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I. ADOLESCENT HEALTH

A. OBJECTIVES

At the end of this presentation the student will be able to:

1. Identify three developmental achievements of the early years and the middle years of the adolescent.
2. Describe four factors that make adolescents particularly vulnerable to Sexually Transmitted Diseases.
3. Identify one bacterial, one viral and one protozoan Sexually Transmitted Disease and describe the symptoms and treatment for each.
4. Name three preventative practices that can help reduce the risks of STDs in adolescents.
5. Define two factors that contribute to the lack of contraceptive use in adolescents.
6. Indicate the most common contraceptive used by adolescents and describe the most common side effects.
7. Identify the most ineffective contraception methods for the adolescent and state one reason why it is ineffective.
8. List three predictive indicators to early adolescent sexual activity.
9. Indicate two medical risks of adolescent pregnancy.
10. List three options that should be addressed when counseling the pregnant adolescent.

B. CURRICULUM OUTLINE

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E. Counseling the Adolescent About Pregnancy Options

1. Identification
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C. CURRICULUM

A. Developmental Milestones of the Adolescent

1. Physical Development

The most noticeable changes during adolescence involve physical, psychological, and sexual growth and development, including the appearance of secondary sexual characteristics and the ability to reproduce. Young adolescents in particular are preoccupied with these physical changes and how they are perceived by others. Many adolescents and families are reassured to learn that the maturation process takes place at a different pace for each individual.

2. Cognitive Development

During this period, adolescents who previously focused on the present begin to mature and to consider the future implications of their current actions. Adolescents begin to develop the cognitive capacity to comprehend the impact of their present behaviors on their future health. This emerging way of thinking is still limited and occurs erratically throughout much of adolescence.

Limited capacity to see beyond simple solutions to complex problems evolves into a tolerance for ambiguity and the growing recognition that many issues have multiple causes and interrelationships. Emerging capability for abstract thinking helps to account for the frequent questions posed by adolescents, their sometimes argumentative behavior, and their recurring challenges to parental authority and limit setting.

3. Social/Emotional Development

Peer relationships play a major role in the adolescent's separation and emerging individuality. Adolescents often seek out peers whose beliefs, values, and even behaviors are similar to those of their families. While peer and other social influences often reinforce familial values, some influences may expose the adolescent to values that differ significantly from the family's. Thus, the need to balance peer pressure and family expectations creates both new challenges and family tensions as adolescents begin to make independent decisions. The health professional is in

a key position to offer guidance and support for adolescents and families as they adapt to these changes.

The ability to integrate emotional and physical intimacy in a love relationship is an important developmental task for the older adolescent. Health supervision must address sexual experimentation and the risks that accompany this aspect of development.

4. Early Adolescence Visits – 11, 12, 13 and 14 Years

Dramatic physical changes are the hallmark of early adolescence. Generally, girls begin puberty an average of two years earlier than boys. During early adolescence, most girls experience a rapid growth spurt, changes in fat distribution, and the development of secondary sexual characteristics such as pubic hair and breasts. Since many young adolescents are unaware that the onset and rate of puberty vary greatly, they need reassurance that their own growth and development are normal, and they will benefit from learning about the progression of physiological changes.

Young adolescents are very egocentric, intensely preoccupied with the question “Who am I, physically?” and feelings of being “on stage.” Because of their sensitivity and modesty about their bodies, young adolescents have a heightened need for privacy. Families must learn to respect a “closed-door policy.” Many young adolescents, preoccupied with their attractiveness, will try to change their appearance. Anorexia and bulimia may occur especially among females. While young adolescents have increasing potential for abstract thought, their cognition still tends to be concrete and present oriented. Their sense of morality, also concrete, is driven by rules. Young adolescents see people and their behaviors as good or bad, right or wrong.

Friendships are often with same-sex peers, and the seductiveness of peer conformity is a powerful phenomenon. Preparing the young adolescent to deal with increasing peer pressure is an important part of health supervision.

Exploration – usually in the company of peers – serves important developmental purposes. Unfortunately, many of the behaviors that adolescents experiment with can have serious health consequences. Sexual exploration also increases during early adolescence. For the majority of young adolescents, however,

masturbation and petting are the most common sexual behaviors. Young adolescents are not likely to use either contraception or methods to prevent sexually transmitted diseases.

Young adolescents harbor much misinformation about sexuality. Issues related to the menstrual cycle, fertility, and sexually transmitted diseases should be explored and clarified by the health professional. Few early adolescents take measures to reduce their risk of injury.

Ambivalent about their impending emotional independence, young adolescents often display erratic, moody behavior. The young adolescent may be extremely opinionated, challenging family rules, values, and behaviors. Families need to keep supervising the adolescent and setting appropriate limits. At the same time, they must promote the youth's increasing autonomy in decision-making. Parents are still important role models for the adolescent.

5. Middle Adolescence Visits – 15, 16, and 17 Years

By the age of 15, most girls have completed the changes associated with puberty and have menstrual periods, and most boys are well on their way to finishing pubertal development, having gained muscle mass and strength as well as secondary sexual characteristics. Most middle adolescents are increasingly comfortable with their sexual identity, but for gay and lesbian youth, recognition of their sexual orientation may precipitate feelings of depression and ideas of suicide.

Most 15 and 16 year olds remain concrete in their thinking. Some middle adolescents, however, begin to make the transition from concrete to formal operational thinking, becoming more capable in abstractions, problem solving, and future-oriented thinking. They are better able to understand complexities in causality and appreciate the perspectives of others.

Changes in moral development also continue. As adolescents broaden their perspective, they often become concerned about community and societal issues such as homelessness, crime, or environmental degradation. This concern can lead to involvement in community service. As friends assume greater importance, middle adolescents spend less time with their families. Youth of this age are extremely sensitive to the social norms of the peer group, including choices in dress, hairstyle, vocabulary, and music.

As adolescents deal with issues of independence, they test rules and question authority. With gains in cognition and increasing autonomy, adolescents often become extremely challenging which frequently results in family conflict, especially over issues such as dress, music, and social etiquette. While parental frustration may be common, continued communication within the family is crucial and should be supported during health supervision.

Adolescents' academic decisions during high school have major implications for future educational and career choices, so it is not surprising that many middle adolescents are anxious about their academic performance. Adolescents often use their capabilities to excel and to enhance their skills.

Middle adolescents can obtain work permits for paid employment. When earning a salary, adolescents may gain some skills in money management.

Adolescent safety has become a major concern. Fear of physical harm is often uppermost in adolescents' minds. Middle adolescents have reached the legal age to drive, gaining a mobility that offers risks as well as new opportunities and choices.

With their increasing cognitive and psychosocial capacities, middle adolescents are able to assume significant responsibility for their health. There is, however, potential for exploration of risky behaviors. Substance use and sexual activity increase with each successive year. Feelings of sadness and depression should not be dismissed as "normal" moodiness during this period. Situational losses – including the death of a pet, problems with girlfriends or boyfriends, school failure, and parental disappointment – can lead to depression and even suicide.

By this stage of development, adolescents may have formulated attitudes and values that will affect their future behavior and quality of life. Their increasingly sophisticated cognitive capability offers the health professional the opportunity to relate to them in a new way. Whenever possible, the health professional should try to use peer influence in adolescent health promotion efforts.

ADOLESCENCE DEVELOPMENTAL CHART

Health professionals should assess the achievements of the adolescent and provide guidance to the family on anticipated tasks. The effects are demonstrated by health supervision outcomes.

