

Teen C.A.R.E.

Comprehensive Adolescent Reproductive Education

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*A Manual for the Clinical Care
of Sexually Active Adolescent Women*

Unintended teen pregnancy and sexually transmitted infections (STIs) can cause emotional, social, educational, and financial consequences for teens, families, and communities. By restructuring the intensity of care provided to teens with negative pregnancy tests, or who are sexually active but not using contraception or condoms, we expect to help teenagers avoid unintended pregnancies, reduce their rates of STIs and become more effective in their use of contraception.

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Teen C.A.R.E.

The Teen C.A.R.E. manual provides the clinician with a teen-friendly approach to clinical care to help reduce the occurrence of sexually transmitted infections (STIs) and unintended pregnancy in sexually active teen women. This clinical approach has been developed from work with an intensive intervention for adolescents with negative pregnancy test results, a group known to be at risk for subsequent pregnancies and STIs. The intervention is designed to assist sexually active young women to effectively use birth control and to use strategies to reduce their risk of STIs. The approach is intended to assess and enhance teens' self-reported contraceptive and STI prevention attitudes, knowledge, and behaviors. Although originally designed for use with sexually active adolescent women using a walk-in pregnancy testing service in two urban women's health services, this approach is based upon theory and recommended practice for all sexually active young women who present to any clinical care agency caring for adolescents. Young women who are able to avoid STIs and delay child bearing beyond their adolescent years are more likely to experience healthier outcomes for themselves and their future children.

Background

Despite headlines reporting declining pregnancy and birth rates among adolescents, the realities of adolescent sexual activity patterns indicate that adolescent pregnancy and childbearing rates (41.7 births per 1000 women age 15-19) remain high across the nation (Hamilton, Martin & Sutton, 2004). Fifteen to 19-year-old females have the highest incidence of both gonorrhea and chlamydia (Centers for Disease Control and Prevention (CDC), 2002). Early initiation of sexual activity with exposure to more partners, increased likelihood of engaging in unprotected sex, and sexual relationships with others considered high-risk place adolescents at higher risk of acquiring STIs (CDC, 1999). Adolescents and young women (ages 13-25) represent 25% of HIV cases in the US (CDC, 1999).

The issues that surround adolescent sexual activity are complex and related to individual, family, community, health, and larger social issues (Jessor, 1991; Resnick, et al., 1997). A critical part of this complex problem centers around adolescent women who are sexually active and do not have access to adolescent-friendly services when they appear at a health care setting, request a pregnancy test and receive a negative test result. Adolescent women who have negative pregnancy tests results are a high-risk group. Zabin, Sedivy, and Emerson (1994) studied 360 teens aged 17 and younger, who presented to a pediatric or a family planning clinic for a pregnancy test. Of 100 who had a negative result, 56% reported becoming pregnant within 18 months. In a subsequent larger, multi-site sample, Zabin, Emerson, Ringers and Sedivy (1996) found that 62.4% of 2926 patients, 17 years of age or less, had negative pregnancy tests. Of those with a positive test, 35.4% reported receiving a previous negative test.

Usually when an adolescent has a positive test for pregnancy, clinicians actively become involved to determine: (1) whether the adolescent wants to continue her pregnancy or seek an abortion, (2) the status of the pregnancy and the health of the teen, (3) where she will receive the appropriate services (either prenatal care or termination of the pregnancy), and (4) what she plans to tell her partner and her family. The adolescent often needs additional help understanding how the pregnancy will affect her plans for education and work. The level of services provided to such young women is often quite intense. In contrast, when an adolescent's pregnancy test is negative, the level of services is much less intense. The teenager may be interviewed about her use of birth control, but often there is no systematic approach that includes an evaluation of the teen's desire not to get pregnant, the provision of the appropriate level of services, and the development of a plan for follow-up. Often the messages to the teen are "take care of yourself" and "the clinicians are here if you need another test." However, studies have demonstrated that having a "pregnancy scare" or a report of a negative pregnancy test alone is not sufficient motivation for adolescents to use contraception (Marcy, Brown & Danielson, 1991; Bloom & Hall, 1999; Zabin, Astone & Emerson, 1993). Furthermore, adolescents do not necessarily think about the dual

need to protect themselves from unwanted pregnancy along with the need to protect themselves against STIs (Grimley, Riley, Ellis, & Prochaska 1993; Whalley, 1999).

Pregnancy Intention and Ambivalence

Pregnancy intention or “wantedness” is a complex issue for many adolescents and it is difficult to determine how many teen pregnancies are truly unintended (Klerman, 2000; Stevens-Simon, Beach & Klerman, 2001). Several studies have shown that the likelihood of subsequent pregnancy is similar for those adolescents expressing ambivalence toward pregnancy and those teens expressing a desire for pregnancy (Cowley, Farley & Beamis, 2002; Jaccard, Dodge & Dittus, 2003; Stevens-Simon, Kelly & Singer, 1996). Rosengard and colleagues (2004) found that adolescent women who are ambivalent about the possibility of pregnancy are less likely to use contraception, and much more likely to become pregnant within 6 months than those who clearly state that they do not wish to be pregnant. Teens who are ambivalent about pregnancy may also be at higher risk for acquiring STIs, including HIV, because of infrequent condom use (Crosby, DiClemente, Wingood, Davies & Harrington, 2002).

Pregnancy intention or “wantedness” may also be influenced by important people in the adolescent woman’s life (Bloom & Hall, 1999; Cowley & Farley, 2001; Martyn & Hutchinson, 2001). Researchers have investigated the relationships between adolescent girls and their partners and also the adolescent girl’s perception of her partner’s attitude toward pregnancy. In a prospective study of 40 adolescent girls identified as being at high risk of teen pregnancy, 70% reported that their partners wanted a pregnancy (Cowley, et al., 2002). A cross-sectional survey of adolescents found that the only significant predictor of the adolescent girl’s attitude about pregnancy was her perception of her boyfriend’s desire for a baby (Cowley & Farley, 2001). Similarly, other studies have noted the great influence that mothers have on attitudes and outcomes about the sexual activity of their daughters (McNeely et al., 2002; Romer et al., 1999).

Teen Care: A Blend of Readiness for Change, Social Cognitive Theory and Teen-Friendly Models of Care

The conceptual model for this clinical intervention includes a blending of the transtheoretical model or stages of change (DiClemente, 1991; Grimely et al., 1993), and social cognitive theory (Bandura, 1997) within a clinical context of adolescent-friendly care (AMA, 1995; Ginsburg et al., 1995; Rosen, Elster, Hedberg, & Paperny, 1997; Winter & Breckenmayer, 1991). The Transtheoretical or Readiness for Change model provides a framework for identifying where an individual is on a continuum of readiness or motivation to change a particular behavior or habit. In this case, the model includes the adolescent’s readiness to delay pregnancy and use protective strategies to prevent pregnancy and STIs, and includes the domain of wantedness of pregnancy, either stemming from the self or imposed by others such as partner or family (Bloom & Hall, 1999; Cowley, Beamis, & Farley, 2000; Jenkins & Raines, 2000; Sadler & Moriarty Daley, 2002; Stevens-Simon, Beach & Klerman, 2001). Assessment of an individual along this continuum allows for a more precise type of intervention or counseling to be used based on pregnancy readiness/wantedness, and there is often a direct relationship between movement along the continuum and increased self-efficacy (Bandura, 1997).

