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Adolescence and Human Sexuality

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Chapter 2**ADOLESCENCE AND HUMAN SEXUALITY**

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ABSTRACT

Human sexuality is a complex phenomenon involving the interaction of biology, sex, core gender identity, and gender role behavior. Successful completion of normal stages of sexuality development is important for children and adolescents to allow for optimal life as an adult. Controversies arise for clinicians as they work with their pediatric patients regarding health care sexuality issues. It is important that clinicians help these patients in an unbiased and neutral manner. As adults, these children and adolescents will function in a number of sexuality roles, whether heterosexual, homosexual, or bisexual. This chapter reviews many of these complex and critical issues that involve the fascinating development of human sexuality in pediatric patients.

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INTRODUCTION

Sexuality education is the knowledge that we are all sexual human beings, that our sexuality is part of our lives and can be an enhancement or enrichment of our total personality (1). Sexuality is a complex phenomenon involving interaction between one's a) biologic sex; b) core gender identity (sense of maleness and femaleness); c) gender role behavior (nonsexual as well as sexual) (see tables 1 and 2) (1-3). Sexuality is also a basic yet profound recognition that humans need other humans and that this human capacity to give and receive love represents a continuum from birth to death. Human sexuality involves the process of the individual at any age interacting with others and how one learns to get others to interact with oneself. As sexuality develops, the success or failure experienced by the child and teenager has much to do with eventual success or failure as an adult. Childhood sexuality is often viewed in terms of how concepts of human sexuality progress throughout stages of childhood-infancy, toddlerhood, preschool period, school age period, and adolescence (see appendix A). A key component to the healthy development of the teenager is how he/she proceeds with the stages of adolescent sexuality. Adolescence is the critical period of physical, psychosocial, as well as cognitive growth, leading from childhood to maturation and adult life. Puberty is the word used to describe the physical-somatic changes of adolescence. During the adolescent years, the individual must develop a healthy self-esteem and also sexual comfort--learning to deal with those in his/her "sexual" universe.

PSYCHOSEXUAL DEVELOPMENT

Sexuality begins at birth or even at conception. At age 8-10 months, infants become aware of their genitalia (penis or vagina) and by the age of three, they usually have developed a fixed gender identify. By the time of their fourth birthday, they perceive themselves as being either boys or girls for life. The psychoanalytic view of adolescent sexual development by Freud offers health care professionals a framework for assessing adolescent sexuality. Freud contended that adults develop as sexual beings from birth through adulthood (see table 3) (4). Though various scholars disagree on the exact meaning of these stages, there is agreement that by the time a child enters puberty, he/she should have developed a good self-image, a sense of security, a willingness to

trust others, and a conscience with a normal sense of right versus wrong. It is the parents that must first accept their children's gender, and, then, communicate to them that they are intact, beautiful, and well-formed. If this is not the case, major problems in adolescence and adulthood are likely to unfold.

Table 1. Components of sexuality

Biologic Sex: The biologic sex (XX or XY) is determined at conception, but postnatal sex hormones also have influence on the developing fetus. Between the sixth and twelfth fetal week, androgens program the XY fetus to develop biologically, and to some extent, behaviorally into a male. The presence of female hormones along with the absence of a critical level of fetal androgens allows the XX fetus to develop into a normal female. Rare situations involving an excess or deficiency of sex hormones can alter the normal male or female outcome; likewise, chromosomal abnormality can cause intersex conditions. However, in nearly all cases, the XX or XY fetus is normally programmed in a poorly understood manner; and the biologic sex is clearly assigned at birth.

Core Gender Identity: During early childhood, individuals learn various behaviors associated with masculinity or femininity and then establish what can be called non-sexual gender role behavior. Thus, girls play with dolls and wear dresses; boys do not and normally will not even consider such activities.

Gender Role Behavior: Gender role behavior from a sexual viewpoint refers to behavior influenced or precipitated by a personal desire for some type of sexual pleasure. This desire for physical sex resulting in orgasm is mainly explored during adolescence and frequently modified during adulthood. However, many experts emphasize that the sexual orientation (heterosexual or homosexual) of an individual develops in childhood by age 6 – 8, and not in adolescence.

A review of normal childhood behavior reveals that physiologic components to sexuality are evident at an early age (see tables 1,2 and appendix A). During the first year of life (infancy), exploration is through mouthing and sucking while trust in the caretaker (especially the mother) develops; aggression may develop in the form of biting. Infants learn to be sexual by touching and being touched; how they are held, soothed, and nurtured impacts their emerging sexuality and sets the stage for their sexuality throughout life. Sexual exploration may involve the skin as an erotic organ and some genital touching. Male erections are noted even in utero; orgasm as a neurophysiological phenomenon can occur as early as the fourth month of life and is common in males 6 to 8 years of age. Female newborns often have leukorrhea or vaginal discharge as a result of maternal hormones.

Table 2. Definitions of terms in sexuality*

<i>Genetic sex</i>	Chromosomally determined sex (XX, XY, XXY, XYY, XO, others).
<i>Anatomic sex</i>	Phenotypic appearance (male, female, intersex, includes variations such as the congenital adrenal hyperplasia (adrenogenital syndrome) and the incomplete masculinization syndrome).
<i>Sexual dimorphism</i>	The structural, physiologic, and behavioral differences between the sexes.
<i>Core gender identity</i>	Self-identification as either male or female, typically occurs by age 3 years.
<i>Gender role identity</i>	The summation of actions that indicate to self and society the degree to which one is male, female, or ambivalent. It is influenced by familial, cultural, and social role expectations, and includes but is not limited to sexual arousal and response. It may also be referred to as one's "sex role".
<i>Transsexualism</i>	The expression or belief that one's gender identity does not match one's anatomic sex ("woman trapped in a man's body, or the reverse")
<i>Sexual (erotic) orientation</i>	Defined by one's prevailing, unrepressed sexual longings and fantasies.
<i>Heterosexuality</i>	An erotic preference, including fantasies and experiences, for persons of the opposite sex, with minimal erotic interest in the same sex.
<i>Bisexuality</i>	The capacity to respond to both sexes to a significant but not necessarily equal degree
<i>Homosexuality</i>	An erotic preference, including fantasies and experiences, for persons of the same sex, with minimal erotic interest in the opposite sex.
<i>Homophobia</i>	The condition in which those whose love and lust are attached to others of the same sex are dreaded or feared.
<i>Antihomosexuality</i>	The pervasive and often institutionalized attitudes denigrating homosexuality. Experienced as self-negating and precipitating significant insecurity, ambivalence, and self-loathing by persons who are homosexually oriented during childhood and adolescent development.
<i>Hyposexuality</i>	The paucity of erotic response or motivation.
<i>Asexuality</i>	The absence of erotic response or motivation
<i>Transvestism</i>	Dressing in clothing of the opposite sex, predominantly by males, for the purpose of erotic stimulation.
<i>Cross dressing</i>	Dressing in clothing of the opposite sex with the intention of expressing identification with or caricaturing the opposite sex role identity; does not generally involve erotic stimulation.

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Table 3. Freud's psychosexual states of development

<ol style="list-style-type: none">1. Oral: Feeding; pleasure derived through the mouth; ages birth-1½ years; security and optimism develop, while conflicts at this stage may lead to distrust of one's environment and a sense of generalized hostility.2. Anal: Toilet training and control over self and environment through elimination functions; ages 1-6 years.3. Phallic phase: Discovery of genitals, pleasure derived through the genitals. Boys experience <i>castration anxiety</i>, fearing genital damage or loss. <i>Oedipus Complex</i> in males as a result of competitive feelings with the father is resolved when the boy develops normal identification with the father. Girls develop <i>penis envy</i>—similar concept for girls is called <i>Electra Complex</i>. This stage is considered ended when temporary resolution of the Complex occurs; ages 3-6 years. <p>Note: Freud's controversial theories of psychosocial development provide a framework for understanding human psychopathology as a failure to resolve the <i>Oedipus</i> or <i>Electra Complex</i>.</p> <ol style="list-style-type: none">4. Latency phase: Child expands intellectual and social skills while repressing childhood sexuality development. End of this stage signaled by the onset of puberty; ages 6 to 9 years.5. Genital phase: <i>Oedipus</i> or <i>Electra Complex</i> is once again raised; the development of normal sexual health dictates successful resolution of this complex. Healthy adult sexuality begins to occur with puberty; ages 6-15 years.

During the toddler period (ages 2-3 years) children develop mobility and language skills; the process of autonomy is noted and parents learn to deal with the word “no!” The toddler also learns what boys and girls do, how sex roles are different, and the names of body parts. Masturbation or self-genital manipulation for pleasure is very common between ages 2-6 years. Children during the pre-school period (ages 3-5 years) continue with an interest in masturbation, but also learn more of the differences in males versus females; a curiosity develops about sex play experimentation and exhibitionism. Table 4 provides guidelines for distinguishing between experimentation and sexual exploitation (5-7). The reaction of parents to their child's growing interest in sexuality sets the tone for the incorporation of human sexuality into the child's sense of self esteem.

Children first learn about their personal boundaries from their parents (e.g., that not all exploratory behaviors are appropriate in every place and time); thus, trusting relationships and open communication between them are very significant. Parents should also communicate the rights for privacy and hygiene, and the necessity to share fears and concerns with trusted adults (e.g., nobody is to touch their body inappropriately or have them keep secrets from either parent). The establishment of core gender identity develops as the child

enters the school-age period (5 years of age to the beginning of puberty). The latency age child has same-sex friends and sexuality is often expressed with an intense interest in prurient or salacious stories, jokes, riddles, and songs; interest in masturbation may recede until puberty develops. However, latency stage children are naturally curious about the anatomy of the opposite sex (6).

