy weight.		
Eat a variety of fruits, vegetables, protein, and whole grains.		
Be physically active for 30 minutes each day.		
Achieve a BMI below the normal range.		
Avoid exercise.		
Be up to date on immunizations.		
Minimize exposure to environmental toxins.		
Become pregnant less than six months after a prior delivery.		
Review medications with a clinician.		
Abstain from alcohol, smoking, and illicit drugs.		

Lesson 14 of 17

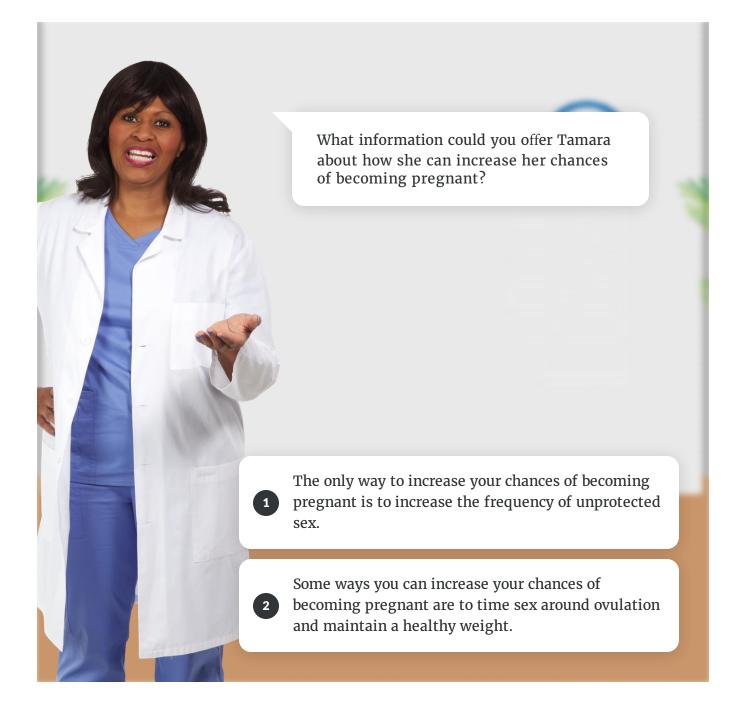
Scenario: Tamara



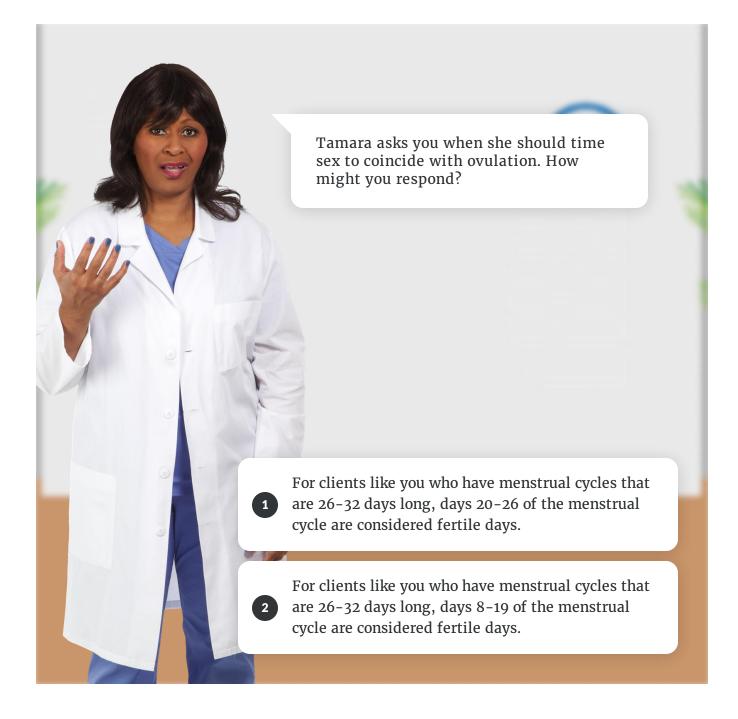
Scene 1 Slide 1 Continue \rightarrow Next Slide



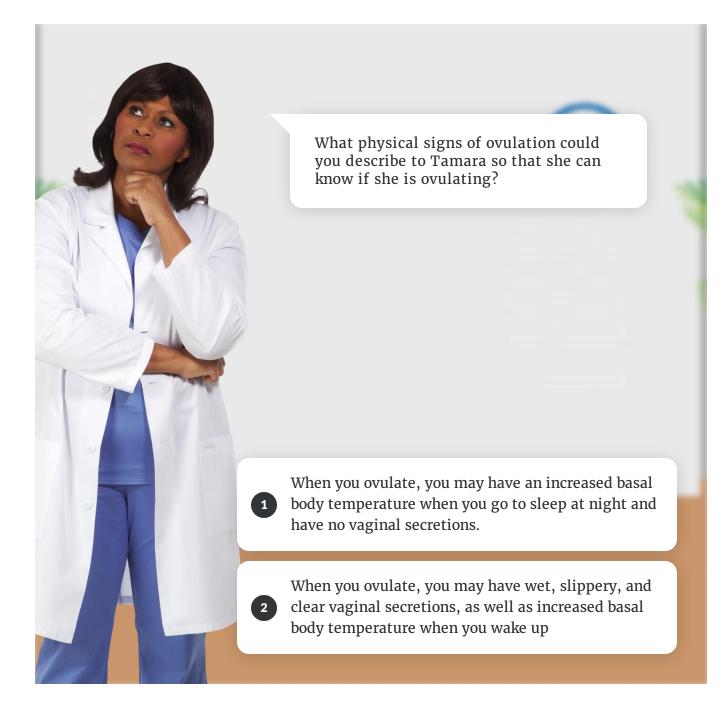
- $0 \ \rightarrow \ \text{Next Slide}$
- $1 \ \rightarrow \ \text{Next Slide}$