Developmental Achievements	Tasks for the Adolescent	Health Supervision Outcomes
<ul style="list-style-type: none"> • Responsibility for good health habits • Physical, emotional, and sexual growth and development • Social and conflict resolution skills • Good peer relationships with the same and opposite sex • Capacity for intimacy • Sexual identity and responsible sexual behavior • Coping skills and strategies • Appropriate level of autonomy • Personal value system • Progression from concrete to abstract thinking • Academic and career goals • Educational or vocational 	<ul style="list-style-type: none"> • Maintain good eating habits and oral hygiene • Engage in physical activity regularly and maintain appropriate weight • Use appropriate safety measures (e.g., safety belt, helmet) • Avoid alcohol and other drugs, tobacco, inhalants • Practice abstinence or safer sex. • Engage in safe and age-appropriate experimentation • Manage negative peer pressure • Learn conflict resolution skills • Develop self confidence, self esteem, and sense of individual identity • Develop healthy interactions with peers, siblings, and adults 	<ul style="list-style-type: none"> • Self-efficacy and mastery • Independence • Active role in health supervision and promotion • Optimal growth and development • Good health habits • Optimal nutrition • Reduction of high-risk behavior • Injury prevention • Promotion of developmental potential • Prevention of behavioral problems • Sense of responsibility and morality • Promotion of family strengths • Enhancement of parental effectiveness • Educational/vocational success

competence	<ul style="list-style-type: none">• Learn ways to reduce risk of physical, emotional, and sexual abuse• Continue process of becoming more independent• Develop sense of community responsibility• Be responsible for school performance• Develop effective communication skills	
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ISSUES DURING ADOLESCENCE

Health professionals should address problems, stressors, concerns, and other issues that arise during health supervision. Strengths and issues for the adolescent, family, and community are interrelated and interdependent.

Adolescent	Family	Community
<ul style="list-style-type: none"> • School concerns (poor grades, underachievement, disinterest, truancy) • Vocational concerns • Behavioral concerns (acting out, aggression, violence) • Social concerns (lack of friends, bullying, negative peer influence, withdrawal from family) • Emotional concerns (depression, anxiety, confusion about sexual orientation, low self esteem, threat of suicide, attempted suicide) • Difficulty in managing anger • Early sexual activity, inappropriate sexual behavior, pregnancy, sexually transmitted diseases, HIV/AIDS, hepatitis • Substance abuse (alcohol, drugs, inhalants, tobacco, steroids) • Dangerous behaviors (drunk driving, failure to use safety belts or helmets) • Excessive risk-taking. • Medical concerns (hypertension, scoliosis, 	<ul style="list-style-type: none"> • Parents or other family members with serious problems (depressed, mentally ill, abusive, uninvolved, overly critical, overprotective, incarcerated) • Severe marital problems • Domestic violence (verbal, physical, emotional, or sexual abuse) • Frequently absent parent • Rotating “parents” (parents’ male or female partners) • Family health problems (illness, siblings or parents with chronic illness or disability) • Substance use (alcohol, drugs, inhalants, tobacco) • Financial insecurity • Homelessness • Family transitions (move, divorce, remarriage, incarceration, death) • Lack of knowledge about adolescent 	<ul style="list-style-type: none"> • Poverty • Inadequate housing • Environmental or occupational hazards • Unsafe neighborhoods • Discrimination and prejudice • Community violence, gangs • Lack of protective legislation (alcohol, tobacco, gun control, mandated safety belt/helmet use; graduated driver’s license) • Few opportunities for vocational training and employment • Inadequate or unsafe schools • Lack of supervised programs before and after school • Lack of programs for families with special needs • Inadequate outreach to uninsured/underinsured adolescents, failure to facilitate enrollment in health insurance programs and access to care • Isolation in a rural community • Lack of

<p>menstrual problems, acne)</p> <ul style="list-style-type: none"> • Weight and height concerns, body image, poor nutrition, obesity, eating disorders • Lack of regular physical activity • Chronic illness • Transitional challenges for adolescent with special health care needs 	<p>development</p> <ul style="list-style-type: none"> • Lack of parental self-esteem and self-efficacy • Poor family communication • Social isolation and lack of support • Neglect or rejection of adolescent • Lack of health insurance 	<p>community/school/public health partnerships</p> <ul style="list-style-type: none"> • Lack of social, educational, cultural, and recreational opportunities • Lack of access to immunizations and other health services • Inadequate public services (lighting, transportation, garbage removal) • Inadequate fluoride in drinking water
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B. Sexually Transmitted Diseases: The Adolescent

1. Facts of Life

- For the vast majority, sexual relations begin in adolescence.
- Unprotected sexual relations increase risks of unwanted pregnancy and early childbirth, as well as unsafe abortion and sexually transmitted diseases (STD) including HIV/AIDS.
- Lack of knowledge and access to contraceptives as well as vulnerability to sexual abuse puts adolescents at highest risk of unwanted pregnancy.
- Worldwide, more than 10% of all births are to women 15 to 19 years of age.
- Each year more than one out of 20 adolescents contracts a curable STD, not including viral infections.

2. Adolescents: Greater Risks of STD Infection

- Experimentation is a normal part of adolescent development which also exposes them to health risks. Young people's sexual relations are often unplanned, sporadic and, sometimes, the result of pressure or force.
- Sexual relations typically occur before adolescents have gained experience and skills in self-protection, before they have acquired adequate information about STDs, and before they can get access to health services and supplies (such as condoms).
- Some infection during adolescence is more likely to result in pelvic inflammatory disease and as a consequence, lead to infertility.
- Exposure to infection during adolescence is more likely to result in cancer of the cervix.
- Stigma and embarrassment associated with STD can impair psychological development and attitudes towards sexuality later in life.
- The diagnosis of STD infection is more problematic during adolescence: the STD may be asymptomatic, especially in young women; even if adolescents know about existing services, they are often reluctant to seek help for diagnosis and treatment.

- Adolescents often have difficulty complying with treatment because it may be lengthy, painful and sometimes they need to conceal medication so that the STD is not revealed to others.

3. Sexually Transmitted Diseases

- Of the estimated 333 million new STDs that occur in the world every year, at least 111 million occur in young people under 25 years of age.
- Sexually transmitted diseases (STDs) are among the most common causes of illness in the world and have far-reaching health, social and economic consequences. STDs are a major public health problem for two additional reasons: serious complications, and the fact they facilitate transmission of HIV.

4. Preventing Sexually Transmitted Infections

Adolescents may think they are too young or too sexually inexperienced to acquire STIs. They may also think they are not at risk, because they incorrectly believe that STIs only occur among people who are promiscuous or who engage in “bad” behaviors. As a provider, you can play an important role not just in treating young people who contract STIs, but in helping them learn about prevention.

Young people are particularly vulnerable to STIs and consequent health problems because:

- They lack information about how to prevent STIs.
- They are less likely to seek proper information or treatment due to fear, ignorance, shyness or inexperience.
- The risk of acquiring trichomoniasis, chlamydia, genital herpes or human papilloma virus (HPV) is greater at first exposure to the STI.
- Adolescent females are more susceptible to infections than older women due to their immature cervixes.
- Early sexual experience can result in trauma to vaginal tissue, increasing adolescent women’s vulnerability to STIs.
- Adolescents who begin sexual activity early are more likely to have a greater number of lifetime sexual partners.

Other risk factors for adolescents are:

- Unprotected sex (without condoms).
- Sex with multiple partners.
- Having a partner with other sex partners.
- Having a partner with STI symptoms.
- Sex with a new partner or more than one partner in the last three months.
- Sex with strangers or sex in exchange for money.
- Vulnerability to sexual violence, coercion and abuse.
- Use of vaginal drying agents.
- A history of STIs or pelvic inflammatory disease (PID).