Table 4. Distinguishing sexual exploitation from experimentation

<p>1. What is the age difference between the participants? If the children are not peers in terms of age or cognitive level, exploitation is likely.</p> <p>2. Is the activity consistent with the developmental level of the participants? Pre-pubertal exploratory behavior typically involves mutual genital display, touching, and fondling; intercourse or attempted intercourse is atypical among preschoolers and is rare in the young school aged child (6-9 years).</p> <p>3. What is the motivation of the participants? Young children are motivated to exploratory behavior by curiosity about differences and similarities in anatomy and pleasurable feelings associated with masturbation. The older child adds interest in sexual roles and sexual identity to the curiosity and pleasure motivations. Participants who are not mutually motivated by these factors may be involved in exploitative sexual contact.</p> <p>4. Is the activity consensual or coercive? Mutual consent is typical of exploratory behaviors. Abusive behavior often involves elements of pressure, misrepresentation, force, threat, secrecy, or other forms of coercion. Although some of the threat or coercion is obvious and violent, the evaluator must take care to recognize subtle emotional pressure or the use of implied authority by an older child or adolescent in some cases.</p> <p>5. Is there an outside influence involved? Two children or adolescents may be involved in age-appropriate exploratory behavior, but if the contact has been arranged for the pleasure of another older individual, it is exploitative.</p> <p>6. What is the response of the child to the contact? Mutual exploratory behavior may engender some guilt feelings in children; however, feelings of anger, fear, sadness, or other strongly negative responses are unusual. Exploitation is more often viewed in negative terms by the child; however, some abused children will appear to have a neutral or positive emotional response to abuse. The victim's denial may mask the negative responses in some cases, or the child's emotional needs for positive aspects of the relationship may outweigh the negative aspects of the sexual abuse.</p>

Adapted from De Jong, 1989 (7).

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These are normal developmental phenomena, and parental attitudes are a major influence on attitudes that children develop about sexual behavior and feelings. As noted by Mary Calderone (1):

Whatever happens, it is clear that by the time the child arrives at school, it has already received, for good or ill, the most profound as well as the most unchangeable sex education it will ever receive in its life.

If a parent finds a 4 year old masturbating and aggressively reacts to inform the child it is “unclean” and not “respectable”, the child clearly learns to associate normal sexuality with negativism – a lesson carried throughout his/her life. If the natural curiosity of the latency age child is totally repressed, the child receives the wrong message about human sexuality.

Misinformation on the part of parents and failure to teach the child normal sexual concepts result in numerous psychosexual difficulties in adolescence and adulthood. It is curious to see 5 year olds who can name the most common body parts, but not their own genitals. It is even more curious to see health care professionals contribute to this by not exploring such ideas with parents and by not even including the genitals as part of the normal physical examination. Health care professionals must teach normal concepts of human sexuality and encourage parents to do so also. Proper naming of their infant’s genitalia (e.g., vagina or penis) is a step towards this goal. Other groups, such as religious and educational institutions, profoundly affect children and must actively join parents in the area of sex education of children and adolescents.

As the grade school child transitions into adolescence, their interests and actions regarding their sexuality expands. The manner in which the adolescent deals with his/her sexuality is far more influenced by what he/she experienced as a child at home, viewing and interacting with parents, than from what they may learn during adolescence. Unfortunately, the negative mixed messages they receive about human sexuality contributes to the many sexuality-related problems seen in many youth and adults: a) depression, b) serious rebellion against society, c) sexually transmitted diseases, d) unwanted pregnancy, e) incest, f) runaway behavior, g) adolescent prostitution, h) marital dysfunction, and i) sexual dysfunction. It is important to remember that sexuality is simply a very important, normal, and crucial part of life and that failure to deal with normal concepts results in major problems in adolescence and adulthood.

ATTITUDES AND SEXUALITY: MASTURBATION

An excellent example of the potential detrimental effect that negative societal attitudes can have on sexuality is offered by looking at historical views on masturbation (1,8). For centuries, this persistent aspect of sexuality was condemned as sinful and/or harmful to human health. Some incorrectly attributed this conclusion to Genesis 38:9, when Onan was condemned for not impregnating his brother's wife after the brother died. This was actually part of the Levirate Marriage Concept which was intended to assure survival of human civilization at a time of very high infant mortality rates and relatively short human life spans. Onan performed coitus interruptus, but his action was incorrectly called masturbation or onanism by later generations. Galen (180 AD), the famous Roman physician, wrote that masturbation was a very harmful habit and when encountering a male who engaged in this practice, he warned:

Watch carefully over this young man, leave him alone neither day nor night; at least sleep in his chamber. When he has contracted this fatal habit (masturbation), the most fatal to which a young man can be subject, he will carry its painful effects to the tomb – his mind and body will always be enervated (1,8).

In 1716, Bekker wrote a book called "Onania. The heinous sin of self population", which strongly advocated the view that masturbation was immoral and caused many health problems. In 1766, an influential Swiss physician, Tissot, wrote what was to become a well-known book called "A treatise on the diseases produced by onanism" (9). His book offered this same thesis and such a conclusion, became the dominant medical view for the next 150 years or more; it was taught in medical schools that most of human medical and mental illnesses were the result of masturbation.

Various treatments were devised to stop masturbation including prayer, diverse dermatological agents, opium, diet, genital cautery, electrodesiccation of rectum or genitals, devices to prevent penile tumescence (including the spermatorrhea ring with spikes in its middle), circumcision, clitorectomy, castration and others. From 1890 to 1925 there was an American group of surgeons (called the Orificial Surgery Society) who taught and practiced genital surgery as treatment measures for masturbation. The roots of such ideas are deeply imbedded in religious bias and fear that masturbation injures sperm – thus possibly interfering with the survival of civilization.

A gradual change in such attitudes was observed in the past century. During the early part of the 20th Century, authors stressed that masturbation as such may not be harmful, but guilt over such worry certainly can be injurious to mental health. By the middle of the 20th century, many physicians accepted this concept and numerous researchers began to study masturbation as a very common aspect of normal human sexuality. It was noticed that genital self-stimulation for pleasure is practiced by most adults in some manner or other without deleterious effects on human physiology.

Pediatricians now teach that “excessive” masturbation in infants may result from such problems as pinworm infestation, diaper dermatitis, tight clothes, non-specific genital pruritus, phimosis and other medical conditions. Freud’s view that masturbation drained energy from children is not accepted now. However, it is known that certain masturbation variations can be harmful; an example is the adolescent sexual asphyxia syndrome – in which the young person attempts to partially hang himself/herself by the neck (“partial hanging”), while masturbating in order to achieve an orgasm.

Current teaching among academic medical or psychological groups is that masturbation is not harmful by itself and can be useful as part of a therapeutic approach to correct various sexual dysfunctions. Some youth, encouraged by their “peer” journals, are encouraged to masturbate in order to relieve sexual tension. However, there still exists considerable worry by parents about the “perceived” effects of masturbation on their children. Thus, anxiety about masturbation and other important aspects of human sexuality remains today, especially because comprehensive sex education is rarely granted to children and youth in the United States. Young children reflect this ignorance and uneasiness about their own sexuality with resultant negative effects. As parents have the greatest influence on sexual decision making of youth, a partial solution for this complex issue is to encourage them to acquire a broad knowledge of human sexuality, which is consistent with their own moral philosophy and culture, and then to share this with their offspring. Health care professionals can assist in this goal as well as they interact with children and youth.

THE ROLE OF CENTRAL NERVOUS SYSTEM MATURATION

Brain cells consist of neurons and glia; the latter support, nourish, and clean the neurons (10). After the billions of central nervous system (CNS) cells are developed by late fetal life, CNS pruning and differentiation occurs in an

aggressive fashion in the young child and young adolescent (11). Approximately three-fourths of the brain growth in weight occurs by age 2 years, while CNS maturation continues throughout childhood and adolescence; this includes axon myelination, a process increasing the efficiency and speed of nerve conduction (12). The ability of CNS cells to adapt to challenges is called plasticity; another process is the pruning or sculpting of these cells starting in late fetal life and accelerating in the young child and young adolescent (13).

The excessive number of CNS cells that develops in fetal life is reduced by the process of apoptosis (programmed cell death) in which cells are destroyed; as the hormones of puberty are increasing, apoptosis accelerates, leading to massive death of neurons and the removal of half of the cortical synaptic connections. Puberty is a very significant neurobiological event that has profound effects on the growth and development of the adolescent.

PUBERTY

The hallmark of adolescence is the process of puberty (see table 5), a profound neurobiological/psychological event in the life of each child that prepares the way for eventual adulthood (14-16). The exact trigger for puberty is not yet clear, but it involves central nervous system (CNS) maturation with reduced hypothalamic sensitivity to gonadal steroids by changes in the GnRH pulse generator; there is also adrenal gland maturation (15,17). The progression (see table 6) through puberty is predictable, but there is considerable variation in its onset, timing, tempo, and magnitude of changes (see table 7). There are five stages of pubertal development due to hypothalamic-pituitary-gonadal maturation, called Sexual Maturity Ratings (SMR) or Tanner Stages (see tables 8 and 9) (18,19).

Table 5. Major physical changes of puberty

<p>Major increase in genital system (primary and secondary sex characteristics) Gaining of 25% of final height (distal growth, e.g., of feet, may precede that of proximal parts, e.g., the tibia, by 3 to 4 months) Doubling of lean and nonlean body mass (gaining by 50% of the ideal body weight) Doubling of the weight of the major organs Central nervous system maturation (without increase in size) Maturation of facial bones Marked decrease in lymphoid tissue</p>

Table 6. The sequential changes of puberty

Adolescent female ^a
Breast bud (thelarche)
Pubic hair development (pubarche)
Height velocity peak
Menarche (onset of menstruation)
Axillary hair
Final pubertal changes, e.g., full breast, pubic hair, and completed height development
Adolescent male ^a
Early testicular growth
Pubarche
Testicular and penile growth
Nocturnal emissions
Height velocity peak
Marked voice changes
Facial hair growth and final pubertal changes, e.g., full genital, height, and muscle development

^aNormally over a 2 to 4 year period.