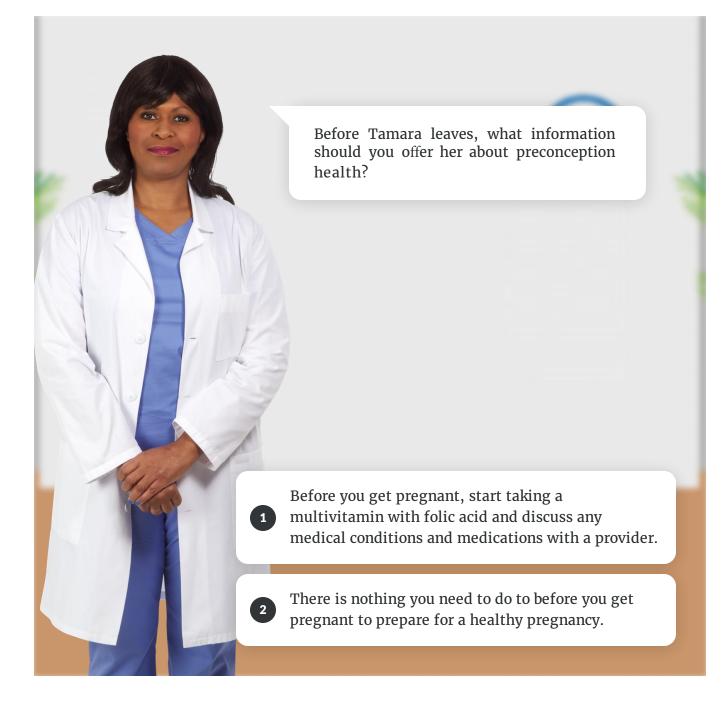
- $0 \ \rightarrow \ \text{Next Slide}$
- $1 \ \rightarrow \ \text{Next Slide}$



- $0 \ \rightarrow \ \text{Next Slide}$
- $1 \ \rightarrow \ \text{Next Slide}$



- $0 \ \rightarrow \ \text{Next Slide}$
- $1 \ \rightarrow \ \text{Next Slide}$



- $0 \ \rightarrow \ \text{Next Slide}$
- $1 \ \rightarrow \ \text{Next Slide}$



 $\mathsf{Continue}\ \rightarrow\ \mathsf{End}\ \mathsf{of}\ \mathsf{Scenario}$

Lesson 15 of 17



Now we will review the information we have covered during this module. For each question, select the response option you think is correct.

01/05

Infertility is defined as the failure to achieve pregnancy after how many months of regular, unprotected sex?

3 months 6 months 9 months 12 months

02/05

The goal of basic infertility services provided by a family planning provider is to:

Schedule surgery to address causes of infertility

Determine the definitive cause of infertility and make referrals to specialist care

Determine potential causes of infertility and make referrals to specialist care

Identify who in the couple is the cause of infertility

03/05

Which clients should be considered for preconception health services?

Only clients who are actively seeking pregnancy

All clients who may become pregnant or cause pregnancy

All female clients

Clients who are visiting the clinic for a pregnancy test

04/05

Which of the following factors is associated with reduced fertility?

Age greater than 35 years

High caffeine consumption (more than 5 cups per day)

Smoking, consuming alcohol, and using recreational drugs

All of the above

05/05

Clients who may become pregnant are advised to take a multivitamin with folic acid in order to:

Reduce the likelihood the baby is born early

Prevent spotting during pregnancy

Prevent nausea associated with pregnancy

Prevent defects of the baby's brain and spinal cord

Conclusion

This is the end of the Support for Achieving a Healthy Pregnancy module.

Thank you for joining us. Your feedback is important to us!

Please complete a brief evaluation of this module. After completing the evaluation, you can download your certifiCate of completion from your FPNTC training account.

Course Evaluation



References

This course was developed by JSI Research & Training Institute, Inc. for the Family Planning National Training Center and supported by Award No. FPTPA006028-04-00 from the Office of Population Affairs (OPA). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of OPA or HHS.

- Gavin, L., Moskosky. S., Marion, C., Curtis, K., Glass, E., Godfrey, E.,...Zapata, L.. (2014). Providing Quality Family Planning Services: Recommendations of CDC and the U.S. Office of Population Affairs. Morbidity and Mortality Weekly Report, 63(4). Retrieved from https://www.cdc.gov/mmwr/pdf/rr/rr6304.pdf
- 2. American Society for Reproductive Medicine. (2020). Infertility. Retrieved from https://www.asrm.org/topics/topics-index/infertility/
- American College of Obstetrics and Gynecology. (2019). Infertility workup for the women's health specialist. ACOG Committee Opinion No. 781. Obstetrics & Gynecology, 133, e77–84. Retrieved from https://www.acog.org/clinical/clinical-guidance/committeeopinion/articles/2019/06/infertility-workup-for-the-womens-health-specialist
- 4. American College of Obstetrics and Gynecology. (2019). Treating infertility. Retrieved from https://www.acog.org/patient-resources/faqs/gynecologic-problems/treating-infertility
- American College of Obstetrics and Gynecology. (2019). Prepregnancy counseling. ACOG Committee Opinion No. 762. Obstetrics & Gynecology, 133, e78–89. Retrieved from https://www.acog.org/clinical/clinical-guidance/committeeopinion/articles/2019/01/prepregnancy-counseling