Adolescent Cognitive Development and the Relationship to The Stages of Change

Adolescents, by virtue of their developmental stage of brain development and cognitive styles, often manifest characteristic behaviors and make seemingly puzzling risky choices. Knowledge of how teens think and reason at the various stages of adolescence, helps clinicians and clinical support staff to appreciate how health care has to be able to accommodate these issues. Recent work with neuro-imaging has allowed for a better understanding of the structural and neurochemical reasons behind why adolescents think and behave differently than chil-

dren and adults (Casey, Giedd & Thomas, 2000; Geidd, 2004; Giedd et al., 1999). Sub-cortical changes in the brain may contribute to the tendency in teens to be more reactive to stress, to seek more novel (risky) situations and to be less sensitive to rewards. At the same time, the prefrontal cortex of the brain is still growing and developing until early adulthood, so that planning, decision-making and other executive or organizing brain functions are not fully engaged during the teen years (Casey et al., 2000).

New knowledge about adolescent brain development complements existing theories about how teenagers progress from concrete thinking in childhood to more abstract or “formal operational thought” patterns in later adolescence and adulthood (Elkind, 1998; Piaget, 1952; 1972). Throughout adolescence individuals move from only being able to reason about objects and simple concepts in the present, to being able to think about possibilities, to think about abstract concepts, to think in multiple dimensions and perspectives, and to think about thinking. This last operation leads adolescents through egocentric stages in which they believe that everyone is thinking about them (as the adolescent is thinking about her/himself almost constantly), which Elkind (1998) terms the “imaginary audience”. This leads to a further step in their reasoning, which is that because they are so special and everyone is so focused on them (teamed with their relatively limited life experience) that nothing bad will happen to them, or the “personal fable” (Elkind). This construct underlies many of the adolescent risky behaviors that are seen with sexual behaviors as well as other adolescent health risks.

Because adolescents make their cognitive transitions gradually, it is necessary for clinicians to be able to assess where individual patients are in their ability to reason and make decisions. Adolescent decision-making and reasoning often occur at a more sophisticated or mature level when the subject matter is less emotionally charged. However, decision-making and reasoning is often at a less mature level when teens are facing decisions about sexual relationships, emotional and romantic issues, or taking measures to plan for safer sex practices (Gaffney & Roye, 2003). Adolescents’ ability or inability to hypothetically see perspectives other than their own, to anticipate and plan for consequences of their actions, and to negotiate with partners and clinicians are all tied into the importance of individualized and teen-friendly clinical assessment and counseling approaches. An additional factor that influences cognitive development in adolescents is the family and community context in which teens live their daily lives. Youth who live in poverty situations and experience the stressors of poor neighborhoods and schooling may be at further risk for having difficulties with more mature reasoning and decision-making (Institute of Medicine, 1999).

Social Cognitive Theory

Social cognitive theory describes the relationships among an individual’s knowledge, attitudes and behaviors regarding a particular complex process such as protecting oneself against sexual risk behaviors (Bandura, 1997). This theory states that behaviors such as delaying pregnancy or preventing STIs rely on an understanding of the processes of reproduction, contraception, and STI prevention; motivation or belief that contraceptive and STI prevention behaviors are worthwhile and will be effective; and the belief that it is possible to use the skills and behaviors effectively, the concept termed as self-efficacy (Bandura, 1997; Kirby, 1997). The component of self-efficacy has been used in previous work with STI prevention in adolescents and includes modeling of desired self-protective behaviors, social skills training for application of strategies to real life situations, and booster sessions for reinforcement of self-protective behaviors (Hollen, 1998; Jemmott, Jemmott & Fong, 1998).

Teen-friendly Approach to Care

Primary care services for teens need to be specifically tailored to meet this population’s unique concerns. Research has demonstrated that adolescent health care is most effective when the following key elements are integrated into the practice setting (Jessor, 1995; Moriarty Daley, Sadler, Leventhal, Cromwell & Reynolds, 2004; Moriarty Daley, Sadler, Leventhal, Cromwell & Reynolds, in press; Resnick et al., 1997; Rosen et al., 1997; Kirby, 1997; Kirby, 2001; Kissinger et al., 1997; Zabin, Hirsch, Smith, Streett, & Hardy, 1986).

Box 1. Is Your Office Adolescent Friendly?

- Does your office have a separate space for teens to wait?
- Are there posters, pamphlets and other literature that are of interest to teens in the waiting room and exam rooms?
- Does your office schedule appointments at times that teens are available, for example after school or on Saturdays?
- Is your office accessible via public transportation?
- Will you see a teen alone?
- If a teen calls with an urgent concern, can they be scheduled for an appointment on the same day?
- Are teens able to see the same provider for all their visits?
- If a teen has a question, can they leave a message for their provider?
- Does the teen's provider return the call?
- If the teen patient has a concern after hours or on the weekend, is a clinician available to return the call?
- Is the wait for an appointment more than 2 weeks?
- Does your office have a mechanism for handling the billing for confidential visits?
- Does your office provide reproductive care?
- Which of the following services are available?
 - Abstinence counseling
 - Pregnancy tests
 - Pelvic examinations
 - STI testing and treatment
 - Pap smears
 - Contraceptive counseling
 - Prescriptions for hormonal contraception
 - Condoms
 - HIV counseling and testing
 - Pregnancy counseling
 - Emergency contraception
- Is your office staff, including receptionists, familiar with adolescent development?
- Does your office mail reminders for appointments?
- Do you see teens more than once a year for well child visits?

*If you answered **Yes** to all of the questions above, your practice is teen-friendly.*

*If you answered **No** to **any** of the questions above, your practice has areas to consider improving.*

Teen-friendly

Adolescents should be able to access all of their health care needs in one place and with a consistent provider. For example, a teen may have a visit for a school physical but during the visit she asks for information about contraception. The clinician needs to also address this need during the visit. Scheduling a return appointment to address her concerns about contraception or making a referral for some time in the future, will delay the teen's ability to begin using appropriate contraception and place her at risk for an unintended pregnancy. In addition, if the teen was already using contraception effectively, the clinician could check in with the patient at the physical examination appointment and address any concerns she may have.

All staff interacting with teens need to be aware of normal adolescent development and their common concerns. Teens tend to be very “acute” in their needs. Providers and others working in the clinical site need to be aware that the phone call for an appointment may come late in the day, not because the teen did not feel her concern was important or that she was being irresponsible, it may have been the only time she could call. Services need to be flexible in accommodating these “urgent situations” so more serious complications do not arise.

A teen waiting area affords the practice with the ability to gear educational materials specifically for this population without offending the parents of younger children. Another great place to provide educational pamphlets is the exam room. A teen is more likely to browse through the selections and take the information if it is provided in a private area. Many teens will also use the pamphlet as a conversation starter with their provider. Clinicians can display information that indicates the office is a safe place to discuss a variety of issues including sex, contraception, homosexuality, date-rape etc. Clinicians can also make baskets condoms available in exam rooms or bathrooms for patients to take as needed.

TIP

If a teen asks for a “really good check-up” the teen may mean a pelvic examination or STI screen.

Easily accessible

Accessibility of services includes physical location, hours of operation and availability of clinicians to adolescent patients. Health care services for teens should be located in areas that teens can easily get to. School-based clinics (SBCs) are a great example of bringing care to teens because care can be provided during the school day. Sites in the community should be located in areas the teen can access via public transportation or by walking. The hours that clinical services are provided should also be tailored to the teen's needs; afternoon or evening appointments, as well as weekend services work best. Teen's need to have the ability to easily contact their provider with questions or concerns as they arise. One way to improve access for teens is to have one person who regularly answers the phone and can assist the teen to leave a message for a clinician or who can triage the call and make a timely appointment for the teen.