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Table 7. Variations in pubertal changes

Pubertal changes	Age Range of Appearance (yrs)
Thelarche	6-15
Pubarche	9-14
Menarche	10-17
Testicular enlargement	9-15
Peak height velocity (male)	10-17
Peak height velocity (female)	10-14
Adult breast stage (V)	12-19
Adult genitalia (male V)	13-18

Eventually there is a rise in gonadotropins (Follicle Stimulating Hormone [FSH], Luteinizing Hormone [LH]), sex hormones (i.e., estrogen, testosterone), adrenal gland steroids, growth hormone, insulin-like growth factors (IGFs or somatomedins) and other hormones. Thelarche (breast budding or SMR 2) is the first clinical evidence of puberty in females, developing between 6 and 13 years of age, typically between 10 and 12 years of age. Menarche (onset of menstruation) usually follows in 1 to 3 years in SMR 4, often between 12 and 13 years of age (range of 10 -17 years). The first

clinical event of puberty (SMR 2) in the male is enlarged testicles (over 3 mL or 2.5 cm in diameter) and scrotal thinning; ejaculation is seen at SMR 3 and fertility at SMR 4.

Table 8. Sexual maturity rating or Tanner staging in females

Stage	Breasts	Pubic hair	Range
I	None	None	Birth to 15 yr
II	Breast bud (thelarche): areolar hyperplasia with small amount of breast tissue	Long downy pubic hair near the labia; may occur with breast budding or several weeks to months later (pubarche)	6 to 15 yr
III ^b	Further enlargement of breast tissue and areola	Increase in amount of hair with more pigmentation	10 to 15 yr
IV ^c	Double contour form: areola and nipple form secondary mound on top of breast tissue	Adult type but not distribution	10 to 17 yr
V ^d	Larger breast with single contour form	Adult distribution	12 ½ to 18 yr

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^a Peak height velocity often occurs soon after stage II.

^b 25% develop menarche in late III.

^c Most develop menarche in stage IV 1 to 3 yr after thelarche.

^d 10% develop menarche in stage V.

The growth spurt results in the final 25% of the adult height and is an early pubertal event in females (SMR 2) often at age 11.5 years and a late pubertal event in males (SMR-4), typically at age 13.5 years of age; the average growth spurt lasts 24 to 36 months. Those who have early (precocious) or late (delayed) puberty can have considerable psychosocial consequences. For example, the female and male who develop much earlier than peers, may be subjected to sexual behavior (including abuse) much earlier than peers who develop puberty over a normal chronological period.

Puberty stimulates more interest in sexuality in the growing and rapidly changing adolescent. Young teen males may be concerned about spontaneous erections, nocturnal emissions, and same-sex sexual experimentations. Males may also be concerned about the development of gynecomastia, or the usually transient development of breasts noted in as many as two-thirds of SMR 2-3 males. Though usually resolved in 12 to 18 months, gynecomastia may cause

confusion about male identity and intense anxiety while undressing in front of peers in physical education classes. Reassurance from the trusted clinician about the benign nature of this phenomenon is very helpful to the male, though temporary release from situations of being undressed in front of peers may be necessary; surgery is also necessary in some situations of persistent gynecomastia, large breasts, or severe psychosocial stress. Education about important aspects of puberty is an important and needed task for primary care clinicians (16).

Table 9. Sexual maturity rating or Tanner staging in males

Stage	Testes	Penis	Pubic hair	Range
I	No change, testes 2.5 cm or less	Prepubertal	None	Birth to 15 yr
II	Enlargement of testes, increased stippling and pigmentation of scrotal sac	Minimal or no enlargement	Long downy hair often occurring several months after testicular growth; variable pattern noted with pubarche	10 to 15 yr
III ^a	Further enlargement	Significant penile enlargement, especially in length	Increase in amount, now curling	10 ½ to 16 ½ yr
IV ^b	Further enlargement	Further enlargement, especially in diameter	Adult type but not distribution	Variable; 12 to 17 yr
V ^c	Adult size	Adult size	Adult distribution (medial aspects of thighs, linea alba)	13 to 18 yr

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^a Peak height spurt usually between III and IV.

^b Axillary hair develops, as well as some facial hair.

^c 20% have peak height velocity now. Body hair and increase in musculature, others, continues for several months to years.

Females may be worried about vaginal discharge (estrogen-stimulated “physiologic leukorrhea”), nocturnal sexually-oriented sex dreams, homosexual interests (including sexual experimentation) and pressure from peers and society to be sexually active (also seen in the male as well). Both males and females may be concerned with the effects of acne vulgaris, body odor, seborrheic dermatitis, and other dermatologic effects of puberty. Crushes on non-parent figures is common in both sexes, and includes interest in teachers, youth leaders, coaches, and others. If adults misinterpret these

“crushes”, sexual abuse results with severe negative consequences for this adolescent. The influence of parents’ reactions to these changes and that of the family’s religious teaching have profound effects on how adolescents deal with these emerging concepts of human sexuality.

NORMAL ADOLESCENT SEXUALITY STAGES

Adolescent psychosocial and cognitive development is typically divided in three classic periods: Early, middle and late adolescence (see table 10) (2,14). The young adolescent resumes previously acquired interest in the development of interpersonal relationships. Typically, the youth approaches this from a narcissistic viewpoint in which the individual’s interest comes first and concerns of others are not considered. This “selfish” attitude starts with those of the same sex and extends to those of the opposite sex during mid-adolescence. First, there is exploration of one’s own body linked with concerns of normality; then comes the comparison with peers of the same gender. Interest towards the opposite sex finally occurs; it is basically platonic during early adolescence and it is gradually expressed through sexual experimentation during middle adolescence.

Considerable energy is spent acquiring social skills and friendships with same-sex individuals. Thus, boys tend to develop “gangs” of males who engage in various behaviors, as each member tests the others in diverse aspects of adolescence. Definitions of masculinity are tested and confirmed within such groups. Homosexual experimentation and considerable false braggadocio about sexuality are quite common.

Girls tend to associate with a few very close girlfriends and then, to a lesser extent, deal with a larger group of females. The extent of female masturbation and homosexual experiences is unknown, but is probably less than that reported in males. This early adolescent phase of development is often referred to as the homosexual phase and is considered normal. Also, classic Freudian theory teaches that early adolescence is the time for reemergence of the Oedipus complex and, if normal sexual health is to occur, it must be finally resolved (see table 3) (4).

Table 10. Adolescent psychosocial development

	Early adolescence (11-14 yr)	Middle adolescence (15-17 yr)	Late adolescence (18-25 yr)
Cognitive thinking	Concrete thinking: here and now. Appreciate immediate reactions to behavior but no sense of later consequences	Early abstract thinking: Inductive/deductive reasoning. Able to connect separate events, understand later consequences. Very self-absorbed, introspective, lots of daydreaming and rich fantasies	Abstract Thinking: Adult ability to think abstractly. Philosophical. Intense idealism about love, religion, social problems
Task areas			
1. Family – Independence	<ul style="list-style-type: none"> -Transition from obedient to rebellious -Rejection of parental guidelines -Ambivalence about wishes (dependence/independence) -Underlying need to please adults -Hero worship (“crushes”) 	<ul style="list-style-type: none"> -Insistence on independence, privacy -May have overt rebellion or sulky withdrawal -Much testing of limits -Roleplaying of adult roles (but not felt to be “real” – easily abandoned) 	<ul style="list-style-type: none"> -Emancipation (leave home) -Reestablishment of family ties -Assume true adult roles with commitment
2. Peers – social/sexual	<ul style="list-style-type: none"> -Same-sex “best friend” -“Am I normal?” concerns -Giggling boy-girl fantasies -Sexual experimentation not normal at this age. – counteract fears of worthlessness -Obtain “friends” -Humiliate parents 	<ul style="list-style-type: none"> -Dating, intense interest in “boys” -Sexual experimentation begins -Risk-taking actions -Unrealistic concept of partner’s role -Need to please significant peers (of either sex) 	<ul style="list-style-type: none"> -Partner selection -Realistic concept of partner’s role -Mature friendships -True intimacy possible only after own identity is established -Need to please self too (“enlightened self-interest”)
3. School – Vocation	<ul style="list-style-type: none"> -Still in a structured school setting -Goals unrealistic, changing -Want to copy favorite role models 	<ul style="list-style-type: none"> -More class choices in school setting -Beginning to identify skills, interests -Start part-time jobs -Begin to react to system’s expectations: may decide to beat the establishment at its own game (super achievers) or to reject the game (dropouts) 	<ul style="list-style-type: none"> -Full-time work or college -Identify realistic career goals -Watch for apathy (no future plans) or alienation, since lack of goal-orientation is correlated with unplanned pregnancy, juvenile crime, etc.
4. Self-perception Identity	<ul style="list-style-type: none"> -Incapable of self-awareness while still concrete thinkers -Losing child’s role but do not have adult role, hence low self-esteem 	<ul style="list-style-type: none"> -Confusion about self-image -Seek group identity -Very narcissistic 	<ul style="list-style-type: none"> -Realistic, positive self-image -Able to consider others’ needs, less narcissistic

Table 10. (Continued)