One of the most important facts you can help adolescents learn is that male latex condoms provide the best protection from STIs including HIV. Condoms must be used consistently and correctly with each act of intercourse.

Young people also need to know symptoms that may indicate they have an STI. These include:

- Urethral discharge or painful urination in young men.
- Genital sores or ulcers in young women or men.
- Lower abdominal pain or tenderness in young women.
- Unusual vaginal discharge or vaginal itching in young women.
- Painful urination or painful intercourse for young women.

Adolescents should be counseled to seek treatment as soon as possible if they have any of these symptoms.

Young people who contract STIs risk serious long-term health problems, including:

- Permanent infertility.
- Chronic pain.
- Cancer of the cervix.
- Heart and brain damage. (Without treatment, can develop 10 to 25 years after initial exposure to syphilis.)

Also, STIs are a risk factor for HIV transmission and acquisition.

C. Sexually Transmitted Infections

1. **STD:** **Syphilis (bacterial)**
What it is: An infection caused by small organisms, which can spread throughout the body.
Signs: In the first phase, sores may appear on the genitals or mouth about three weeks to three months after exposure, lasting for three to six weeks. Often, however, there are no noticeable symptoms. In the second stage, about three to six weeks after sores appear, a variety of symptoms can appear, including a rash (often on the palms of the hands and soles of the feet).
How it's spread: Through vaginal, oral, or anal sex – and through kissing.
Treatment: All syphilis can be treated with benzathine penicillin G, 2.4 million units IM in a single dose. Penicillin-allergic nonpregnant patients may be treated with doxycycline, 100 mg orally two times a day for 2 weeks, or tetracycline, 500 mg orally four times a day for 2 weeks, or, with a higher failure rate, erythromycin, 500 mg orally 4 times a day for 2 weeks. Medication cannot undo damage the disease has already done. Both partners must be treated at the same time.

Possible consequences: Increased risk of HIV infection. If syphilis is untreated, about a third of people who reach the disease's late phase may experience brain damage, heart disease, nerve damage, and other incapacitating health problems. If untreated, it can seriously harm or even kill a developing fetus during pregnancy.

2. **STD:** **Chlamydia (bacterial)**
What it is: A bacterial infection of the genital area.
Signs: There are no symptoms in most women and many men who have it. Others may experience abnormal vaginal bleeding, unusual discharge or

pain within one to three weeks of having sex with an infected partner.

How it's spread:

Through vaginal or anal intercourse.

Treatment:

Oral antibiotics cure the infection; both partners must be treated at the same time to prevent passing the infection back and forth. Uncomplicated chlamydia cervicitis may be treated with doxycycline, 100 mg orally twice daily for 7 days, or azithromycin, 1 g orally (single dose).

Alternative regimens include ofloxacin, 300 mg twice daily for 7 days; erythromycin base, 500 mg four times daily for 7 days; amoxicillin, 500 mg orally three times daily for 7 to 10 days, may be used if erythromycin is not tolerated in pregnant women. Patients treated with erythromycin, pregnant and nonpregnant, need retesting for chlamydia more than 3 weeks after the therapy is completed. Partners should be treated and abstinence from sexual intercourse encouraged until therapy is complete.

Possible

Consequences:

Pelvic inflammatory disease (PID) in women, tubal (ectopic) pregnancy, infertility, and increased risk of HIV infection.

3. **STD:**

Gonorrhea (bacterial)

What it is:

A bacterial infection of the genital area.

Signs:

Most women and many men who get it have no symptoms. For those who do get symptoms, it can cause a burning sensation while urinating, green or yellowish vaginal or penile discharge, and for women, abnormal vaginal bleeding, pelvic pain, and/or fever within 10 days of getting infected. It takes 1 to 14 days for symptoms – such as discharge or pain – to appear.

How it's

Spread:

Through vaginal, oral, or anal intercourse.

Treatment:

The 1998 CDC STD guidelines recommend, for uncomplicated gonorrhea, cefixime 400 mg orally, or ceftriaxone 125 mg IM, or ciprofloxacin 500 mg orally, or ofloxacin 400 mg orally; *plus*

azithromycin 1 g orally once or doxycycline 100 mg orally bid for 7 days. In pregnancy, quinolones and tetracyclines are contraindicated; substitute erythromycin or ampicillin for the doxycycline in the treatment protocol. Both partners need to be treated at the same time to prevent passing the infection back and forth – and need to abstain from intercourse until the infection is gone.

Possible consequences:

PID, tubal (ectopic) pregnancy, sterility, increased risk of HIV infection. The infection can spread into the uterus and fallopian tubes. It can also cause complications during pregnancy (including stillbirth) or infant blindness or meningitis (from infected mom during delivery).

4. STD:

Genital Herpes (viral)

What it is:

A viral infection of the genital area (and sometimes around the mouth).

Signs:

There are two kinds of herpes. Herpes 1 causes cold sores and fever blisters on the mouth but can be spread to the genitals; Herpes 2 is usually on the genitals. Nearly two-thirds of people who are infected with herpes don't even realize it. An outbreak can cause red bumps that turn into painful blisters or sores on the vagina, penis, buttocks, thighs, or elsewhere. During the first attack, it can also lead to fever, headaches, and a burning sensation when you urinate. Symptoms usually appear within 2 to 20 days of infection but can take longer in some cases. The first outbreak is usually more severe than later recurrences.

How it's spread:

By touching an infected area or having vaginal, oral, or anal intercourse. Warning: some people may be contagious even when they don't have symptoms.

Treatment:

Treatment for primary herpes in the immunocompetent patient is any one of the

following: acyclovir 400 mg orally 3 times daily for 7 to 10 days; or acyclovir 200 mg orally five times daily for 7 to 10 days; or famciclovir 250 mg orally three times daily for 7 to 10 days; or valacyclovir 1 g orally twice daily for 7 to 10 days. Treatment for recurrent herpes in immunocompetent patients may be acyclovir 200 mg orally five times a day for 5 days; or acyclovir 400 mg orally three times a day for 5 days; or acyclovir 800 mg orally two times a day for 5 days; or famciclovir 125 mg orally two times a day for 5 days; or valacyclovir 500 mg orally two times a day for 5 days.

Possible

consequences: Recurrent sores (the virus lives in the nerve roots and keeps coming back), as well as increased risk of HIV infection. May cause complications during pregnancy, possibly causing severe illness, disabilities, or (in rare cases) death for an infant if there is active infection during childbirth. (A cesarean section delivery can reduce this risk.)

5. **STD:**

Human Papilloma Virus (HPV) (viral)

What it is:

A viral infection with 60 different types, primarily affecting the genital area, both the outer and inner surfaces.

Signs:

Soft, itchy warts in and around the vagina, penis, and anus, may appear two weeks to three months after exposure. Many people, however, have no symptoms but may still be

How it's

contagious.

Spread:

Through vaginal or anal intercourse, or by touching or rubbing an infected area.

Treatment:

Treatment of HPV is difficult, with recurrences and failure to treat all involved areas common. In patients with external symptomatic disease, once coloscopic evaluation and biopsy (of the lesion and other areas as needed) have been performed to rule out the presence of a malignancy or a premalignant lesion, trichloroacetic acid (TCA) or

bichloroacetic acid 80 to 90% may be applied to warts. Patients are retreated every week for up to 6 weeks. Vulvar and vaginal lesions may be treated with cryotherapy, laser, LEEP procedures, and interlesional interferon also may be helpful. Cervical warts can be treated with cryotherapy, LEEP, or TCA.