Confidential

In many states teens can access primary care and reproductive services without the consent of their parent. The confidentiality agreement should be clearly explained to the teen and the parent, if applicable. The clinician needs to ensure that the agreement is not violated, and in the event that the agreement needs to be broken, the teen should be informed first. [See Hoffman, A. (1992). Managing adolescents and their parents: Avoiding pitfalls and traps. *Adolescent Medicine: State of the Art Reviews*, 3, 1–11.]

Free/Reduced cost

The fees charged for visits may be cost prohibitive, especially for teens that are seeking confidential care and are reluctant to share this information with their parents. Many offices offer alternative billing strategies, including sliding scales or free services.

Frequent follow-up

Teens are more successful with contraception if they are able to see their clinician on a more frequent basis. This allows for education and discussion regarding any concerns the teen may have. Unlike adults, who are often scheduled annually contraception follow-up visits, teens should be seen within 6 weeks of beginning OCPs and then every three months to enhance compliance.

Services for partners

Services to address the needs of partners are also beneficial. If at all possible health education and condoms should be available to the partner of the teen patient. Most providers will treat the partner of a patient with a STI. SBCs have the unique ability to see both the patient and the teen if they attend the same school.

The blending of these three theoretical approaches holds great potential for helping adolescents delay pregnancy and prevent STI exposure (Cowley et al., 2000; Grimley et al., 1993; Santelli, DiClemente, Miller, & Kirby, 1999). Community and school-based group interventions have had some success regarding prevention of risky sexual behaviors (Kirby, 1997; Thomas, 2000). Many examples of suggested approaches for intensive care for high risk adolescents exist in the clinical literature, but few have been rigorously evaluated or tested (Cowley, et al., 2000; Santelli, et al., 1999; Whalley, 1999). The studies by Zabin and others (1994; 1996; Sadler, Chen, Moriarty Daley, Leventhal & Reynolds, in press; Moriarty Daley et al., 2004) identify teenagers with negative pregnancy tests as a group at high risk of future pregnancy and STIs.

Intervention

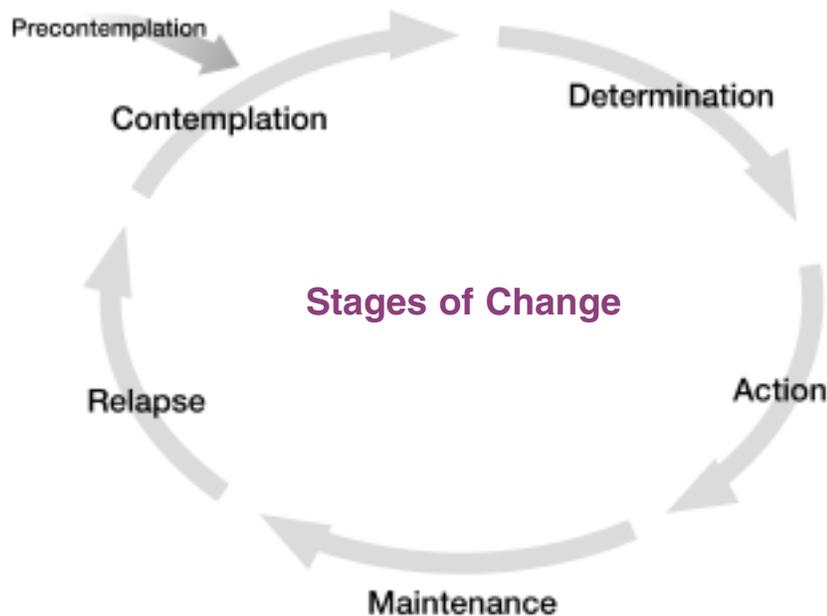
The Teen C.A.R.E. intervention involves an intensive care approach (Appendix). At the initial visit the teen is introduced to the adolescent clinician (preferably the service has a dedicated phone line with voice mail for direct access for patients and access to the computerized program to schedule/reschedule patients' visits). At this first juncture, the adolescent clinician sets up a mutually acceptable plan for staying in touch with the teen and following up any missed visits, while honoring the teen's right to confidentiality. If teens have questions or need to schedule appointments, they are given the phone number with voice mail or answering service; if they need emergent care off-hours, they are directed to call the on-call phone system or the Emergency Department. The adolescent clinician or the designated (but consistent) staff member is responsible for staying in touch with teens, ensuring compliance with follow-up appointments, and being available to patients for phone contact and liaison. The staff member or clinician will call to remind teens about appointments and reschedule if an appointment is missed.

At the first visit, the clinician sees the adolescent for a reproductive health visit or the concerns about pregnancy, contraception and STIs may emerge in the context of a comprehensive visit or an episodic visit for some other health issue. It is important that the clinician is skilled in caring for adolescents and providing comprehensive reproductive health care, as well as having available appointments afternoons to see patients for initial and follow-up visits, without interfering with school attendance. If the clinician is based in a SBC this may be less of an issue.

At the initial visit, an assessment and decision-making counseling is initiated by the clinician regarding risk reduction for pregnancy and STIs, modeled after counseling strategies tested by Cowley and colleagues (2000) based on the Stages of Change (Jenkins & Raine, 2000; Prochaska, et al., 1994) model and social cognitive theory (AMA, 1995; Jemmott et al., 1998). The assessment and counseling intervention follows:

1 Assessment

A clinical interview (Appendix) by the clinician will include an assessment of the patient's interest in becoming pregnant versus using contraception/condoms, her partner(s) desire for pregnancy and or contraception, her condom use patterns/attitudes, her pregnancy history and attitudes, her contraception history and attitudes, and other high risk behaviors. Based on the interview data, the clinician will determine an assessment of the teen's stage of readiness to use contraception outlined below.



Precontemplative stage Adolescent has not thought of using contraception.

Teen: She comes in for an annual health visit and is questioned about the date of her last menstrual period and sexual activity. The clinician suggests a pregnancy test because her LMP was 40 days ago. The teen thinks “I have sex but usually with condoms—I just thought my period was screwed up, I hope she doesn’t think I am pregnant—I know lots of people who have sex without condoms and they have never gotten pregnant...”

Clinician: The role of the provider is to raise awareness and educate the patient about ways that she can change her behavior. Key concepts include: education regarding menstrual physiology and conception. Dispel myths (i.e.: can’t get pregnant the first time or if partner “pulls out”). Then discuss ways to lower her risk of pregnancy and STIs.

Contemplative stage Given some thought to contraceptives but no immediate plans to use.

Teen: “I know about the pill but that is for people who have sex all the time. My boyfriend and I have been having sex for a few months now, sure we have done it without a condom but I always get my period—the (the clinician) is over reacting! Maybe we should be better about condoms—for birth control though because I am not worried he is with anyone else and he never has complained about burning or sores. Would he tell me?”

Clinician: Tip the teens thinking in favor of change. Point out that all teens believe that their partner is monogamous, but that is not always the case. Also address the fact that lots of teens get lucky with unprotected sex but it is only luck and it could run out at any time.

Determination stage The teen wants to try contraceptives and safer sex practices. This is the window of opportunity for the clinician because the patient is motivated to change her behaviors.

Teen: “She (the clinician) is probably right...I could get pregnant or get an STI and that would really be a mess. The pill doesn’t seem that bad and if I also use condoms I would be really safe.”