	Early adolescence (11-14 yr)	Middle adolescence (15-17 yr)	Late adolescence (18-25 yr)
Social Responsibility	-Tend to use denial (it can't happen to me)	-Impulsive, impatient	-Able to reject group pressure if not in self-interest
Values	-Stage II values (back-scratching) (good behavior in exchange for rewards)	-Stage III values (conformity) (behavior that peer group values)	-Stage IV values (social responsibility) (behavior consistent with laws and duty)
Chief health issues (other than acute illness)	-Psychosomatic symptoms -Fatigue and "growing pains" -Concerns about normalcy -Screening for growth and development problems	-Outcomes of sexual experimentation -Prevention of pregnancy, STD – AIDs -Health-risk behaviors (drugs, alcohol, driving) -Crisis counseling (run-aways, acting-out, family, etc.)	-Health promotion/healthy lifestyles -Contraception and STD – AIDs prevention -Self-responsibility for health and health care
Professional approach To retain sanity, you and your staff should: -Like teenagers -Understand development -Be flexible -Be patient	-Firm, direct support -Convey limits-simple, concrete choices -Do <i>not</i> align with parents, but do be an objective caring <i>adult</i> -Encourage transference (heroworship) -Sexual decisions-directly encourage to wait, to say "NO" -Encourage parental presence in clinic, but interview teen alone	-Be an objective sounding board (but let them solve own problems) -Negotiate choices -Be a role model -Don't get <i>too</i> much history ("grandiose stories") -Confront (gently) about consequences, responsibilities -Consider: what will give them status in eyes of peers? -Use peer-group sessions -Adapt system to crises, walk-ins, impulsiveness, "testing" -Ensure confidentiality -Allow teens to seek care independently	-Allow mature participation in decisions -Act as a resource -Idealistic stage, so convey "professional" image -Can expect patient to examine underlying wishes, motives (e.g., pregnancy wish if poor compliance with contraception) -Older adolescents able to adapt to policies/needs of clinic system

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Middle adolescence is typically called the heterosexual stage, as youth acquire diverse experiences with the opposite sex; these experiences can be

quite short (even one or two days) and intensive (see table 10). This mainly occurs during this “selfish” period, because of partner idealization, followed by disappointment and moving on to the next partner (e.g., serial monogamy phenomenon). During middle adolescence, depending on the youth’s self-image, opportunity, and parental influence, there is a normal sequencing of this heterosexual development. It begins with interest in the opposite gender, and is followed by group dating, individual dating, and eventually sexual intimacy. Such intimacy runs an individual course including hand-holding, superficial versus “serious” kissing, petting, oral sex, anal sex, and/or vaginal coitus. This relationship is also described as narcissistic (generated from self-interest) and deeply embedded in resolution of the Oedipus or Electra complex (see table 3). Late adolescence is normally the time to begin consideration of available adult lifestyles. The ability of having functional non-selfish relationships finally develops (see table 10).

ADOLESCENT COITAL EXPERIENCE

Kinsey, 1948, reported that 20% of American females aged 16-20 years were coitally experienced (20). Sorensen (21) in 1973 surveyed 400 American youth and reported coital experience in 44% of males versus 30% of females aged 13-15 years; this contrasted with 72% of males and 57% of females aged 16-19 years (21). Kantner and Zelnik (22) published several well-known survey reports in the 1970s; they noted that 30% of females 15-19 years were coitally experienced in 1971, 43% in 1976 and 50% in 1979; males aged 17-21 years were at 70% (22). The average age of sexarche was 16.2 years for females and 15.7 for males (23). The average age of sexual “debut”/first sexual intercourse is approximately the same (16 years) in Canada and Western (United Kingdom, France) and Eastern Europe (Ukraine, Russia) (24). Early age at first intercourse can depend on many factors, such as socioeconomical that involves such issues as personal or family income or level of education (25).

In the mid-1990s, 66% of females and 70% of males had coitus before their 18th birthday; 9% of 12 year olds and 38% of 14 year olds were sexually active—this increased to 47% by age 16 and 68% by age 18 (23,24). This data also noted that 13% of those 14-17 years of age and 41% of those 18-21 years of age had 4 or more sexual partners; 79% of African-Americans were sexually active vs. 48% of Caucasians, and 56% of Hispanic students (23,26).

The 1999 Centers for Disease Control (CDC) Youth Risk Behavior Surveillance (YRBS) noted that 49.9% of high school students (12-18 years of age) were coitally experienced; this was broken down as 45.1% for Caucasians, 54.1% for Hispanics, and 71.2% for African-Americans (27). Also, 8% were coitally active before age 13 (12.2% for males, 4.4% for females) and 16% had 4 or more partners (19.3% in males and 13.1% in females). Adolescents are noted to practice serial monogamy, having one partner at a time, though often for a short time. Studies noted that 31% of sexually active female adolescents reported two to three sex partners, 9% had four or five partners, and 10% claimed over five sex partners (27).

Data from the 2002 National Survey of Family Growth notes that 47% of never-married female youth (ages 15-19 years of age-4.6 million) have had coitus and 46% of never-married male youth (ages 15-19 years-4.7 million) ever had coitus (28). For the males, this was a significant decline from 55% in 1995. Among sexually active females in the 2002 survey, 83% said they used contraception the last time having sex, in contrast with 71% in 1995 (28). The 2007 YRBS noted that 47.8% of 15 to 19 year old adolescents are sexually experienced and 61.5% used a condom during the last intercourse, in contrast to 46.2% with condom use in 1991 (29).

FACTORS THAT IMPEDE NORMAL SEXUALITY DEVELOPMENT

In the 21st century, pediatric sexuality develops in a society characterized by a rapidly changing environment, intense migration, and expanding opportunities to communicate with others in a modern global network that has become a widely-used resource for sexual health information among adolescents around the world (30). Major problems for childhood and adolescent sexuality that are emerging in today's global society including a change in the concept that heterosexual relationship is the norm, the development of casual relationships, and changes in what is termed the love ideology (30).

There is a noticeable cultural difference in the acceptance of and breadth of the casual relationships in youth. Examples of visible changes in the love ideology among young people throughout the world include the increase in the number of sexual partners, a rise in casual sex episodes, more openness to group sex relationships, and open discussion among youth as well as

popularity of such relationships as a sex buddy (f*** buddy or FB), friends with benefits (FWB), and sexualized friendships (see table 11) (30-33).

Table 11. Definitions of terms in adolescent causal relationships (33)

<p>1. <i>Casual Relationship</i> Physical and emotional relationship between two people who may have a sexual relationship or a near-sexual relationship without necessarily demanding or expecting a more formal relationship as a goal. It is different from a one-night stand or more than just casual sex.</p> <p>2. <i>Friends With Benefits (FWB)</i> Two friends with a very casual dating relationship. The benefits can be really good, long, flirty conversations, make-out sessions, and sex with no other commitments.</p> <p>3. <i>Sex Buddy (F... buddy; FB)</i> Sexual partner (male or female) with whom there is no danger of attachment, commitment or other complications. A person with whom you have sexual relations, on the mutual understanding that you both want sex and nothing more.</p>
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There is enormous influence from the mass media on adolescents around the world in which sex is often presented as a casual pastime that is normative behaviour without negative consequences (30-33). The media (television, movies) presents the message that “everyone is doing it and having fun.” Some youth view oral sex as not “real sex” and use it to maintain a state of “technical” virginity, not realizing that sexually transmitted diseases are acquired with this form of sexual behaviour including gonorrhoea, syphilis, herpes, human papillomavirus infection and AIDS/HIV. One study of 9th graders in San Francisco noted that nearly 30% were engaged in oral sex and 13.5% intended to have oral sex in the next six months (34); another study of 10th graders in New England noted that nearly 48% of the males and 42% of the girls reported experience with oral sex (35).

ADOLESCENT PREGNANCY AND SEXUALLY TRANSMITTED DISEASE

Since young people often lack comprehensive information about human sexuality, it is not surprising to note that these millions of sexually active youth produce approximately 800,000 pregnancies and several million sexually transmitted disease (STDs) cases each year in the United States

(36,37). Such behavior also results in 31,000 pregnancies in females 15 years of age or under and in approximately 400,000 annual abortions in females under 20 years of age. Adolescent females account for 13% of all US births (4,158,212 in 1992) and 26% of all abortions (37). The birth rate was 48.5/1000 in 2000, 45.9 in 2001, 43 in 2002, 40.5 in 2005, 41.9 in 2006, and 40.4 in 2007 (37). The negative psychosocial risks to the adolescent mother and offspring are well described in the literature. Marriage is often not seen as a consequence of adolescent pregnancy in contemporary American society; 11% of teens are married before age 18 and percentage of teen births taking place out of marriage has risen from 15% in 1960 to 80% in 1999 (19). The divorce rate among adults is 50% and 70% among teens.

HYPERSEXUALITY

The term, hypersexuality, has been used in various ways to refer to adolescent sexual behaviour. However, it should be used to refer to inappropriate or ill-regulated behavior and can be a cause of disruption among children and adolescents who are hospitalized for psychiatric disorders. It refers to “inappropriate” sexual behavior that involves sexual fantasies that increase abruptly in frequency and become of sufficient severity to disrupt expected or usual functioning. Though not a common cause of hypersexuality, virilization should be considered in its differential diagnosis (38).

SEXUAL ABUSE

Although most data on sexual abuse is focused on females, recent research is acknowledging that males are also sexually abused. Surveys of adults note 27% of adult females were sexually abused, with a peak at 16-19 years of age (39); 25% of college females report sexual assault at some point in their lives (26). The child and adolescent must survive in a world with many dangers of unwanted sexual and physical abuse (see chapter on sexual abuse). There are three million reported annual cases of abuse in those under 18 years in the US; these are classified as neglect (53%), physical abuse (26%), sexual abuse (14%), and emotional abuse (5%) (40). The abuse may be from the father, step-father, uncle, teachers, boyfriend, or in 10% to 33% of the cases, strangers (41). Finkelhor (42) noted that 5 of every 1,000 college female

reported being victims of incest from their fathers. Pregnancy and STDs may be signs of sexual abuse in young teens.