Possible

Consequences: Increased risk of genital cancer for men women. Some virus types cause the most common form of cervical cancer in women.

6. **STD:** **HIV/AIDS (viral)**

What it is: The human immunodeficiency virus (HIV), the cause of AIDS.

Signs: Many people who have HIV don't even know it because symptoms may not appear for 10 years or longer. Others experience unexplained weight loss, flu-like symptoms, diarrhea, fatigue, persistent fevers, night sweats, headaches, mental disorders, or severe or recurring vaginal yeast infections.

How it's spread: Through body fluids such as blood, semen, vaginal fluids and breast milk – in other words, during vaginal, oral or anal intercourse; by sharing contaminated needles; via pregnancy or breastfeeding. During vaginal intercourse, the risks of catching the virus are higher for women than for men.

Treatment: There are only two classes of antiretrovirals (reverse transcriptase inhibitors—nucleosides and nonnucleosides—and protease inhibitors) there are an expanding number of agents available with many interactions between them. Although the paradigm of care can be briefly summarized—treat anyone with a viral load in the 5000 to 10,000 range and start treatment with a protease and two nucleosides—management of the HIV-infected

individual is extremely complex and should be in the hands of an expert. A key part of the management of infected women is to assess their immune and viral status in an ongoing manner.

Possible

Consequences: It is the deadliest STD of all. It may weaken the body's ability to fight disease, making someone with HIV vulnerable to certain cancers and infections such as pneumonia. Fifteen to thirty percent of babies born to HIV-positive mothers can get the disease if the mother is not receiving treatment, but treatment can reduce that rate significantly.

7. **STD:**

Hepatitis B Virus (HBV) (viral)

What it is:

A viral infection primarily affecting the liver.

Signs:

Many people don't have any symptoms. Others may experience severe fatigue, achiness, nausea and vomiting, loss of appetite, darkening of urine, or abdominal tenderness, usually within one to two months of exposure. Yellowing of the skin and whites of the eyes (called jaundice), and darkening of the urine can occur later.

How it's spread: Through vaginal, oral, and anal sex – and through kissing. Also by sharing contaminated needles.

Treatment:

Vaccination dosage is 1 ml of HBV vaccine IM in the deltoid at 0, 1, and 6 months. Patients sexually exposed to HBV should receive 0.06 ml/kg of HBIG IM once within 14 days of last exposure, plus the first (0) dose of HBV vaccine, followed by the 1- and 6-month vaccine doses. Of the young adults who survive HBV, 6 to 10 percent become carriers; and over 25 percent of the carriers develop chronic active hepatitis with cirrhosis.

Possible

Consequences:

Chronic, persistent inflammation of the liver, cirrhosis or cancer of the liver; plus, 90 percent of babies born to women with HBV will carry the virus unless they are vaccinated within an hour of birth.

8. **STD:** **Trichomoniasis (“Trich”) (protozoan)**
What it is: A parasitic infection of the genital area.
Signs: Often there are no symptoms, especially in men. Some women note a frothy, smelly, yellowish-green vaginal discharge, and/or genital area discomfort, usually within 3 to 28 days after exposure to the parasite.
How it’s spread: Through vaginal intercourse.
Treatment: Treatment consists of oral metronidazole, 2 g once, or metronidazole 500 mg two times per day for 7 days. Partners should be referred for treatment at the same time. Follow-up is necessary for women who do not become asymptomatic after treatment. Abstain from intercourse until the infection is gone.
Possible Consequences: Increased risk of HIV infection; can cause complications during pregnancy. Also, it’s common for this infection to happen again.

D. Preventing Sexually Transmitted Diseases

1. The Role of the Health Professional

Health professionals can provide counseling on a one-on-one basis and are trusted by many adolescents as highly authoritative sources of information. Building trust and ensuring confidentiality are key components in effectively preventing and controlling STDs. Health professionals need to reassure adolescents that all information and diagnostic and treatment services will be confidential.

Health professionals can help adolescents identify and understand the risks and consequences of their sexual behaviors and support the development of healthy sexuality through the following risk assessment, screening, and counseling strategies:

- Obtain a complete medical and sexual history, and ask about specific high-risk practices.
- Clearly identify the adolescent’s risk factors, and tailor prevention and counseling messages to the individual’s risky behaviors (e.g., sexual practices, drug use).

- Screen all sexually active adolescents and other at-risk adolescents annually for STDs, even if they are asymptomatic.
- Provide one-on-one counseling that is direct, detailed, compassionate, and nonjudgmental. Prevention counseling should include discussion of specific actions that the adolescent can take to reduce the risk of acquiring or transmitting STDs.
- Adapt the style and content of counseling to the adolescent's developmental level and individual needs. Ask open-ended questions, use language that is both understandable and respectful, and offer reassurance that services will be provided regardless of ability to pay, immigration status, language, or lifestyle.
- Include information on STDs other than HIV. While most individuals are aware of the effects of HIV infection, few realize the serious risks and consequences of more common STDs such as chlamydia, gonorrhea, and human papilloma virus (HPV.) STDs, particularly genital ulcer diseases, also increase the risk of becoming HIV-infected if exposed to the virus.
- Recognize that detailed discussions and careful counseling are especially important for adolescents who may not be willing to acknowledge their high-risk behaviors.

2. Specific Guidance for Adolescents

The most effective way to prevent STDs is to delay having sexual relations as long as possible. The younger individuals are when having sex for the first time, the more susceptible they become to developing an STD. The risk of acquiring an STD also increases with the number of partners over a lifetime.

For sexually active adolescents, these preventive practices can help reduce their risk of STDs:

- Have a mutually monogamous (committed) sexual relationship with an uninfected partner.
- Correctly and consistently use a male condom. (Use a new condom for each act of intercourse.)

- Avoid anal intercourse. (If engaging in anal intercourse, be sure to use a male condom.)
- Avoid drug use. (If injecting drugs, be sure to use clean needles.)
- Learn the common symptoms of STDs. Seek medical help immediately if any suspicious symptoms develop, even if they are mild.
- Have regular checkups for STDs even in the absence of symptoms, especially if you are having sex with a new partner. Testing can be done during routine health visits.
- Prevent and treat other STDs to decrease susceptibility to HIV infection or, if already HIV-infected, to reduce the risk of transmitting the infection to others.
- Avoid having sex during menstruation. HIV-infected women are probably more infectious, and HIV-uninfected women are probably more susceptible to becoming infected during that time.
- Avoid douching because it removes some of the normal protective bacteria in the vagina and increases the risk of infection with some STDs.

Meeting the needs of adolescent populations can be particularly challenging because of the barriers they face in accessing and using comprehensive reproductive health services. A trusting and confidential relationship between the health professional and the adolescent is a critical component of STD preventive guidance.

Contraception and Adolescents (RE9841)

American Academy of Pediatrics – Committee on Adolescence

ABSTRACT. The risks and negative consequences of adolescent sexual intercourse are of national concern, and promoting sexual abstinence is an important goal of the American Academy of Pediatrics. In previous publications, the American Academy of Pediatrics has addressed important issues of adolescent sexuality, pregnancy, sexually transmitted diseases, and contraception. The development of new contraceptive technologies mandates a revision of this policy statement, which provides the pediatrician with an updated review of adolescent sexuality and use of contraception by

adolescents and presents current guidelines for counseling adolescents on sexual activity and contraceptive methods.