Clinician: It is important to match the **patient’s** goal with the appropriate change strategy. The change strategy should be acceptable, accessible, appropriate and effective.

- Develop a plan with the patient to have her begin to use her contraceptive method of choice and condoms with each sexual act.
- Give her the first pack of pills in the office and write a prescription for a refill. If she has chosen DMPA, discuss how she will notify the office when she gets her period.
- Demonstrate proper technique for using condoms and how to store them correctly. It is important to point out the expiration date.
- Make a follow-up appointment for 4-6 weeks to discuss how it is going and any side effects she may attribute to the contraceptive method.
- Encourage phone contact if she has any questions or concerns prior to the next visit.

Action stage Teen decides to begin using contraception and actively takes steps to begin method.

Teen: “I think the pill will work best for me, can I get a prescription today?”

Clinician: Assist the patient to make the change.

- Discuss how to begin contraceptive method and possible side effects.
- Discuss strategies for increasing compliance, and how to contact clinician with questions.
- Give written instructions and samples.

Maintenance stage Teen is consistently using contraceptive method and condoms.

Teen: “I started the pill the Sunday after my period began, I am now on my second pack.”

Clinician: Assist the teen to sustain the change achieved in the action phase and prevent relapse.

- Praise for any self-protective behaviors.
- Continue to see at three month intervals and as needed.
- Review problems patient reports in the past with contraception or condom use and suggest strategies to combat them in the future (i.e.: taking the pill with an already established daily activity).
- Discuss any side effects the teen may be attributing to the contraceptive method.
- If the teen is experiencing side effects, discuss strategies to eliminate it (i.e.: nausea from OCPs—take pill with snack prior to bed instead of in A.M. on empty stomach).

Relapse Teen stopped using contraception or condoms.

Teen: “I was doing fine and then I went away for the weekend and left my pills at home.”

Clinician: Assist the teen to begin the process of change again and not get stuck in this stage on inactivity. Help the teen to realize that minor slips and relapses occur and make a plan to get back into the action phase. It is important for the clinician to help the teen avoid discouragement.

2 Counseling Intervention

The counseling section of the intervention has two aspects. The first includes developmentally oriented counseling and a self-efficacy discussion regarding pregnancy wantedness, the patient's decision to use contraception, the patient's decision to protect herself against STIs, and the patient's decision to discuss issues with her partner and or her parent. This counseling is based upon where the patient is on the pregnancy wantedness/contraception continuum of stages outlined above and in the literature (AMA, 1995; Bloom & Hall, 1999; Cowley et al., 2000; DiClemente, 1991; Jenkins & Raine, 2000; Marcy et al., 1983; O'Campo, et al., 1999; Sadler & Moriarty Daley, 2002; Tober, 1991; Winter & Breckenmaker, 1991).

The second aspect of the counseling section of the intervention includes offering the teen strategies to enhance social skills for pregnancy and STI prevention. These strategies include the use of scenarios for the rehearsal of negotiations with partner or parents, modeling of skills necessary for correct use of contraception and condoms, and decision-making strategies based on the adolescent's goals and attitudes about pregnancy and STI prevention (*See Box 2*).

3 Adolescent-friendly Reproductive Health Care

The clinician provides a physical exam, and performs necessary Pap and STI screening, performs contraceptive teaching based on a detailed Reproductive Education Protocol (*See Box 3*), and begins the teen on their contraceptive method of choice (if the patient decides to use contraception). If the teen is unsure about starting, she may be encouraged to begin with oral contraceptive pills for a month and see how things go. The clinician also provides teens with condoms and instructions on their use and a prescription or directions for contacting the clinician for emergency contraception as an available option if needed.

4 Follow-up Care

A 4–6 week return appointment is scheduled for the teen to see the same clinician for follow-up contraceptive care and a booster session concerning the counseling done at the initial visit. After the first follow-up visit with the clinician, the patient then is scheduled for return appointments every three months for contraception check-ups including booster sessions of decision-making strategies for risk reduction behaviors regarding STIs. If appointments are missed, the clinician or the scheduling assistant sends a letter and reschedule the visit for the patient. If two consecutive visits are missed the clinician contacts the patient by phone to schedule another visit. All patients are given a phone number for contacting the office if questions, additional help or services are needed between scheduled visits.

Box 2. Ways to Help Teens Think about Avoiding Pregnancy

- 1) Help teens recognize negative **life scripts** (Martyn & Hutchingson, 2001) among friends, family, community
 - Ask about peers who experienced STIs, pregnancy, had babies
 - Ask about family, friends who are successful, living better lives, finished school, are in college, have jobs, or who own homes.
 - Help the teen think about ways to look at different lifestyles & choose a positive life direction
- 2) Help teens realize that negative life scripts don't have to happen to them
 - Ask if they feel special ("personal fable" may help with this) or different from those who have negative lives? How are they different?
 - What are their own sets of personal values?
 - family values and parents expectations?
 - religion: spiritual or moral values?
 - own self-respect and common sense (belief in yourself; being firm when you make a decision)
 - Are there possible reasons to wait to have children?
 - I want to be able to provide the things my baby will need—love is not enough
 - I don't want the same money pressures my mother had
 - I want to finish school and find a better life
- 3) Help teens decide to be different
 - Setting goals to improve life
 - finish school, go to college, get a job, before having a child—better able to afford things the child will need
 - Being responsible for following own goals
 - the power to make the difference
 - Exploring choice of partners
 - talking; getting to know him
 - choosing partners with similar goals; who are concerned about them and their safety
 - compare partners with own fathers (was her father a positive influence?)
- 4) Help teens take steps toward creating a better life
 - Find positive role models
 - Stay busy—school activities, sports, church activities
 - Listen to advice from friends who have babies – how hard is it?
 - Look at need to escape from negative life situations
 - may need physical distance from family if family involved in negative or dangerous behaviors
 - may need to evaluate friends in same way

Adapted from Sadler, L. S. & Moriarty Daley, A. (2002). A model of teen-friendly care for young women with negative pregnancy test results. Nursing Clinics of North America, 37, 523–535.

Box 3. Teen Care – Reproductive Education Protocol

- 1) Assessment of risk and discussion with patient re: pregnancy, STI, and HIV prevention
 - Discuss with patient any inconsistencies between patient's desires and behaviors
 - Address any concerns about fertility
- 2) Assessment of patient's knowledge of reproductive physiology
 - Use drawings or models.
 - Discuss how contraceptives prevent pregnancy / condoms prevent STIs and HIV
- 3) Discussion of available contraceptive options
 - Address anything the patient has heard about each contraceptive method
 - Provide information on proper use, effectiveness, possible side effects future fertility etc.
 - Provide information on emergency contraception, situations appropriate for use, and how to obtain
 - Provide written materials about all appropriate contraceptive options.
 - Provide first pack of OCPs: indicate where to start, when menses should occur and how to start subsequent packs
 - Discuss and give written instructions on proper use, possible side effects, and when to contact the clinician
- 4) Safer sex discussion for the prevention of STIs and HIV .
 - Discuss the transmission of STIs (including HIV), prevention, and common symptoms
 - Demonstrate condom use with a wooden model or clinician's hand
 - Provide condoms; educate on proper use and storage
 - Discuss HIV counseling and testing and the pros/cons of testing.
- 5) Pelvic Examination Education
 - Address what the patient has heard and concerns about previous experiences
 - Show patient the equipment used during the examination (speculum, cytobrush, etc.)
- 6) Discussion of parent/guardians views of teen sexual activity, contraception use, and pregnancy.
 - Is parent aware of teen's sexual activity?
 - What would happen if parent found out?
 - What would she say to the parent? Role-play situations with clinician assuming role of parent/guardian.
 - If using OCPs/condoms where will they be kept?
 - What would her parent/guardian do/say if she was pregnant or knew she wanted to have a child now?
- 7) Discussion of the partner's views of contraceptive/condom use and desire for pregnancy.
 - How does that coincide or conflict with patient wishes?
 - Assist patient to discuss/negotiate with partner contraception, condom use, and desire for pregnancy and what to do if he is unwilling to respect her wishes.
 - Explore alternatives to sexual intercourse.