Between 50,000 and 70,000 cases of rape are reported each year, while the estimated number of actual cases exceeds 400,000 to 700,000 each year (19,43). Adolescents have the highest rates of rape and other sexual assaults (41). The United States Department of Justice notes there are 3.5 assaults per 1,000 ages 12-15 years, 5.0 for 16-19 years, 4.6 for those 20-24, and 1.7 for those 24-29; half of these rapes and other sexual assaults are to those under age 25 and the female-male ratio is 13.5 to 1 (44).

Sexual abuse is reported in 13% of females aged 13-14 in the United States (45); forced coital behavior occurs in over 70% of sexually active females under 14 years of age and 60% in sexually active females under age 15 (46). Forced sex among sexually active teens occurs in 74% at 13 years of age, 60% at 14 year of age, 40% at 15 year of age, and 15% at 19 years of age (26). In the 1999 YRBS, sexual assault was noted in 12.5% of high school females and 5.2% of males (27). The 2001 Youth Risk Behavior Surveillance reports 10% of high school girls with forced coitus in contrast to 5% of the males (47). There were 272,350 victims of sexual assaults (including rapes and attempted rapes) reported in 2006 (versus 191,670 in 2005) with over 40% being under age 18 years and an estimated one-sixth being under age 12 (48,49). Factors increasing chances of being sexually assaulted include hitchhiking, living on the streets, and prior assault. Unwanted sexual overtures and harassment can even occur over the internet (50).

DATING VIOLENCE

Up to 87% of high school students receive unwanted sexual comments or actions at school-lewd comments, jokes, being touched or grabbed by others (26). Studies suggest that the majority of female youth eventually become victims of some violence while dating. This may be physical, verbal, and/or sexual in nature (51,52). As many as 60% of adolescents experience dating violence and this involves youth from all ethnic groups and socioeconomic strata (53). Studies with college students note dating violence in 36% of the males and 59% of the females (53). Acquaintance or date rape may be the cause in 60-70% of adolescent assaults (19).

Adolescents need to learn potential signs that their dating partner may be too aggressive and may resort to violent means to control the relationship. Concerns in this regard should be raised under these circumstances as noted in

table 12 (51-55). Youth and their parents need to be educated that these are warning signs and to avoid dating or stop dating such individuals (55). Adolescents should also know that violent dating partners become violent spouses.

Table 12. Signs warning of a potential violent dating partner (51-55)

1.	Partner prevents the teen from associating with friends
2.	Becomes jealous with minimal (if any) reason
3.	Becomes upset with the teen for little or no reason
4.	Uses <i>any</i> means of violence in the relationship
5.	Always apologizes for being mean or violent
6.	Induces sadness in the teen when with him/her
7.	Uses drugs , including Rohypnol or other date rape drugs when dating

ADOLESCENT SEXUAL OFFENDERS

Adolescents can also be involved in being sexual perpetrators. Teens under age 18 account for 20% of arrests for all sexual offenses (not including prostitution), 20-30% of rape cases, 14% of aggravated sexual assault offenses, and 27% of child sexual homicides (5,19). Adolescent sexual offenders represent a serious problem in the American society. These offenders commit multiple offenses, usually have more than one victim, and may not limit their offenses to one type of victim. These adolescents represent all races, social classes, and regions throughout the United States. This supports the need for comprehensive service delivery and the importance of having a continuum of treatment services that are available in all communities for this disorder. Within the context of anticipatory guidance, child health clinicians can incorporate office screening questions regarding sexually deviant behaviors to detect aberrant or deviant sexual behavior, allowing for early referral and intervention (see table 4). They can play an important role in the education of parents about the importance of appropriate professional help for deviant sexual behavior in children and adolescents.

CHRONIC ILLNESS AND DISABILITY

Adolescents with chronic illnesses and deformities (i.e., cerebral palsy, spina bifida, others) are also invested in the development of their sexuality,

even if society and parents are not focused on these issues (56-60). Growing youth worry over their changing bodies, and disabled adolescents need to learn to accept actual abnormalities and tolerate deviations from an idealized body image. Table 13 lists potential complications in the psychosexual development of youth with chronic deformities/illnesses. For example, youth with colostomies become anxious about being accepted because of odor, while those with arthritis become concerned about problems with pain as well as limitations. Some chronically ill teens are stimulated to coital activity to prove normalcy, while others are slow to develop healthy sexuality; the clinician can be of considerable help to both groups to encourage normal sexual development. Parents and clinicians should seek to help adolescent females develop a positive self-esteem and body image despite impaired fertility noted with various genetic and endocrine disorders (61,62).

Table 13. Psychosexual development problems in youth with chronic illness/deformities

Concerns about ability to reproduce and parent
Difficulties finding peer friends
Doubts about future self-sufficiency
Increased risk for abuse (physical and sexual)
Increased risk for bullying and harassment
Limited social skills
Poor body image
Reduced self-esteem

OTHER CONSEQUENCES

There are an estimated one million runaway youths, and an estimated one million adolescent prostitutes (male and female), who exist in the United States (63-68). Some youth run away from home while others are thrown out by parents or guardians (“throwaways”), leading to a harsh life on the street as homeless youth. Many will turn to prostitution, using survivor sex as a way to remain alive. Children and adolescents living on the streets of the world are the product of war, poverty, domestic violence, and abuse (physical, sexual, mental). Homeless youth are subject to many dangers of the street—as physical/sexual abuse, substance abuse, sexually transmitted diseases, various medical disorders, and others (64,65). Their main medical treatment is usually through the hospital emergency department, if they receive any care at all.

Estimates of the number of children and adolescents who live on the world's streets range from 30 million to 170 million. Children and youth are sold into slavery and prostitution in various parts of the world. There are an estimated one million children abducted or coerced into the global sex trade industry each year. Estimates suggest there are 300,000 child soldiers around the world—some as young as 10 years of age. Their duties are varied, from overt soldiers to providing sexual services for the older soldiers.

RESPONSIBLE MALE SEXUALITY

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Researchers and educators in sexuality often note considerable differences in how both sexes view sexuality (68). The male development of sexuality is termed presocial versus females who learn their early concepts of sexuality in the context of social relationships. American society conditions males early in their development to define masculinity as synonymous with such destructive concepts as dominance, competition, performance, and achievement.

The American media is often indicted in this regard for teaching males that masculinity implies that one is aggressive, has a “duty” to perform (whether scoring in basketball or coitus), and has an out-of-control sex drive that can only be controlled by one's partner. This same philosophy implies that if a girl gets pregnant (by not saying “no” or not using contraceptives), it is her fault, not his. Males are taught that “shared contraceptive” responsibility is not an important concept which applies to them. Even the media censors often remove the topic of contraception when coitus is demonstrated or implied. Insurance plans in the United States often cover prescriptions for erection dysfunction medications but not oral contraceptives!

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Males lacking extended contact with their fathers for appropriate role model patterns are especially vulnerable to such misogynic cues from the media. Males are taught from early life and throughout life to be more distrustful and insecure than females. Males are taught to control their sexual thoughts in regard to males and to use homophobia as a guiding principle. Males are more likely to carry negative attitudes about their bodies from their childhood throughout adolescence and adulthood. Though males tend to masturbate earlier than females, they are more likely to avoid group masturbation due to societal homophobic attitudes.

The adolescent male is generally exposed to very limited sexuality education and receives little contraceptive information/services. Sexuality education programs are often geared toward females, and birth control clinics

often provide inadequate services to males or exclude males altogether. A common reason given by males for not using contraception is their limited knowledge base, and studies also suggest that the male exerts more influence than the female regarding the use (or non-use) of contraception.

Others conclude that the changes in sexual values in America over this past century have allowed males to be raised with much conflict and confusion in regard to their sexuality and in methods of sexual expression. This confusion and lack of control contribute to the high morbidity and mortality currently described in adolescent males (53,69,70). The current adolescent male is exposed to a hostile environment that promotes violence (suicide and homicide), homophobia, limited sexuality education, limited exposure to medical services, and limited knowledge of disease prevention (such as use of condoms or self testicular examinations) (2,3,68,71). This dangerous risky environment continues throughout adulthood. Health care professionals should be trained in techniques helping to talk with males and females about their specific concerns and needs (72). While females are expected to control their sexuality, males are not by society. Males use the Internet more for sexual purposes, though both sexes also use the Internet for social contact (30,73). Certainly more open communication between sex partners is important to increase effective contraceptive use for improved responsible sexual decision-making.

CLINICIANS AS COUNSELORS

Limited sex education can be invoked as a partial explanation for current adolescent sexuality statistics (73-76). Youth are naturally curious about sexuality and often experiment widely, especially starting during mid-adolescence. Today's society stresses the enjoyment of human sexuality but often, paradoxically, ignores the responsibility and potentially negative consequences of unwise sexual experimentation. Part of this is the "normal" narcissistic stage of adolescent sexuality, while part of it results from a society which exposes young people to sexual advertisements and promiscuous lifestyles that do not show the consequences of irresponsibility. As noted, the modern media (cable TV, videos, etc) has a profound effect on America's youth, without parents really being aware of what is being taught (77,78). Porno websites are also used by adolescents (especially males) for sexual education needs. Sex is presented on these websites in a non-realistic way, in

order to please the experienced and not by any means to educate the non-experienced.

As previously noted, most youth begin to overcome their narcissistic heterosexual experimentation in late adolescence; at this stage youth begin to prepare for adulthood by serious consideration of a job investment as well as an adult lifestyle. Relationships in late adolescence should switch from “selfish” concerns to overt caring about the other individual, which should be the goal of adult sexual relationships. Unfortunately, the high rate of divorce and sexual dysfunction reported in current adult populations indicates that this is not always the case (79).

The result of fewer teens being sexually active and more of the sexually-active teens using contraception has resulted in a decline in adolescent pregnancy from the early 1990s to the early part of the 21st century (80). However, despite access to effective contraception and use of condoms, pregnancy rates in the United States, Western Europe, Eastern Europe and Russia remain high (25,81,82).