A. Adolescent Sexual Behavior and Use of Contraception

An adolescent's decision to initiate or delay sexual activity is complex. Evidence exists that consensual sexual intercourse may serve a variety of psychosocial needs in the adolescent, including mastery of psychosocial development, rebellion, peer group identification and validation, and as a way of coping with frustration and failure.

There is no evidence that refusal to provide contraception to an adolescent results in abstinence or postponement of sexual activity. In fact, if adolescents perceive obstacles to obtaining contraception and condoms, they are more likely to have negative outcomes to sexual activity. In addition, no evidence exists that provision of information to adolescents about contraception results in increased rates of sexual activity, earlier age of first intercourse, or a greater number of partners. Two school-based controlled studies that demonstrated a delay of onset of sexual intercourse in the intervention group used a comprehensive approach that included a discussion of contraception. Availability of contraception is not causally related to sexual experimentation.

An adolescent's decision about whether to use contraception is complex. Although trends have improved, with more adolescents reporting current use of contraception, more use of contraception at first intercourse, and more frequently with continuing sexual intercourse, the consistent use of any contraception remains a challenge for most adolescents.

Adolescents who incorrectly or inconsistently use (are poor users of) contraception include younger adolescents who may be less likely to be involved in a stable, long-term relationship and youth who are involved in casual relationships. In addition, more than one fourth of female adolescents who have had their first intercourse at 14 years or younger report that their participation was involuntary. Contraception clearly is problematic for these young women. Other factors that contribute to lack of contraceptive use include adolescent developmental issues such as reluctance to acknowledge one's sexual activity, a sense of invincibility (belief that they are immune from the problems or issues surrounding sexual intercourse or pregnancy), and denial of the possibility of pregnancy and misconceptions regarding

use or appropriateness of contraception. However, an adolescent's level of knowledge about how to use contraception effectively does not necessarily correlate with consistent use. Some of the reasons given by adolescents for the delay in using contraception are fear that their parents will find out, ambivalence, and the perception that birth control is dangerous.

B. The Role of the Health Care Provider

Health Care Providers should be able to encourage abstinence and provide appropriate counseling about sexual behaviors. Counseling should include discussion about the prevention of STDs, education on contraceptive methods, and family planning services for the sexually active patient. When these services are provided in the clinic, policies and procedures for the provision of such services should be developed.

1. Counseling Adolescents about Contraception

Comprehensive health care of adolescents should include a sexual history that should be obtained in a safe, non-threatening environment through open, honest, and nonjudgmental communication, with assurances of confidentiality. During the preadolescent years the Health Care Provider can provide anticipatory guidance by discussing puberty and offering health education materials to the youth and family. With the onset of puberty, the patient's history should include information regarding attitudes and knowledge about sexual behavior, degree of involvement in sexual activity, and use of contraception. At the onset of puberty, private, confidential interviews with the adolescent should be part of a health maintenance visit.

2. Confidentiality and Consent

The primary reason adolescent's hesitate or delay obtaining family planning or contraceptive services is concern about confidentiality. Requirements and standards of practice should be reviewed and the development of clear, concise, and standardized protocols for confidentiality should be developed for staff, patients, and parents.

3. Sexual Responsibility

The promotion of healthy and responsible sexual decision-making is one of the goals of counseling adolescents about contraception. Issues of health concerns and individual risk assessments may lead to appropriate discussions between the adolescent and Health Care Provider. The teaching of responsible sexual decision-making requires effective dialogue, skillful history taking, careful listening, and repeated simple messages that contain essential information.

4. Sexual Decision Making

Adolescents should be strongly encouraged to postpone the initiation of sexual intercourse. For patients already engaged in sexual intercourse or who are contemplating having sexual intercourse, a discussion of contraceptive methods and prevention of STDs is essential. Discussions should address and explore, in a nonjudgmental way, the adolescent's reasons for becoming sexually active and the impact that sexual intercourse may have on relationships with peers, parents, and significant others.

For sexually active adolescents who are using contraception, the role of the caregiver is to support compliance, manage side effects, change the method of contraception as circumstances require, and provide referrals and frequent follow-up with periodic screening for STDs.

5. Methods of Contraception

Numerous current reviews and protocols for prescribing and managing contraception are available. The following comments focus on the appropriateness of the various contraceptive methods for adolescents. The Health Care Provider should emphasize the need for prevention of STDs as well as contraception with each patient.

a. Abstinence

Abstinence is the most effective means of birth control. Abstinence education generally focuses on delaying the initiation of adolescent sexual activity until adulthood. Teenage couples who choose to abstain from sexual

intercourse should be encouraged and supported by their parents, peers, and society.

b. Condoms

The male condom is a mechanical barrier method of contraception. Its effectiveness is enhanced by use of a spermicide. Latex condoms significantly reduce the transmission of STDs and should therefore be used by all sexually active adolescents regardless of whether an additional method of contraception is being used.

Adolescents must understand that the use of a condom is not optional and that a new condom must be used each time they have sexual intercourse. They must also be instructed in the correct use of a condom. Adolescents need to understand that no other contraception method provides the same protection from STDs. Male condoms have several other advantages. They allow for males to share in the responsibility for contraception, they are easily accessible and available, they can be obtained without prescription, they are inexpensive, and they can be legally purchased by minors.

The female condom is also a barrier method of contraception. Available data suggest it may be effective in the prevention of STDs and as effective as the diaphragm in preventing pregnancy. Acceptability in the adolescent population is unknown, but may be limited by the high cost, lack of availability, and the difficulty of insertion.

c. Spermicides

Spermicides have a relatively high contraceptive failure rate when used alone and must be applied with each act of intercourse to be effective. If used consistently with male condoms, the birth control effectiveness approaches that of oral contraceptives. Spermicides consist of 2 agents: nonoxynol 9 and octoxynol 9, applied intravaginally through a variety of forms (gel, foam suppository, and film). The combination of spermicide and condoms is a very effective means of contraception for adolescents because it provides effective prevention of pregnancy and STDs, is available without a prescription, and is inexpensive.

d. Oral Contraceptives

Oral contraceptives are reliable and effective for the prevention of pregnancy, are available by prescription, and are the most popular method of contraception among adolescents. Currently 3 forms of oral contraceptive pills are available: the fixed-dose combination (each tablet contains the same dose of estrogen and progestin), the phasic dose (the triphasic and biphasic packs containing varying doses of estrogen and progestin), and the mini-pill (progestin only). The newest generation of birth control pills have a low dose of estrogen (20 to 35 micrograms), and new forms of progestin. The standard 28-day pack of pills (21 days of hormone and 7 days of placebo) continues to be widely and successfully used by adolescents and should be encouraged over the 21-day pack for promoting daily compliance.

Breakthrough bleeding is the most common side effect and usually resolves within 3 months. Weight gain, nausea, and headaches are infrequent. The failure rate of oral contraceptives when used correctly is <1%. However, the failure rate among adolescents may be as high as 15% because of inconsistent use. One study suggests that adolescents miss an average of 3 pills per month.

Adolescent compliance with oral contraceptive use may be enhanced by appropriate patient education and problem-solving techniques. This includes careful instruction regarding the use of oral contraceptives, anticipatory guidance about side effects and their management, a discussion of correct pill usage, and frequent follow-up and monitoring.