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Test Your Knowledge

A 15 year-old patient comes to clinic requesting a pregnancy test. She reports that she had sex last night with her boyfriend and the “condom broke.”

What questions would be important to ask Kim about her menstrual cycle?

- Date of last menstrual period (LMP)
- How many days? What is the flow like? Does she get cramps? When?
- Does she need medication for the cramps or miss school because of the cramps?
- Has she ever missed a period? When?
- When was menarche?
- Any other unprotected sex? When?

Can adolescents receive reproductive services without the consent of a parent?

In many states teen can receive reproductive services without the consent of a parent. Clinicians should become familiar with the state regulations.

After a thorough menstrual and sexual history, you have learned that Kim had a period that began 2 weeks ago and lasted “4 or 5 days.” Menarche was at age 12 and she has monthly cycles—initially she reports “I skipped periods sometimes” but in the last year has not “missed a period.” Menses is typically heavier on day 1 and 2 and accompanied by cramps, she successfully takes ibuprofen 400 mg po q 6 hour for relief. Kim denies break through bleeding or spotting at any other time in her cycle. She denies a history of STIs and states “I trust my boyfriend he isn’t doing anything with anyone else.” However, Kim states that she has experienced some yellowish vaginal discharge since her last period, but denies dysuria, pruritis, dyspareunia, malodor, lower abdominal pain or lesions. She admits inconsistent condoms use because “we just don’t always use one.” Kim has been sexually active for approximately 4 months with the same partner. The condom has “broken” in the past, but only once since her last menstrual period which was about 2 weeks ago.

What additional questions should you like to ask Kim at this point?

- What would she do if she was pregnant?
- Does she understand what her choices are?
- Has she ever had a pelvic exam and what was the experience like?

What contraceptive methods are most effective for teens?

- Condoms
- OCPs
- DMPA
- Contraceptive Patch

Would Emergency Contraception (EC) be appropriate today?

Yes. EC (Plan B or Yuzpe regimen) is most effective when offered in the first half of the cycle and within 72 hours of unprotected sex. However, many clinicians will provide EC up to 5 days following unprotected sex and at any point prior to menses.

What are the most common reasons why a condom breaks?

- Teen didn’t use a condom.
- Incorrectly placed on the penis without space at the tip.
- Use of oil-based lotions or vaginal creams.
- Stored improperly or expired.

What are the common symptoms associated with STIs? (See Box 4.)

- Vaginal or urethral discharge
- Dysuria or tingling sensation with urination
- Lesions or sores
- Malodor
- Dyspareunia
- Spotting

Box 4. STI Signs and Symptoms

Infection	Signs and Symptoms
Trichomonas vaginalis	copious discharge, pruritis, dysuria
Neisseria gonorrhoeae	yellow discharge, dysuria, painful intercourse
Chlamydia trachomatis	clear discharge most asymptomatic
Phthirus pubis	intense itching in pubic/perianal hair and skin sensation of movement gray-white adhesions on hairs
Herpes Simplex Virus Type I, Type II	sores, dysuria, vaginal discharge fever, flu-like symptoms if initial outbreak
Treponema pallidum	Chancere Lymphadenopathy Rash Condyloma lata
Human Papilloma Viruses	Condyloma acuminata

Adapted from Moriarty Daley & Cromwell (2002). How to perform a pelvic examination for the sexually active adolescent. The Nurse Practitioner, 27, 28–43.

How often are STIs asymptomatic?

Many teens infected with Chlamydia are asymptomatic and are diagnosed through screening. HIV and human papillomavirus typically are silent infections until the appropriate testing is done.

What are the potential sequelae for untreated STIs for female adolescents?

- Pelvic inflammatory disease
- Tubo-ovarian abscess
- Scarring
- Infertility

What STI symptoms do adolescents typically experience?

See Box 4.

Kim's chart reveals that she has had a normal physical examination 4 months ago for school and a non-contributory past medical history and negative family medical history. Kim has no known allergies and is currently not taking any medications. She has never had a pelvic examination, however, was given information about contraception and safer sex at her last visit (2 months ago) and encouraged to make a follow-up appointment if she was interested in oral contraceptive pills or DMPA. The chart also reveals that she was given condoms and appropriate counseling for proper use.

What questions would you ask Kim to determine her pregnancy wantedness?

What would she do if she found out she was pregnant today?

Does she want a baby now?

Is she trying to get pregnant? If yes, what are her reasons for wanting to get pregnant?

Is her boyfriend aware of her visit today? How will he react to a negative pregnancy test? Positive pregnancy test?

How does he feel about having a child now?

What questions would you ask her to determine her readiness to use a more reliable method of contraception?

What contraceptive methods has she heard of? What has she heard? Do any of them seem appealing? Why or why not?

Has she ever been on any type of contraception? What? When? Why did she stop?

How does she feel about making a decision to begin a contraceptive method today?

Kim is sexually active and admits to not always using condoms. She agrees she needs Plan B today and would like to know more about contraception before she makes a decision. During your discussion with Kim, it is evident that Kim does not have strong feelings one way or another about getting pregnant "if it happens it happens." She admits she forgets to use condoms and her partner would prefer not to use one. Some of her friends use the pill and the shot and she states "they are happy with using something." Kim doesn't think her boyfriend wants a baby now, but states "I don't think he has thought about it."

What stage of change is Kim currently in?

Contemplation

What is your role?

Tip balance in favor of change. Ambivalent teens have similar pregnancy outcomes as teens who express a desire for pregnancy.

What questions would you ask Kim to help her clarify her desire regarding a pregnancy?

What are good and bad reasons for having a baby now versus in the future?

What in her life would change as a result of having a child?

Does she want a child now 100%? Why or why not?

After a lengthy discussion, Kim remains ambivalent about pregnancy. She agrees to "try" to use a hormonal method of birth control in addition to using condoms. As the clinician, your next task is to assist Kim in deciding what method of hormonal contraception would work best for her.

Ask:

- What has Kim heard about oral contraceptive pills, DMPA, the patch?
- What is she most interested in? Why?
- When could she begin each of these methods? (See Cromwell, Moriarty Daley & Risser 2004 a, b.)
- How will she get it? Can she pay for it or will her insurance cover the cost?
- How will she remember to take it?
- Will she include a parent in her decision?
- What if her parent finds it?

When does Kim need to return for follow-up?

4-6 weeks

How will she get in touch with you if she has questions?

Kim should be given a card with the name of the clinician and the phone number so she can call with questions prior to the next appointment. Ideally the same clinician that saw Kim today should be available to answer any call from Kim in the future.

What are the most common side effects of each method?