Primary care clinicians can encourage those who are abstinent to continue with this choice until they really feel mature and ready to become involved in a sexual relationship. Abstinence is the best way to prevent unwanted pregnancy and sexually transmitted diseases (STDs). Primary care clinicians should be prepared to ask basic questions about their teenage patients’ sexuality, including if they are sexually active, what type of sex are they doing, when was the last time, how many partners, are they using condoms, and are they interested in using contraception?

Clinicians should be aware of factors that place youth at increased risk for early coital activity, such as poor school attendance, early menarche, behavioral problems, drug use (including tobacco, marijuana, alcohol, methamphetamine, heroin, cocaine, others), absence of religious ties, limited training in refusal of unwanted sex, survival sex, and others (55,83-85). Those who choose to be sexually active should have appropriate information about contraception and STD protection (81,85-87). Role plays on refusal of unwanted sex or convincing one’s partner to use effective contraceptive methods if sexual activity is about to take place, are very helpful in this education.

Sexuality education is important for all adolescents that is offered and encouraged from various segments of society, including parents, clinicians, and schools (75-77,88-90). One survey of adults in the United States aged 18 to 83 years (N of 1,096) looked at three types of sex education in schools: abstinence-only, comprehensive sexuality education, and condom instruction;

abstinence-only programs received the lowest public support at 36% and the highest level of opposition by the surveyed public at 50% (90). Research has noted the failure of abstinence-only programs to provide sufficient information about sexuality to allow adolescents to reduce unwanted pregnancy and sexually transmitted diseases (89).

Advice about sexuality should be provided in a friendly, confidential, and safe manner (14,91,92). The attitudes and beliefs of clinicians can influence their ability and willingness to provide counsel for teens regarding sexual orientation, pregnancy, abortion, contraception, and STDs. Clinicians can introduce the subject of sexuality into the doctor-patient communication on a regular basis and set the youth at ease while talking about sexuality. Youth may have a hidden agenda regarding various aspects of sexuality, and clinicians should be attuned to this agenda. A number of factors can compromise sexual health and careful screening will often uncover these issues. Sexuality involves various family, legal, ethical, moral, and religious issues and clinicians need training to be able to help these youth as these various factors influence the youth.

Anticipatory guidance by clinicians is important to promote healthy sexuality development in children as well as adolescents and prevent complications (as unwanted pregnancy, STDs, abuse). Youth involved in abusive relationships need the guidance of trusted clinicians to steer them toward healthy adulthood. Counselling can encourage the growth of various resiliency factors that promote healthy sexuality and healthy living, enabling these youth to deal with adversities and lead a productive adolescent as well as adult life (93). These factors include a sense of belonging with other peers, acquiring a healthy value system, receiving appropriate education (including sexuality education), and learning to enjoy the fascinating phenomenon of life itself. Youth need an adviser and a guide in life, one who can provide support and accurate education in important facets of life, such as human sexuality. One should follow local laws for confidentiality and provision of reproductive rights (81,86, 91,92,94,95).

HOMOSEXUALITY

As puberty progresses, attraction to and sexual experimentation with the opposite sex is a classic feature of youth. Also, during early puberty, transient attraction to and sexual experimentation with members of the same sex may occur (96,97). Some adolescents go through a phase of homosexual behavior

and proceed toward a heterosexual behavior pattern; other adolescents learn to perceive homosexuality as a life pattern (98-103). Clinicians may not only care for heterosexual adolescents, but also gay, lesbian, bisexual, transgender, or questioning (GLBTQ) youth (103). Sexual behavior, whether heterosexual or homosexual, places adolescents at risk for sexually transmitted diseases or infections (STDs or STIs) (101-105). However, adolescents with persistent homosexual attraction and sexual behavior additionally have to cope with social pressures associated with homosexuality that may place them at risk for various psychosocial problems as well as diverse medical complications (96-103). Table 2 provides definitions of terms used in this chapter and others related to the discussion of sexual orientation (96,97).

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Perspectives on homosexuality

Though there has been considerable research about the etiology of homosexuality, controversy remains. Some maintain that homosexuality results from in utero sex hormone-controlled "programming" of the brain (hypothalamus) in combination with complex social learning factors in childhood (104). It has been observed that if a female (XX) fetus is exposed to excessive male hormones (as noted with some forms of congenital adrenal hyperplasia), the resultant female child may exhibit some "masculine" traits (such as seeking male aggressive play or ignoring doll playing) (96,97).

Genetic studies have shown a higher incidence of homosexual concordance among monozygotic twins than among dizygotic twins (96,97,104,105). These results suggest a genetic predisposition, but chromosome studies have been unable to differentiate homosexuals from heterosexuals (106). Most homosexual individuals have the same sex hormone levels as their heterosexual counterparts. Though some data suggest that homosexuals respond differently to certain hormone injections (as opposed to heterosexuals), more research clearly is necessary in this area (104). Some researchers point out differences in hypothalamic size and structure (107), anterior commissure size (108), or cerebral asymmetry (109); others look for a potential genetic marker for homosexuality (104). However, there is no agreement on these biologic theories at this time (106,110, 111).

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Psychological perspectives

Psychological studies and theories abound regarding homosexuality, but so do the disagreements (97,98,105,110). Freud wrote that individuals began human life with bipotentiality - that is they could become homosexual or heterosexual; in his view, usually the heterosexual aspect dominated (105). Freud did not consider homosexuality a mental illness, as noted by his famous 1935 response to an American mother of a homosexual:

“Homosexuality assuredly is no advantage, but nothing to be ashamed of, no vice, no degradation; it cannot be classified as an illness; we consider it to be a variation of sexual functioning produced by a certain arrest of sexual development (112).”

Diagnostic perspectives

It was in 1973 when homosexuality as a diagnostic category of mental illness was eliminated by the American Psychiatric Association. Seven years later, in 1980, it was removed from its Diagnostic and Statistical Manual (DSM-III); it is not present in the DSM-IV-TR edition (105,113). The American Psychological Association officially accepted this same concept in 1975. The 10th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) states “Sexual orientation alone is not to be regarded as a disorder (114).” This view reflects a change in the perception of homosexuality on the part of most researchers from a pathological disorder to a variant form of human sexuality. However, profound concerns still continue toward such declarations (115-119).

Homosexual identity perspectives

A variety of sexual orientations have been described since the ground-breaking work of Kinsey et al, who surveyed over 5,000 adult males and 6,000 adult females in the 1930s and 1940s in the United States (120,121). This research concluded that 4% of adult males and 2% of adult females are exclusively homosexual in their sexual fantasy and sexual behavior; also, these researchers concluded that 50% of these adult males had a homosexual experience before puberty, 37% had at least one such experience leading to orgasm, and 10%

were homosexual for at least 3 years after puberty (120,121). Table 14 lists the Kinsey scale used to rate sexual orientation in adults (105).

Table 14. Kinsey scale of sexual orientation (120,121)

Rating	Description
0	Exclusive heterosexual (in sexual behavior and fantasy)
1	Essentially heterosexual with incidental or limited homosexual history
2	Largely heterosexual with distinct homosexual history
3	Equal heterosexual and homosexual orientation (“ambisexuality”)
4	Largely homosexual with distinct heterosexual history
5	Essentially homosexual with limited heterosexual history
6	Exclusive homosexual in sexual behavior and fantasy

Bell and Weinberg noted that 25% of those identifying themselves as homosexual also reported having heterosexual inclinations (122). McConaghy surveyed 138 male and 58 medical students in Australia, concluding that 60% of these students were aware of homosexual feelings as teenagers, with 40% still retaining these feelings at different levels (123). Further ratings of the male group (using the Kinsey scale) revealed: 55%-0, 37%-1, 4%: 2-4; 1%-5, and 3%-6.;the McConaghy female group rated themselves as: 52%-0, 33%-1, 7%-2-4%, 5%-5, and 3%-6 (123). Remafedi sampled 34,706 students in Minnesota, grades 7 through 12; 10.7% were unsure of their sexual orientation, 88.2% were predominately heterosexual, and 1.1% were bisexual or predominately homosexual (124). Other researchers conclude that 2% of adult males are exclusively homosexual while 3% are bisexual (125), that 3% of adult females are sexually active with other females since their teen years (126), and nearly 7% of adult females in the United States are involved in same-sex sexual activity after age 15 years (127).

Same-sex identity acquisition

The process of acceptance of a homosexual identity has been described by different researchers (105). Green (128) identifies three stages in this process: a) first feeling "different", b) then developing a crush on a same sex person,

and finally, c) becoming aware of his/her homosexual orientation. There may be a subsequent "coming out" phase in which the teenager seeks to reveal this "secret" to others, as family, peers or a health care professional. Troiden (1979) has outlined four stages in the development of a gay identity (see table 15) (129,130).

Table 15. Troiden's stages of gay identity development [129,130]

1)	Stage One: <i>Sensitization</i> Gains homosexual experiences in childhood and adolescence while learning of general society's negative view on homosexuality
2)	Stage Two: <i>Dissociation and Signification</i> Struggles to reject the concept that society's negative views on homosexuality applies to oneself
3)	Stage Three: <i>Coming Out</i> Identifies oneself as homosexual and reaches out to become involved in some aspect of the same-sex society culture; begins to consider homosexuality as a viable lifestyle option
4)	Stage Four: <i>Acceptance</i> Fuses one's concepts of sexuality and emotionality as an adult; some are "arrested" at stage 3 while others will eventually progress to Stage Four

12eb02ea67b99612833d822e8f3d3df2 ebruary **Parents' reactions**

The process of "coming out" for a homosexual youth can be very difficult, not just for the teenager, but also for the parents, who may feel they cannot talk to others and feel isolated (131). Parents may say it is "just a phase my child is going through" and may not take seriously the young person's exploration. They may feel that their adolescent's sexual orientation can be changed, or blame themselves for having a gay or lesbian teen. One can also see some parents who become so angry and threatened by this declaration that they physically abuse their teens or throw them out of the house ("throwaway teens"), forbid them from talking about this to anybody, and/or forbid them from contact with other siblings in the family. Parents may also worry about increased risks of violence their children may face and fear that their teen may not become a happy, adjusted adult. They mourn the loss of never becoming

traditional grandparents and never having their child married in a heterosexual relationship having children (131).