Oral contraceptives are best for adolescent females who desire regular menses and are organized and motivated to take a pill every day; additionally, a condom must be used in conjunction with oral contraceptives to give protection against STDs. Ideally, adolescents should receive a complete gynecological examination by the pediatrician before taking oral contraceptives. In some circumstances (such as when a patient shows anxiety), the pelvic examination may be deferred and oral contraceptives prescribed if the patient is healthy, not pregnant, and has no contraindications to taking the pills.

e. Medroxyprogesterone Acetate Injection (DEPO-PROVERA)

Medroxyprogesterone acetate is a long-acting progestin given every 12 weeks as a single 150-mg intramuscular (IM) dose. For adolescents, this contraceptive method has many benefits, including effective pregnancy prevention, convenience (requires no daily drug regimen, no need for planning before intercourse), lack of estrogen-related side effects, and protection against endometrial cancer and iron deficiency anemia. The major disadvantages of this contraceptive method for adolescents are menstrual cycle irregularities (present for nearly all patients originally), the need for IM administration, and the side effects (weight gain, headaches, bloating, depression, and mood changes). Medroxyprogesterone acetate is also associated with a delayed return to fertility and possibly a reversible osteopenia.

This contraceptive method may be safely recommended for adolescents who have chronic illnesses (i.e., seizures, sickle cell disease), are lactating, or are at risk for complications with estrogen. Medroxyprogesterone acetate injection is the best type of contraception for adolescents who do not remember to take daily medication. Health Care Providers need to be sure to discuss the potential side effects and to ensure that the patient is not pregnant at the time of each injection. Condoms must be used in conjunction with medroxyprogesterone acetate for protection from STDs.

f. Levonorgestrel Implants (Norplant system)

Levonorgestrel implants are a highly effective long-acting progestin contraceptive that provides pregnancy prevention for up to 5 years. It requires insertion and removal of subcutaneous Silastic capsules by a trained health care professional.

For some adolescents levonorgestrel implants have proven to be a long-term effective method of contraception. This contraception may be indicated in adolescents who desire long-term spacing between births, want an extended length of protection, have a history of problems with oral contraceptives, or are already mothers. The major disadvantages for use in the adolescent population include high initial cost, the potential side effects (breakthrough

bleeding, headaches), and the need to have an experienced health care professional remove the implant.

Adolescents using subdermal implants have experiences similar to adults, particularly when appropriate counseling is provided. Condoms must be used in conjunction with levonorgestrel implants for protection from STDs.

g. Intrauterine Devices (IUDs)

When used appropriately, IUDs are safe, effective methods of contraception. IUDs should be reserved for adolescent females who cannot use other contraceptive methods and whose sexual behavior does not put them at risk for STDs. Some controversy exists as to whether IUDs are an appropriate method of contraception for adolescents. Condoms must be used in conjunction with IUDs for protection against STDs.

h. Diaphragm and Cervical Cap

The diaphragm and cervical cap are effective barrier methods of contraception that require use of spermicides and condoms. These contraceptive methods have limited usefulness in adolescents as they require a prescription, a visit with a health care professional for a fitting, and a motivated adolescent who is comfortable and skilled with insertion. Consistent, correct use is critical.

i. Rhythm and Other Periodic Abstinence Methods

Rhythm and other methods of periodic abstinence require sophistication, awareness of fertility, motivation, and timing of intercourse that may be too complicated for most adolescents. However, the Health Care Provider should be prepared to teach adolescents about the menstrual cycle and the times of increased fertility as an educational tool. The rhythm method provides little or no protection against STDs.

j. Withdrawal

Withdrawal, which involves the male partner's attempt to withdraw the penis before ejaculation, is still widely used by adolescents in sexual relationships. Adolescents should receive counseling that discusses the high failure rate of

withdrawal for pregnancy prevention. In addition, counseling should stress that this method provides little or no protection against STDs.

k. Emergency Contraceptive Pills (ECPs)

There are many prescribed methods of emergency postcoital contraception. The most commonly prescribed method consists of 2 doses of combined estrogen and progestin contraceptive pills taken within 72 hours of unprotected intercourse followed by 2 pills 12 hours later. For this method of ECPs, the dose depends on the oral contraceptive agent used. Nausea is a likely side effect that may be relieved by the use of antiemetics. Health Care Providers should inform adolescents that ECP is available in cases of emergency but should not be considered a substitute for ongoing contraception.

6. Compliance and Follow-up

Frequent follow-up is important to maximize compliance for all methods of contraception, to promote and reinforce healthy decision-making, and to screen periodically for risk-taking behaviors and STDs. Follow-up visits should include: periodic reassessment for contraception method, STD surveillance, and cervical cytology (Papanicolaou smear). The timing and frequency of reassessment will vary depending on the contraceptive method. In general, adolescents should have an annual Papanicolaou smear and a screen for STDs every 6 months, and a quarterly contraceptive reassessment to discuss issues such as utilization, compliance, and complications. Each adolescent should receive ongoing support, personal guidance, and reinforcement to enhance effective and consistent contraceptive use; parental support (if possible); and couples counseling or the opportunity for couples interaction with the health care professional. In addition, condom use needs to be advised and reinforced at every visit.

7. Special Considerations

The issue of contraception in adolescents with chronic illness or disability is often forgotten. An estimated 10% to 20% of children and adolescents experience a disability or chronic illness

by age 20 years. Extensive information regarding contraception choices and decisions for adolescents with chronic illness or disability are available in references and texts on adolescent medicine.

8. Recommendations

- Encourage and promote sexual abstinence to their adolescent patients at every appropriate opportunity.
- Be prepared to provide nonjudgmental education and preventive counseling about sexuality to adolescent patients.
- Counsel sexually active patients about the consequences of sexual activity, including pregnancy and STDs.
- Provide basic contraceptive services for patients in the clinic providing an environment that is conducive to trust and confidentiality or refer patients to another appropriate site for these services while still maintaining primary care of the adolescent.
- Provide basic contraceptive services for patients.
- Health Care Providers who offer contraceptive services to adolescents should provide appropriate follow-up to ensure compliance. Time needs to be allocated for counseling, education, problem solving, and periodic reassessment of the adolescent's contraceptive needs.

Adolescent Pregnancy – Current Trends and Issues: 1998 American Academy of Pediatrics

Although the prevention of unintended adolescent pregnancy is a primary goal of the American Academy of Pediatrics and society, many adolescents continue to become pregnant. Since the last statement on adolescent pregnancy was issued by the Academy in 1989, new observations have been recorded in the literature. The purpose of this new statement is to review current trends and issues on adolescent pregnancy to update practitioners on this topic.

A. Sexual Activity

There are several predictors of sexual intercourse during the early adolescent years, including early pubertal development, a history of

sexual abuse, poverty, the lack of attentive and nurturing parents, cultural and family patterns of early sexual experience, a lack of school or career goals, and poor school performance or dropping out of school. Factors associated with a delay in the initiation of sexual intercourse include living with both parents in a stable family environment, regular attendance at places of worship, and increased family income.

B. Contraceptive Use

Despite increasing use of contraception by adolescents at the time of first intercourse, 50% of adolescent pregnancies occur within the first 6 months of initial sexual intercourse. Many adolescents who use contraceptives that require a prescription or clinician insertion delay seeing a clinician for a contraceptive prescription until they have been sexually active for 1 year or more.

C. Trends in Adolescent Childbearing

1. Adolescents at Risk of Becoming Parents

Poverty is correlated significantly with adolescent pregnancy in the United States. At least one third of adolescents who become parents are themselves the product of a teenage pregnancy.

2. Increased Rates of Unmarried Childbearing

The birth rate to unmarried female adolescents has been rising steadily for the last 30 years. Births to unmarried teenagers reflect a larger societal trend toward single parenthood.

3. Unintended Versus Intended Pregnancy

Greater than 90% of 15- to 19-year-olds describe their pregnancies as being unintended, and >50% of those unintended pregnancies end in abortion.