See Box 5: Contraceptive Methods

Box 5 Contraceptive Methods		
Method	Common Side Effects	Typical Use
Condoms (male)	Usually none Latex sensitivity Spermicide sensitivity	15%
OCPs (combined and minipill)	Nausea Break through bleeding	8%
DMPA	Irregular bleeding Amenorrhea Galactorrhea ?weight gain	3%
Contraceptive Patch	Break-through Bleeding Site irritation Nausea Breast Tenderness Headache	8%

Adapted from Trussell, J. (2004). The essentials of contraception: Efficacy, safety, and personal considerations. In R.A. Hatcher et al. Contraceptive Technology, 18th ed. (pp. 221–252) New York: Ardent Media, Inc.

What tips can you give Kim to enhance compliance with condoms, OCPs, DMPA or the patch?

OCPs-Assist teen to identify an activity that she reliably completes each day, for example brushing her teeth before bed, and pair taking her pill.

DMPA-reminder letter sent for next appointment

Contraceptive patch- identify change day and mark on calendar/daily planner—encourage the change day to be a day that she always does something else

Based on her history, what should be included in the physical examination?

See PE Appendix.

Is a pelvic examination indicated?

Yes.

When is a pap smear indicated?

Annually or prn if abnormal findings on pelvic examination or history of abnormal pap. Many STIs are asymptomatic especially in women, screening annually for sexually active patients is indicated.

Should the pelvic exam be done today or rescheduled for another visit in the future?

Today would be best because of the concern regarding a STI.

Does she need a pregnancy test?

A pregnancy test today would not provide any information regarding last night, but would rule out an existing pregnancy. It is worth doing today for that reason. Caution the patient that if she does not have a period within 3 weeks she needs to return for a pregnancy test.

Because of the concern regarding yellow discharge since Kim's last menses, the best course of action is to proceed with a pelvic examination and evaluate for the presence of a STI.

Would urine testing for gonorrhea and chlamydia be adequate in Kim's situation?

Yellow discharge can also accompany a trichomonas infection, which is identified through wet mount evaluation of discharge from the vaginal pool.

What is included in pre-pelvic examination teaching?

Refer to Moriarty Daley, A. & Cromwell, P. (2002). How to perform a pelvic examination for the sexually active adolescent. *The Nurse Practitioner*, 27, 28–43.

Your examination includes a pelvic examination, cervical testing for gonorrhea and chlamydia and wet mount evaluation.

What are you evaluating with the wet mount?

You are evaluating for evidence of an infection

Refer to Moriarty Daley, A. & Cromwell, P. (2002). How to perform a pelvic examination for the sexually active adolescent. *The Nurse Practitioner*, 27, 28–43.

The results of the exam are as follows:

Vital signs

Bp: 98/62
HR: 74
temp: 98.8 F

Pelvic examination

External genitalia:	Tanner V normal female without lesions or nodes
Vagina:	pink mucosa without lesions, moderate amount of yellow purulent discharge
Cervix:	slightly friable, yellow purulent discharge from os, no cervical motion tenderness
Uterus:	non-tender without masses
Adnexae:	non-tender without masses
Wet mount:	+WBCs, +RBCs, no trich, no hyphae, no clue cells
Urine pregnancy test:	negative

What is your diagnosis/diagnoses at this point?

Cervicitis

What tests will you send? Why?

Swabs for Gonorrhea and Chlamydia testing.
Pap smear.

How will you discuss the findings with Kim?

Tell her that you are concerned about the yellow discharge and that you are sending tests to determine if she has gonorrhea or chlamydia, which are STIs and passed from one person to another during unprotected sex. If she does have an infection then antibiotics will be given to her and her partner to treat the infection. Emphasize that both of them need to be treated otherwise re-infection can occur.

What follow-up is necessary?

Test of cure is not necessary as long as the patient has completed the prescribed therapy. In fact, DNA amplification tests will remain positive for weeks after the infection has been treated.

How will you get in touch with Kim with the results of her tests?

Before Kim leaves the office, discuss how you can reach her with the results and when you expect to call.

Kim is at home when you call with the results of her gonorrhea and chlamydia testing. The results of the test reveal that Kim has a positive test for gonorrhea.

How will you share the results with Kim?

Tell Kim that she has a STI called gonorrhea that is passed from partner to partner during unprotected sex.

What will you treat her with?

Use the treatment regimen with the fewest doses to enhance compliance.

See CDC (2002). Sexually transmitted disease guidelines 2002. *MMWR*, 51 (no. RR-6). 1–80.

Does her partner need treatment?

Yes.

What does Kim need to discuss with her partner? How can you assist her in this process?

Kim needs to tell her partner that she had a STI called gonorrhea and he needs to be treated. Role-playing is often helpful.

Whose responsibility is it to inform Kim's partner of the diagnosis? How can you assist Kim in this process?

It is Kim's responsibility to tell her partner. Encourage her to do so to prevent re-infection or prevent someone else from getting gonorrhea from her partner.

What are possible options for Kim's partner to be treated?

STI treatment of partners is challenging. Clinicians use a variety of methods to treat the partner(s) of patients diagnosed with a STI. Several options are listed here:

- The partner may call his own provider for treatment
- Phone numbers of the local health department or STI clinic can be given to Kim and/or her partner for treatment
- The clinician may elect to treat the partner by giving Kim enough medication to treat both of them
- The clinician may offer to treat the partner after speaking to him and confirming that the medication is safe to provide

Kim is very upset but gives you the name of a pharmacy nearby and agrees to discuss the diagnosis with her partner. Kim is very concerned that "her mother will find out."

When would you like to see Kim again? Why?

It would be important to see Kim again in 4-6 weeks to ensure that she had menses and began the OCPs appropriately. In addition, a follow-up discussion about her STI treatment and if her partner received treatment should also be included in the visit.

What do you tell Kim regarding confidentiality and the diagnosis of gonorrhea?

In many states, the diagnosis and treatment of STIs are confidential. Discuss what would happen if her mother called you, for example "If your mom called and asked me what your appointment was for, I would tell her that information about a health visit is confidential and that she should discuss that with you." Gonorrhea is reportable infection, reporting guidelines are available through the state or local health department.