Social perspectives

Past societal attitudes generally have been intolerant of same sex orientation, especially for males; various religions have often condemned homosexuality as being immoral (96,97,105). Homophobia (see table 2) is a negative attitude toward or fear of homosexuality or homosexuals (117), while heterosexism is the belief that a heterosexual relationship is preferable to all others; it implies discrimination against those practicing homosexuality. Some adults prefer to identify sexual orientation by using terms like “lesbians” and “gay men” rather than homosexual which may imply pathology.

Evaluation and management

Part of the process of being a competent clinician is being aware of personal issues that may influence clinical evaluation and management. The clinician should be able to review personal attitudes and feelings related to sexuality, sexual behaviors, and homosexuality (see table 16). The primary care practitioner ideally is comfortable in eliciting information regarding sexual fantasies, sexual history, and sexual behaviors when obtaining a comprehensive sexual history in adolescent and young adult patients. Though GLBTQ (gay, lesbian, bisexual, transgender, and questioning) youth often wish their clinician would ask them about their sexual orientation and provide information in this regard, most primary care clinicians fail, tending to ignore this important aspect of their adolescent patients' lives (115). Clinicians must understand that homosexual youth have increased risks for depression, suicide attempts/completions, alcohol and drug abuse (including club or date-rape drugs), eating disorders, sexually transmitted diseases (including HIV), violence-related injuries (including homicides), homeless lifestyles, and other psychological as well as medical problems (96,97,102,103). Clinicians must also understand that GLBTQ youth often have limited access to health care (102).

Table 16. Sexuality evaluation checklist for clinicians

Factor	Evaluation	Issues	Recommendations
1. Sexual Identity	Complete Physical Examination	<ol style="list-style-type: none"> 1. Ambiguous Genitalia 2. Genital abnormalities 	Genetic Testing Gynecological Evaluation Urological Evaluation
2. Gender Identity	Observation of gender behaviors Interview	<ol style="list-style-type: none"> 1. History of persistent cross-dressing 2. Persistent feelings of being “trapped in the body of the opposite sex” 3. Persistent desire to be the opposite sex 4. Persistent repulsion towards genitals 5. Persistent gender behaviors of the opposite sex 	Psychiatric Evaluation
3. Sexual Orientation	Interview	<ol style="list-style-type: none"> 1. Predominant sexual fantasy and attraction towards the: <ul style="list-style-type: none"> Opposite sex Same sex Both sexes 2. Knowledge and awareness of variations of sexual orientations 3. Psychological Adjustment <ul style="list-style-type: none"> Depression Suicidal ideation and plan Substance abuse 4. Familial knowledge and support <ul style="list-style-type: none"> Family unaware Family unsupportive 5. Social knowledge and support <ul style="list-style-type: none"> School Friends Sexual relationships 6. Religious conflicts 7. Legal problems <ul style="list-style-type: none"> 7.1 Prostitution 8. Special problems <ul style="list-style-type: none"> Bullying Violence 	Reassurance Advise on Gay and Lesbian resources (See Resources) Referral to Mental Health Professional

Table 16. (Continued)

Factor	Evaluation	Issues	Recommendations
4. Sexual Behavior	Interview	<ol style="list-style-type: none"> 1. Pattern of Sexual relationships 2. Sexual Behaviors Masturbation Oral sex Sexual intercourse Anal sex 3. Related behaviors Drugs Sex toys Pornography 	<p>Advise on options for Safe Sex and condom use</p> <p>Advise on Family Planning</p> <p>Advise on risk for STDs/STIs</p> <p>Hepatitis B immunization</p> <p>Medical Testing (See Tables 6 and 8)</p>

Table 17. Reasons that GLBTQ youth seek medical attention (97)

<ul style="list-style-type: none"> • Information about homosexuality or other aspects of human sexuality • Sexually transmitted disease(s), including fears of STDs and information • Psychosocial difficulties <ul style="list-style-type: none"> Family School Significant other(s) Personal problems Vocational concerns Religious conflicts • Infection with human immunodeficiency virus (HIV) or concerns about HIV or acquired immunodeficiency syndrome • Other medical disorders • Substance abuse • Legal problems (including prostitution)

Initiating the evaluation

Table 17 outlines various reasons why a GLBTQ adolescent may seek advice or an evaluation by the primary care clinician (96,97). Table 16 provides a sexuality checklist for clinicians and table 17 provides an outline to the medical evaluation of this patient. The clinician should introduce himself or herself to the adolescent and explain that a complete medical evaluation includes both an interview and a physical examination. The clinician should also reassure the patient that whatever is discussed in the interview remains confidential except in situations that the safety of the patient may be

compromised. While evaluating an adolescent, the practitioner should not make assumptions about the youth's sexual orientation.

Sexuality is influenced by four interrelated psychosexual factors: sexual identity, gender identity, sexual orientation and sexual behavior (see table 19) (96,97,105). The clinician should evaluate sexuality in all adolescents, asking questions in these different domains; these factors affect personality growth, development and functioning.

Table 18. Medical evaluation of GLBTQ adolescents (97)

- | |
|---|
| <ul style="list-style-type: none"> • History (ensure confidentiality, privacy) <ul style="list-style-type: none"> Social School Family Employment Substance use Assessment of psychosocial problems, including suicidal ideations • Review of systems • Sexual history • Physical examination <ul style="list-style-type: none"> General Close inspection for sexually transmitted diseases or infections (STDs/STIs) Other procedures as indicated (pelvic examination, anoscopy) • Laboratory evaluation (see table 20) <ul style="list-style-type: none"> Neisseria gonorrhoeae Chlamydia trachomatis Treponema pallidum Human immunodeficiency virus (HIV) Others (herpes simplex virus [HSV], human papillomavirus [HPV], others) • Hepatitis B immunization • Human Papillomavirus Vaccine (and others as they become available) • Appropriate treatment of STDs (including partners) and any medical problems • Discussion of risk reduction, abstinence, contraception, condoms • Referral to support groups as necessary • Follow-up visit(s) with primary care physician (including family) |
|---|

Evaluation and management process

In evaluating the sexual identity of the adolescent, a general examination can help in addressing this concept. Table 16 provides a checklist for clinicians when evaluating concepts of sexuality in their adolescent patients. Should there be any genital anomaly, the adolescent should be further evaluated by the

appropriate specialist whether by an endocrinologist, urologist, or gynecologist. In evaluating the gender identity of the adolescent, the clinician should determine any history of cross-dressing (transvestism) or the sense of feeling “trapped in the body of the opposite sex” (transsexualism). These symptoms should be further evaluated by a psychiatrist or other appropriate mental health professional to determine the possibility of transvestic fetishism or gender identity disorder (see tables 1 and 2) (113).

Table 19. Components of sexuality (see tables 1 and 2)

1. <i>Sexual Identity</i> This refers to one being genetically male (XY) or genetically female (XX). The clinician should conduct a thorough physical examination, including gross examination of the genitalia and determine the development of secondary characteristics or sexual maturity ratings.
2. <i>Gender Identity</i> This refers to one’s sense of masculinity and femininity. The clinician should observe the degree of masculinity and femininity of the adolescent and ask questions regarding their sense of being “male” or “female”, history of cross-dressing (wearing clothes of the opposite sex [transvestism]), whether they would like to be a member of the opposite sex and whether they feel uncomfortable with their genitalia (transsexualism).
3. <i>Sexual Orientation</i> This refers to the sexual attraction to the opposite sex (<i>heterosexual</i>), same sex (<i>homosexual</i>) or both sexes (<i>bisexual</i>). The clinician should ask questions regarding sexual attraction to the opposite sex, same sex, or both sexes.
4. <i>Sexual Behavior</i> This refers to the range of sexual activity. The clinician should ask specific questions on sexual activities, the number of sexual partners, use of prophylactics, use of sex toys, pornography, and use of alcohol as well as substances (as club drugs) prior to or during sexual activity.

Sexual orientation is a very complex but poorly understood phenomenon which is established by middle childhood (ages 7-9) (96,97). In evaluating for sexual orientation, the clinician should identify whether the sexual attraction of the adolescent is directed towards the opposite sex, the same sex, or both sexes. Adolescents who have homosexual attraction and sexual behavior can be advised to wait until late adolescence or early adulthood before concluding they are homosexual or lesbian; by that time most are aware of their real sexual orientation - and usually this is heterosexual. Early and mid-adolescence stimulate various stages of experimentation while late

adolescence may allow some resolution in the area of acceptance of one's sexual orientation (105,132).

Some youth enter adulthood committed to a homosexual lifestyle; they state that their sexual orientation as well as commitment began even in early adolescence. Variations on such timing certainly do occur. Part of the management of adolescents with homosexual attraction and sexual behavior includes evaluation of their knowledge and misconceptions regarding homosexuality. Also, the perceived need for secrecy and their often limited sexuality education result in various potential psychological and physiological difficulties (133-135). In this regard, the Internet, as noted previously, can be a dangerous place for youth seeking accurate information about sexuality, including homosexuality; the result may be sexual abuse instead of appropriate sexuality information (50).

Evaluating support systems

Part of the evaluation of adolescents with homosexual attraction and sexual behavior includes a review of family and social supports. Youth who are going through various stages of homosexual identity (see table 14) need as much support as possible (102). They have to deal with society's prejudicial (homophobic) attitude, peers' ridicule, and parents' potential rejection. Perceived rejection of one's religious upbringing and even of one's culture can be very difficult. Some end up on the street as homeless youth. Hate crimes and violence are also a major risk factor for GLBTQ teens; this may take the form of murder, rape, assault, and other crimes.