4. Comparison with International Statistics

The United States has the highest adolescent birth rate of all developed countries, despite sexual activity rates that are similar or higher among Western European teenagers than rates observed for teenagers in the United States. For every 1000 females 15 to 19 years of age in 1992, 4 gave birth in Japan, 8 in The Netherlands, 33 in the United Kingdom, 41 in Canada, and 61 in

the United States. The reasons for this contrast are unclear, but European teenagers may have greater access to and acceptance of contraception. The contrast also may be related to the universal sexuality education that exists in some European countries.

D. Medical Risks of Adolescent Pregnancy

Pregnant adolescents younger than 17 years have a higher incidence of medical complications involving mother and child than do adult women, although there are emerging data that these risks may be greatest for the youngest teenagers. The incidence of low birth weight (<2500g) is more than double the rate for adults, and the neonatal death rate (within 28 days of birth) is almost three times higher. Adolescent pregnancy has been associated with other medical problems, including poor maternal weight gain, prematurity (birth at <37 weeks' gestation), pregnancy-induced hypertension, anemia, and sexually transmitted diseases. Approximately 14% of births to adolescents 17 years old or younger are premature versus 6% for women 25 to 29 years old.

Whether biological or social factors account for most medical complications is unclear. The only biological factors that have been associated consistently with negative pregnancy results are low prepregnancy weight and height, parity, and poor pregnancy weight gain. Many social factors have been associated with poor birth outcomes, including poverty, unmarried status, low educational levels, drug use, and inadequate prenatal care.

E. Psychosocial Complications of Adolescent Pregnancy

Psychosocial problems implicated in adolescent pregnancy include school interruption, persistent poverty, limited vocational opportunities, separation from the child's father, divorce, and repeat pregnancy. Research during the past decade, however, suggests that long-term negative social outcomes are not inevitable. Several long-term follow-up studies indicate that 2 decades after giving birth, most teenage mothers are not welfare-dependent.

F. Children of Teenage Parents

Research during the past decade supports the common belief that children of adolescent mothers do not fare as well as do children of adult mothers from a psychosocial perspective. These children have an increased risk of developmental delay, academic difficulties,

behavioral disorders, substance abuse, and becoming adolescent parents themselves.

G. The Fathers of Infants Born to Adolescent Mothers

The fathers of infants born to adolescent mothers have been the focus of recent reports. Almost two thirds of adolescent mothers have partners older than 20 years of age. Adolescent fathers are similar to adolescent mothers; they are more likely than their peers who are not fathers to have poor academic performance, higher school drop out rates, limited financial resources, and reduced income potential.

H. Adolescent Pregnancy Prevention

Many studies and programs have addressed the challenging issue of prevention of adolescent pregnancy. Most successful programs include multiple and varied approaches to the problem, such as abstinence promotion, contraception availability, sexuality education, school completion strategies, and job training. Primary prevention (first pregnancy) and secondary prevention (repeat pregnancy) programs are both needed, with particular attention to the adolescents who are at highest risk for becoming pregnant and innovative programs that include males.

I. Recommendations

- Encourage adolescents to postpone early coital activity. Abstinence counseling is an important role.
- Be sensitive to issues relating to adolescent sexuality and be prepared to obtain a developmentally appropriate sexual history on all adolescent patients.
- Help ensure that all adolescents who are sexually active have knowledge of and access to contraception.
- Encourage and participate in community efforts to prevent first and subsequent adolescent pregnancies. These efforts may vary widely from one community to another but should be directed to the specific needs of youth in that community.
- Advocate for comprehensive medical and psychosocial support for all pregnant adolescents. Prenatal care should be tailored to the medical, social, nutritional, and educational needs of the adolescents and should include childcare training.

- Recommend that adolescent mothers not receive early postpartum discharge so that clinicians can ensure that the mother is capable of caring for her child and has resources available for assistance.
- Advocate for the inclusion of the adolescent mother's partner and father of her child in teenage pregnancy and parenting programs with access to education and vocational training, parenting skills classes, and contraceptive education.
- Serve as resource for pregnant teenagers and their infants, the teenager's family, and the father of the baby to ensure that optimal health care is obtained and appropriate support is provided.

IV. Counseling the Adolescent about Pregnancy Options American Academy of Pediatrics

The statement represents an objective guide for assisting patients and their families in making decisions about adolescent pregnancy. None of the options offered is necessarily ideal or universally preferred.

Premarital sex, pregnancy, and abortion engender strong personal and individual feelings. Health professionals should not allow their personal beliefs and values to interfere with optimal patient health care. The Health Care Provider needs to respect the adolescent's personal decision and her legal right to continue or to terminate her pregnancy and not impose barriers to health services from another provider.

A. Identification

All pregnancy options benefit from an early diagnosis. Some adolescents will seek medical care with characteristic signs and symptoms of pregnancy or as the result of a positive home pregnancy test. However, pregnancy symptoms may also be vague and nonspecific, particularly in the younger adolescent. The Health Care Provider cannot always rely on the menstrual and sexual history of the patient to diagnose pregnancy. Psychological denial may exist to such an extent that the adolescent may not consider pregnancy to be the cause of her symptoms, even when it is evident to others.

Laboratory test results for pregnancy are likely to become positive before the appearance of clinical symptoms or signs on physical examination. A serum *B*-subunit human chorionic gonadotropin (*B*-hCG) assay may show positive results as early as 1 week after conception. Most pregnancies are diagnosed by monoclonal human chorionic gonadotropin (hCG) urine pregnancy tests, which are rapid,

cost-effective, specific to hCG, and almost as sensitive as the serum hCG assays. These urine tests will also demonstrate positive results within 7 to 10 days after conception, before the first missed menstrual period. When there is clinical suspicion of pregnancy, a negative test result suggests the need to repeat the test in 1 to 2 weeks. The Health Care Provider should use the negative result of the pregnancy test as an opportunity for further counseling.

The physical diagnosis of a normal intrauterine pregnancy can usually be made by 6 weeks from the last menstrual period with the finding of an enlarged softened uterus during a pelvic examination. The fetal heart tones may be detected as early as 10 weeks' gestation by Doppler fetoscopy. The observation or notice of fetal movement occurs at about 20 weeks in women experiencing their first pregnancy. Ultrasonography can confirm an intrauterine pregnancy, with cardiac activity demonstrable at approximately 6 weeks from the last menstrual period. Concurrent with pregnancy evaluation, appropriate testing for sexually transmitted diseases should be performed.

B. Communication

While waiting for the results of a urine pregnancy test, the Health Care Provider has the opportunity to discuss the adolescent's expectations and feeling about her possible pregnancy and convey the results of the pregnancy test to the adolescent alone in a private setting.

Confidentiality laws vary from state to state. In considering confidentiality, assess the adolescent's ability to understand the diagnosis of pregnancy and appreciate the implications of that diagnosis. The diagnosis should not be conveyed to others, including parents, until the patient's consent is obtained, except when there are concerns about suicide, homicide, or abuse. Be sensitive to the possibility of sexual abuse or incest in the young or developmentally delayed pregnant adolescent. Inform child protective services as required by the law in most jurisdictions.