References

- American Medical Association (1995). *Guidelines for adolescent preventive services*. Baltimore: Williams & Wilkins.
- Bandura, A. (1997). *Self-efficacy*. New York: WH Freeman & Company.
- Bloom, K. & Hall, D. (1999). Pregnancy wantedness in adolescents presenting for pregnancy testing. *MCN, the American Journal of Maternal/Child Nursing*, 24, 296-300.
- Casey, B.J., Giedd, J. & Thomas, K. (2000). Structural and functional brain development and its relation to cognitive development. *Biological Psychology*, 54, 241-257.
- Centers for Disease Control and Prevention. (1999). Sexually transmitted disease surveillance, 1998. Atlanta (GA): U.S. Department of Health and Human Services, Public Health Service, Division of STD Prevention (US).
- Centers for Disease Control and Prevention. (2002). Sexually transmitted diseases treatment guidelines 2002. *MMWR*, 51 (No. RR-6), 1-80.
- Cowley, C.B., Beamis, K, Farley, T. (2000). To contracept or not: A prospective study of contraceptive use among adolescents at different stages of readiness to prevent pregnancy. Paper presented for Society for Adolescent Medicine.
- Cowley, C. & Farley, T. (2001). Adolescent girls' attitudes toward pregnancy: The importance of asking what the boyfriend wants. *The Journal of Family Practice*, 50, 1-5.
- Cowley, C. B, Farley, T., Beamis, K. (2002). "Well, maybe I'll try the pill for just a few months..." Brief Motivational and Narrative-based Interventions to Encourage Contraceptive Use Among Adolescents at High Risk for Early Childbearing. *Families, Systems & Health*, 20, 183-204.
- Cromwell, P.F., Moriarty Daley, A. & Risser, W. (2004a). Contraception for adolescents: Part one. *Journal of Pediatric Health Care*, 18, 149-152 .
- Cromwell, P.F., Moriarty Daley, A. & Risser, W. (2004b). Contraception for adolescents: Part two.
- Crosby, R., DiClemente, R.J., Wingood. G., Davies, S., & Harrington, K. (2002). Adolescents' ambivalence about becoming pregnant predicts infrequent condom use: A prospective analysis of nonpregnant African American females. *American Journal of Obstetrics and Gynecology*, 186, 251-2.
- DiClemente, C. (1991). Motivational interviewing and the Stages of Change. In W. Miller & S. Rollnick (Eds.), *Motivational interviewing*, (pp.191-202). New York: The Guilford Press.
- Elkind, D. (1998). Cognitive development. In S.B. Friedman, et al. (Eds.). *Comprehensive adolescent health care, 2nd Edition*. St Louis: Mosby.
- Gaffney, D.A. & Royce, C. (2003). Adolescent sexual development and sexuality. Kingston, NJ: Civic Research Institute.
- Geidd, J.N. (2004). Structural magnetic resonance imaging of the adolescent brain. *Annals of the New York Academy of Science*, 1201, 77-85.
- Geidd, J.N., Blumenthal, J., Jeffries, N., Castellanos, F, Lui, H., Zijdenbos, A., et al. (1999). Brain development during childhood and adolescence: A longitudinal MRI study. *Nature*, 2, 861-863.
- Ginsburg, K.R., Slap, G.B., Cnaan, A., Forke, C.M., Baksley, C.M. & Rouselle, D.M. (1995). Adolescents' perceptions of factors affecting decisions to seek health care. *JAMA*, 273, 1913-1918.
- Grimley, D., Riley,G., Bellis, J. & Prochaska, J. (1993). Assessing the Stages of Change and decision-making for contraceptive use for the prevention of pregnancy, STDs and AIDS. *Health Education Quarterly*, 20, 455-470.

- Hamilton, B., Martin, J. & Sutton, P. (2004). Births: Preliminary data for 2003. *National Vital Statistics Reports*, 53, (9).
- Hoffman, A. (1992). Managing adolescents and their parents: Avoiding pitfalls and traps. *Adolescent Medicine: State of the Art Reviews*, 3, 1-11.]
- Hollen, P. (1998). Intervention booster: Adding a decision making module to risk reduction and other health care programs for adolescents. *Journal of Pediatric Health Care*, 12, 247-255.
- Institute of Medicine, (1999). From neurons to neighborhoods. Washington, DC: National Academy Press.
- Jaccard, J., Dodge, T. & Dittus, P. (2003). Do adolescents want to avoid pregnancy? Attitudes toward pregnancy as predictors of pregnancy. *Journal of Adolescent Health*, 33, 79-83.
- Jemmott, J., Jemmott, L. S. & Fong, G. (1998). Abstinence and safer sex: HIV risk reduction interventions for African American adolescents. *JAMA*, 279, 1529-1536.
- Jenkins, R. & Raine, T. (2000). Helping adolescents prevent unintended pregnancy. *Contemporary Pediatrics*, 17, 75-99.
- Jessor (1991). Risk behaviors in adolescence: A psychosocial framework for understanding action. *Journal of Adolescent Health*, 12, 597-605.
- Jessor, R, Van Den Bos, J, Vanderryn, J, Costa, FM, Frances, M. & Turbin, M.S. (1995). Protective factors in adolescent problem behavior: Moderator effects and developmental change. *Developmental Psychology*. 31, 923-933.
- Kirby, D. (1997). No easy answers: Research findings on programs to reduce teen pregnancy. Washington, DC: The National Campaign to Prevent Teen Pregnancy Task Force on Effective Programs and Research.
- Kirby, D. (2001). Emerging answers. Washington, DC: The National Campaign to Prevent Teen Pregnancy.
- Kissinger, P, Trim, S, Williams, E, Mielke, E, Koporc, K. & Brown, R.W. (1997). An evaluation of initiatives to improve family planning use by African-American adolescents. *Journal of the National Medical Association*, 89, 110-114.
- Klerman, L. (2000). The intendedness of pregnancy: A concept in transition. *Maternal and Child Health Journal*, 4, 155-162.
- Marcy, S., Brown, J. & Danielson, R. (1991). Contraceptive use by adolescent females in relation to knowledge, and to time and method of contraceptive counseling. *Research in Nursing and Health*, 6, 175-182.
- Martyn, K. & Hutchinson, S. (2001). Low income African American adolescents who avoid pregnancy: Tough girls who rewrite negative scripts. *Qualitative Health Research*, 11, 238-256.
- McNeely, C., Shew, M. L., Beuhring, T., Sieving, R., Miller, B.C., & Blum, R.W. (2002). Mothers' influence on the timing of first sex among 14 - and 15 - year - olds. *Journal of Adolescent Health*, 3, 256-265.
- Moriarty Daley, A. & Cromwell, P. (2002). How to perform a pelvic examination for the sexually active adolescent. *The Nurse Practitioner*, 27, 28-43.
- Moriarty Daley, A., Sadler, L., Leventhal, J.M., Cromwell, P.F. & Reynolds, H. (2004). Clinicians' views on reproductive needs and services for teens with negative pregnancy tests. *Journal for Specialists in Pediatric Nursing*, 9, 41-49.
- Moriarty Daley, A., Sadler, L., Leventhal, J.M., Cromwell, P.F. & Reynolds, H. (in press). Negative pregnancy tests in urban adolescents: An important and often missed opportunity for clinicians. *Pediatric Nursing*.
- O'Campo, P, Fogarty, L., Gielen, A., Armstrong, K., Bond, L, Galvotti, C. et al. (1999). Distribution along a stages of change behavioral change continuum for condom and contraceptive use among women accessed in different settings. *Journal of Community Health*, 24, 61-72.
- Piaget, J. (1952). *The origins of intelligence in children*. New York: International Universities Press.
- Piaget, J. (1972). Intellectual evolution from adolescence to adulthood. *Human Development*, 15, 1-12.