Reactions to the diagnosis of pregnancy vary. Some adolescents may be pleased, while others may be upset or confused. Some may have already discussed potential options with their family or sexual partner. Be sensitive to family, social, and cultural issues that may influence the adolescent and her decisions about pregnancy. Adolescents should be encouraged to include their parents in a full

discussion of their options. Explain how parental involvement can be helpful and that parents generally are supportive. If parental support is not possible, minors should be urged to seek the advice and counsel of adults in whom they have confidence, including other relatives, counselors, teachers, or clergy. This is especially true for younger adolescents, age 12 to 15 years. The duration of the pregnancy should be assessed and documented because options depend on this assessment. Usually, the adolescent has the following options available:

- Carrying her pregnancy to delivery and raising the baby.
- Carrying her pregnancy to delivery and placing the baby for adoption.
- Terminating her pregnancy.

Discuss with or counsel the adolescent about all three options or refer the adolescent to a health care professional who will discuss all three options.

The patient should be counseled to consider all options, encouraged to return for as many visits as needed, and helped to understand the need to make a timely decision. She should be encouraged to include her parents and the father of the baby in these counseling sessions. If the adolescent is reluctant to reveal the identity of the father, consider the possibility of sexual abuse, sexual assault, or incest.

Address any coexisting medical conditions--chronic medical illness, physical disability, or psychiatric illness—that could affect the decision to continue or terminate the pregnancy. If there is a question of the adolescent's mental competence to make an informed decision about the pregnancy, be aware of state law and procedures necessary to make this determination.

If the adolescent decides to continue the pregnancy, refer her for timely and appropriate prenatal care. Adolescents receiving prenatal care in comprehensive adolescent pregnancy programs generally have had better outcomes than adolescents not in such programs. Family and social support systems are essential for optimal outcomes for young adolescent parents and their infants.

Adoption is an important option to discuss with the adolescent. To make appropriate referrals, be familiar with the available medical, legal, counseling, and social service resources that facilitate adoption.

Throughout the pregnancy, the adolescent should have the opportunity to discuss the possibility of adoption with health care professionals.

If the adolescent decides to terminate her pregnancy, the Health Care Provider should be knowledgeable about community resources, considering the stage of pregnancy and any coexisting medical conditions. Consider the adolescent's financial resources and be aware of local or federal law affecting the availability of services, parental notification, or consent. With the anticipated US Food and Drug Administration approval of pharmacologic agents, such as mifepristone, and the availability of prostaglandin analogues and methotrexate to induce abortion nonsurgically, the Health Care Provider needs to be aware of the nature and availability of these methods and have a clear understanding of their role in the counseling, provision of care, or referral for these methods.

Whatever the adolescent's decision, follow up with the patient to ensure that there has been a successful referral and that appropriate social support is in place and to discuss the prevention of future unintended pregnancies. If the adolescent chooses to continue her pregnancy, remain available for further discussion during the pregnancy should later events require reconsideration of decisions made at the time of the initial confirmation of pregnancy. If the adolescent chooses to place the child for adoption or to terminate her pregnancy, be available to provide for her subsequent health care and emotional support. In either case, the Health Care Provider should encourage the adolescent to continue her education and be available to help her identify appropriate community scholastic programs.

The diagnosis of pregnancy is a sensitive and emotional time for the adolescent, her family, and her sexual partner. A warm and accepting environment in which the adolescent feels sufficiently secure to explore her own feelings about pregnancy is essential. Becoming a parent, placing a child for adoption, or having an abortion may have significant personal and long-term consequences for adolescents. It is important to ensure continuing help and support, regardless of the adolescent's decisions about her pregnancy.

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E. PRETEST EVALUATION

Adolescent Health

1. Identify three developmental achievements of the early years and the middle years of the adolescent.

Early Years

1. _____
2. _____
3. _____

Middle Years

1. _____
2. _____
3. _____

2. Describe four factors that make adolescents particularly vulnerable to Sexually Transmitted Diseases.

1. _____
2. _____
3. _____
4. _____

3. Name three preventative practices that can help reduce the risks of STDs in adolescents.

1. _____
2. _____
3. _____

4. Identify one bacterial, one viral and one protozoan Sexually Transmitted Disease and describe the symptoms and treatment for each.

Bacterial _____

Viral _____

Symptoms _____

Symptoms _____

Treatment _____

Treatment _____

Protozoan _____

Symptoms _____

Treatment _____

5. Define two factors that contribute to the lack of contraceptive use in adolescents.

1. _____

2. _____

6. Indicate the most common contraceptive used by adolescents and describe the common side effects.

Most Common Contraceptive _____

Common Side effects _____

7. Identify an ineffective contraception method for the adolescent and state one reason why it is ineffective.

8. List three predictive indicators to early adolescent sexual activity.

1. _____

2. _____

3. _____

9. Indicate two medical risks of adolescent pregnancy.

1. _____

2. _____

10. List three options that should be addressed when counseling the pregnant adolescent.

1. _____

2. _____

3. _____

TRUE or FALSE

1. An adolescent who uses oral contraceptives does not need to use a condom.

True

False

2. Genital Herpes can be cured with treatment.

True

False

3. Research indicates that the refusal to provide contraception to adolescents result in abstinence and postponement of sexual activity.

True

False

4. A sexual history should be obtained from all adolescents with a parent present in the room.

True

False

5. Exposure to Sexually Transmitted infections during adolescence is more likely to lead to long term negative consequences.

True

False

6. Dramatic physical changes are the hallmark of early adolescence.

True

False

7. During middle adolescence there is potential for risk taking behaviors including substance abuse, sexual activity, depression and suicide.

True

False

F. POST TEST EVALUATION

Adolescent Health

1. Identify three developmental achievements of the early years and the middle years of the adolescent.

Early Years

1. _____
2. _____
3. _____

Middle Years

1. _____
2. _____
3. _____

2. Describe four factors that make adolescents particularly vulnerable to Sexually Transmitted Diseases.

1. _____
2. _____
3. _____
4. _____

3. Name three preventative practices that can help reduce the risks of STDs in adolescents.

1. _____
2. _____
3. _____

4. Identify one bacterial, one viral and one protozoan Sexually Transmitted Disease and describe the symptoms and treatment for each.

Bacterial _____ **Viral** _____

Symptoms _____ Symptoms _____

Treatment _____ Treatment _____

Protozoan _____

Symptoms _____

Treatment _____

5. Define two factors that contribute to the lack of contraceptive use in adolescents.

1. _____

2. _____

6. Indicate the most common contraceptive used by adolescents and describe the common side effects.

Most Common Contraceptive _____

Common Side effects _____

7. Identify an ineffective contraception method for the adolescent and state one reason why it is ineffective.

8. List three predictive indicators to early adolescent sexual activity.

1. _____

2. _____

3. _____

9. Indicate two medical risks of adolescent pregnancy.

1. _____

2. _____

10. List three options that should be addressed when counseling the pregnant adolescent.

1. _____

2. _____

3. _____

TRUE or FALSE

1. An adolescent who uses oral contraceptives does not need to use a condom.

True

False

2. Genital Herpes can be cured with treatment.

True

False

3. Research indicates that the refusal to provide contraception to adolescents result in abstinence and postponement of sexual activity.

True

False

4. A sexual history should be obtained from all adolescents with a parent present in the room.

True

False

5. Exposure to Sexually Transmitted Infections during adolescence is more likely to lead to long term negative consequences.

True

False

6. Dramatic physical changes are the hallmark of early adolescence.

True

False

7. During middle adolescence there is potential for risk taking behaviors including substance abuse, sexual activity, depression and suicide.

True

False

G. INSTRUCTOR EVALUATION

Instructor Evaluation: Using a scale of One (lowest) to Five (highest), please rate the following:

The Instructor met the stated objectives. 1 2 3 4 5

The content was informative. 1 2 3 4 5

The information was presented in an
interesting and logical format. 1 2 3 4 5

The most useful information in this lecture was