- Prochaska, J.O., Velicic, W., Rossi, J., Goldstein, M.G., Marcus, B.H., Rakowski, W. et al. (1994). Stages of change and decisional balance for 12 problem behaviors. *Health Psychology*, 13, 39-46.
- Resnick, M.D., Bearman, P.S., Blum, R.W., Bauman, K.E., Harris, K.M., Jones, J. et al. (1997). Protecting adolescents from harm: Findings from the national longitudinal study of adolescent health. *JAMA*, 278, 823-832.
- Romer, D., Stanton, B., Galbraith, J., Feigelman, S., Black, M.M., & Li, X. (1999). Parental influence on adolescent sexual behavior in high-poverty settings. *Archives Of Pediatric Adolescent Medicine*, 153,1055-1062.
- Rosen, D., Elster, A., Hedberg, V., & Paperny, D. (1997). Clinical preventive services for adolescents: Position paper of the Society for Adolescent Medicine. *Journal of Adolescent Health*, 21, 203-214.
- Rosengard, C., Phipps, M., Adler, N. & Ellen, J. (2004). Adolescent pregnancy intentions and pregnancy outcomes: A longitudinal examination. *Journal of Adolescent Health*, 35, 453-461.
- Sadler, L.S., Chen, J., Moriarty Daley, A., Leventhal, J.M., & Reynolds, H.(in press). Reproductive care and rates of pregnancy in teens with negative pregnancy test results. *Journal of Adolescent Health*.
- Sadler, L.S. & Moriarty Daley, A. (2002). A model of teen-friendly care for young women with negative pregnancy test results. *The Nursing Clinics of North America*, 37, 523-535.
- Santelli, J., DiClemente, R., Miller, K., & Kirby, D. (1999). Sexually transmitted diseases, unintended pregnancy and adolescent health promotion. *Adolescent Medicine: State of the Art Reviews*, 10, 87-108.
- Steven-Simon, C., Beach, R. & Klerman, L. (2001). To be rather than not to be – That is the problem with the questions we ask adolescents about childbearing intentions. *Archives of Pediatric and Adolescent Medicine*, 155, 1298-1300.
- Stevens-Simon, C., Kelly, L. and Singer, D. (1996). Absence of negative attitudes toward childbearing among pregnant teenagers. *Archives Of Pediatric Adolescent Medicine*, 150,1037-1043.
- Thomas, M. (2000). Abstinence-based programs for prevention of adolescent pregnancies: A review. *Journal of Adolescent Health*, 26, 5-17.
- Tober, G. (1991). Motivational interviewing for young people. In W. Miller & S. Rollnick (Eds.), *Motivational interviewing*. (pp.248-259). New York: The Guilford Press.
- Trussell, J. (2004). The essentials of contraception: Efficacy, safety, and personal considerations. In R.A. Hatcher et al., *Contraceptive Technology*, (18th ed.), (pp. 221-252). New York: Ardent Media, Inc.
- Whalley, A. (1999). Preventing the high-risk sexual behavior of adolescents: Focus on HIV/AIDS transmission, unintended pregnancy or both? *Journal of Adolescent Health*, 24, 376-382.
- Winter, L. & Breckenmaker, L. (1991). Tailoring family planning services to the special needs of adolescents. *Family Planning Perspectives*, 23, 24-30.
- Zabin, L., Astone, N. & Emerson, M. (1993). Do adolescents want babies? The relationship between attitudes and behavior. *Journal of Research on Adolescence*, 3, 67-86.
- Zabin, LS, Hirsch, MB, Smith, EA, Streett, R, & Hardy, J.B. (1986). Adolescent pregnancy-prevention program: A model for research and evaluation. *Journal of Adolescent Health*, 7, 77- 87.
- Zabin, LS, Sedivy, V, & Emerson, MR. (1994). Subsequent risk of childbearing among adolescents with a negative pregnancy test. *Family Planning Perspectives*, 26, 212-217.
- Zabin, L., Emerson, M. Ringers, P. & Sedivy, V. (1996). Adolescents with negative pregnancy test results. *JAMA*, 275, 113-117.



Helpful Web Sites for Adolescent Reproductive Issues

www.teenpregnancy.org

www.plannedparenthood.org

www.healthyteennetwork.org

www.adolescenthealth.org

www.cdc.gov

www.contraceptiononline.org



Appendix

Quick Reference Guide

Teen C.A.R.E. – Overview and Outline for Content of Visits and Follow-up Care

Initial Visit

Introduction

- Introductions
- Brief explanation and welcome to care
- Confidentiality discussion

Health History

- Family History
- Social History
 - habits: smoking, alcohol, drugs
 - family: where living, who living with, guardian
 - peers: school, friends, activities, boyfriend
- Past Medical History
 - allergies
 - medications
 - health concerns
- Assessment
 - reproductive history: number of partners, STD history
 - contraception history and attitudes
 - pregnancy history
 - interest in becoming pregnant vs. using contraception/condoms
 - partners interest in pregnancy vs. using contraception/condoms
 - condom use patterns/attitudes

Teen's Stage of Readiness

- Precontemplative Stage – not thought of using contraception or desires pregnancy
- Contemplative Stage – given some thought to use, but no immediate plans to use
- Determination Stage – want to try contraception in near future
- Action Stage – either wants to use or is using contraception

Counseling Intervention – Stages of Pregnancy Wantedness

- Desires Pregnancy (precontemplative stage)
 - Propose delaying pregnancy; have pt consider cost/benefits of becoming pregnant now
 - How sure are you that you want a child?
 - Can you list reasons to have a child now?
 - Can you list reasons not to have a child now?
 - Explore relationship with partner and parents and their influences on decisions
 - What type of father do you want for your child?
 - Will your boyfriend be that type of parent?
 - Explore issues of strength and resiliency/opportunity regarding own goals for life and influence of delaying pregnancy
 - List advantages and disadvantages to having a child now vs. delaying
 - Look at goals for the child—able to meet better now or later?
 - Goals for patient as a parent – able to meet goals better now or later?
 - Reinforce need to protect self against STIs/condom use
 - Important to be healthy now? Meet goals, future pregnancy and parenting
- Ambivalent about Pregnancy (contemplative stage)
 - Explore relationship with partner and parents and their influences on decisions
 - What type of father do you want for your child?
 - Will your boyfriend be that type of parent?
 - Explore ambivalence and reasons to have a child vs. delay
 - List advantages and disadvantages to having a child now vs. delaying
 - Look at goals for the child – able to meet better now or later?
 - Goals for patient as a parent – able to meet goals better now or later?
 - Address questions, concerns, suggest trial of birth control
 - Stress the adolescent being in charge of decision when to have a child
 - Explore need to protect self against STIs/condom use
 - Important to be healthy now? Meet goals, future pregnancy and parenting
- Desires Contraception (Determination stage)
 - Provide options; discuss questions/concerns; encourage discussion with partner & parent; provide birth control
 - Reinforce need to protect self against STIs/condom use
 - Important to be healthy now? Meet goals, future pregnancy and parenting
 - Menstrual cycle/reproductive system

Developmental Oriented Counseling and Self-Efficacy Discussion

- Pregnancy wantedness
- Decision to use contraception
- Decision to protect self against STIs
- Decision to discuss issues with partner or parents

Strategies to Enhance Social Skills for Pregnancy and STI Prevention

- Scenarios for rehearsal of negotiations with partner or parents

- Modeling of skills necessary for correct use of contraception and condoms
- Decision-making strategies based on goals and attitudes about pregnancy and STI prevention

Physical Exam

- Vital signs
- Weight/height
- HEENT
- Heart/lungs
- Breasts
- Abdomen
- Extremities
- Pelvic
 - STI screening
 - Pap smear
- Contraception teaching
- Provide contraception and give condoms
- Blood work: consider Hep B, VDRL, HIV, CBC

Follow-Up Care

- 1 month for 1st visit; every 3 months if return visit and PRN
- Give business card
- Determine best way to contact patient
- Phone call to be made in 1 week to determine compliance, answer questions, if follow-up is needed

Follow-Up Visit Format

Assessment

- How has it gone since last visit?
 - Using contraception?
 - Any problems with contraception?
 - Using condoms?
 - Any problems with condom use?
- Review discussion of pregnancy wantedness and/or delay of pregnancy; consider booster counseling session if needed

Results of Previous Tests

- Blood work
 - further tests needed?
 - Vit/Fe needed?

- STI screening
 - Prescriptions
 - Contacting partners: Has the partner(s) been notified/treated?
- Pap smear
 - Need to treat infection?
 - Need repeat pap?

Physical Exam

- BP
- Weight

Review Contraception and Condom Teaching

- Use
- Common side-effects
- Risks/benefits
- Warning signs

Follow-Up

- 3-month visit and PRN
- Contact prior to visit as a reminder