The clinician can provide information regarding gay-straight alliances at some schools for all adolescents receiving support from others who are interested in them. The growth of organizations like Parents and Friends of Lesbians and Gays (PFLAG) has been very important in helping both parents and teenagers understand these issues. The clinician can address the lack of information by providing resources available on the Internet or through libraries (see resources section).

Evaluating social relationships

Evaluating adolescents with homosexual or bisexual attraction and sexual behavior includes assessing self-esteem and social integration. Reaction to

Troiden's Stage Two (see table 15) may include denial, despair, avoidance of social as well as sexual relationships, and perhaps, eventual acceptance or rejection of having a homosexual or bisexual orientation. They may develop poor social skills and suffer due to a lack of appropriate adult role models.

It is not surprising that many such youth struggle intensely to develop an acceptable self-identity. Health care professionals can help such individuals by a) providing non-prejudicial counseling (or referring to someone who can provide this), b) teaching improved social skills, c) arranging family counseling, and d) reminding youth to keep their sexual orientation options open while being safe (96,97,100).

If the individual does seem disturbed by a homosexual orientation, referral to appropriate mental health or counseling facilities may be helpful. However, there is no scientific evidence to support the process of "reparative therapy" ("conversion therapy") or trying to force sexual orientation change on a youth who seems content with his/her gay or lesbian lifestyle (104). The 1980 DSM-III contained the term, "ego dystonic homosexuality" in reference to those who were homosexual but in conflict with this orientation or wished to change their orientation; the 1987 revision of the DSM-III deleted this term, noting that most individuals who are homosexual normally go through a phase of conflict over this orientation in current society.

Depression and suicide

Part of the evaluation of adolescents with homosexual attraction and sexual behavior includes assessment of depression and suicide risk (133,135). Data suggest that gay youth account for approximately 30% of completed suicides in adolescents, while 30% of a surveyed group of gay and bisexual males have attempted suicide at least once.

One study of 137 gay and bisexual males (ages 14-21 years) noted nearly 30% had a suicide attempt, and almost half of this group had multiple suicide attempts (135). The clinician can help those with overt depression and suicide risks by referral to an appropriate mental health professional.

SEXUALLY TRANSMITTED DISEASES (STDs)

In evaluating for sexual behavior, the clinician should ask about the different aspects of the adolescent's sexual behavior and risk factors. Youth may

unknowingly be exposed to various sexually transmitted diseases (STDs) (see table 20) (19,34-36,85,96,97,101,103,118,119) (see chapter 10). Young adolescents may only find gay contact at public places where problems with sexually transmitted diseases (including HIV infection) often exist. Lesbian teens may have sex with males as part of their adolescent sexual experimentation and some are at increased risk of HIV infection because of coitus with infected males; pregnancy risks also occur in this situation if unprotected sex occurs. About 25% of those with HIV/AIDS in the United States contracted their infection by the age of 21. For those in their twenties with HIV, many, if not most of them, were infected while they were still teenagers or in their early twenties. Even if the adolescent engages in same-sex behavior for economic reasons and not because of being homosexual, risks for STDs remain (101,103,135).

Advice regarding testing for sexually transmitted diseases includes explaining possible risk factors, treatment options, and discussion regarding confidentiality as well as informing the adolescent's parents (2,3,19,36,55,56,95,96). Advice regarding options for self protection includes safe sex awareness and practice, such as sexual abstinence and use of latex condoms (87,89). In addition, the adolescent can be taught techniques to handle peer pressure regarding sexual behavior. Part of the evaluation of sexual behavior includes inquiry about the use of alcohol or substances (including other illicit drugs, sildenafil citrate, others) before or during sexual activity. Violence is a serious reality for many gay and lesbian youth in America and the clinician should provide anticipatory guidance on what can be done if violence has become a threat to the life and well-being of this young individual; this violence can include assaults, homicides, and even suicides (96-98,119). Also, as noted with heterosexuals, adolescents involved in gay or lesbian relationships may experience dating violence (136).

CONCLUSION

The clinician should be able to summarize findings with the adolescent and discuss options that do not emotionally threaten the adolescent. It is important to establish a trusting relationship based on respect and honesty using a professional demeanor. Explanation for a laboratory work-up should be provided and issues regarding confidentiality clearly addressed. Additionally, information on how the clinician or others may be reached in case of crisis

should be provided. Advice about caring for children whose parents are gay is provided by Perrin (99).

Table 20. Sexually transmitted diseases in homosexual/bisexual adolescents (96,97)

Urethritis
Neisseria gonorrhoeae
Chlamydia trachomatis
Mycoplasma hominis/genitalium
Ureaplasma urealyticum
Acquired immunodeficiency syndrome or AIDS
(persons with HIV infection may acquire various other opportunistic infections not listed)
Genital warts (infection with human papillomavirus [HPV])
Ectoparasites.
Pediculosis pubis (Phthirus pubis).
Scabies (Sarcoptes scabiei).
Hepatitis A, B, C, D, and/or E virus
Cytomegalovirus
Epstein-Barr virus
Ulcerative lesions
Syphilis (Treponema pallidum)
Herpes simplex virus (HSV)
Chancroid (Haemophilus ducreyi)
Lymphogranuloma venereum (Chlamydia trachomatis)
Granuloma inguinale (Calymmatobacterium granulomatis)
Enteritis/proctocolitis
Giardia lamblia
Salmonella enteritidis
Entamoeba histolytica
Cryptosporidium species
Campylobacter species
Shigella species

The clinician should be aware of personal issues regarding sexuality and homosexuality which may affect clinical evaluation of the adolescent. The clinician should be comfortable in asking questions regarding sexuality in their adolescent patients.

The primary care clinician should evaluate the different dimensions of sexuality for all adolescents, including the current changes in love ideology of youth and their potential preference for casual relationships. Clinicians should

also be sensitive to unique issues of adolescents with homosexual attraction and sexual behavior (30,96-99,136). Additionally, the clinician should also appreciate the possible need for other medical specialties, school and community resources, and internet sites that may be helpful for the adolescent with sexuality concerns (see resources). The GLBTQ youth lives in a very difficult and potentially dangerous environment and the clinician may serve as an important lifeline in stabilizing this youth allowing successful transitioning from adolescence to adulthood. Both heterosexual and homosexual youth are resilient and can learn to lead happy and productive lives with the help of supportive family members, friends, and their clinicians.

Primary care clinicians should understand and appreciate the importance of sexuality in the lives of the children and adolescents they care for in their practices (119,136,137). Normal sexuality is a critical part of normal growth and development. Children and adolescents need knowledgeable health care professionals who can supplement the parents' teaching about human sexuality in a confidential and sensitive manner. Clinicians can also learn of potential problems with sexuality development, including unwanted pregnancy (chapter 9), sexually transmitted diseases (chapter 10), sexual assault (chapter 5), dating violence, homosexuality and others. Adolescents who are not sexually active, can be encouraged to continue in this lifestyle. Those who choose to be sexually active, need information about STDs/STIs (safe sex) and pregnancy prevention (i.e., contraception, chapter 8). Counselling about fertility, sexual dysfunction, and other aspects of sexuality is an important role for clinicians caring for adolescents (see appendix A).

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APPENDIX A. ANTICIPATORY GUIDANCE: SEX EDUCATION

Age	Child's needs or interests	=Anticipatory guidance
Newborn	-Cuddling, sucking, loving touch (foundations for security, trust and later ability to give physical affection are established now)	-Teach parents the importance of touch, of warm, loving cuddling -Encourage breastfeeding, front packs, rocking chairs -"You can't spoil a baby at this age – it's okay to pick her up when she cries" -Observe parents' interactions with newborn – demonstrate behaviors if parents seem uncomfortable -Comment on role expectations – by choosing "pink or blue" we are already sending sex role messages to the infant
6 months	-Infant discovers body -Self-stimulation and touching of genitals	-Tell parents to expect this behavior and that it's normal -Ask parents about their own attitudes toward infant self-stimulation -Remind them, "Don't slap his hands", as this sets up negative messages (i.e., that part of your body is "bad") -Show the parents the parts of genitalia – teach them the vocabulary to use -Encourage questions – let them know sexually related topics are appropriate to discuss during health care visits
1 year	-Curiosity as to what daddy and mommy look like without clothes on	-Guidelines for household nudity. Explore parents' own attitudes – what's best is what they are comfortable with -Children begin to establish gender identity by observing differences in male and female bodies -Use picture books if nudity is uncomfortable -Parents should avoid messages that convey nudity as "dirty" or "pornographic"
1 ^{1/2} – 3 years	-Self-respect and self-esteem develop. Feelings form about being a boy or a girl -Effectiveness of toddler discipline at this age determines later ability to handle frustration and have self-control -Exploration of body parts is common -Bathroom activities are of great interest (toilet training) -Sense of privacy develops	-Teach parents how self-esteem is developed. Need for lots of positive feedback ("catch them being good"). Give praise and positive messages about being either a girl or a boy. Let children seek own preferences for sex role behavior (okay for boys to play with dolls or girls to play with trucks) -Discuss plans for discipline. Teach parents methods (e.g. time out). Emphasize how to give positive reinforcement ("I like it when you __") -Encourage parents to help children learn correct words for genitals and body functions (penis, vulva, BM) -Discuss toilet training – using rewards and reinforcing positive attitudes about genitals
3 - 5 years	-Child needs answers to "sexual questions" appropriate to cognitive level of development -Grasping genitals is clearly pleasurable, may	-Tell parents to expect sexual questions ("where do babies come from") and give examples of how to answer them -Give techniques for determining level of understanding ("where do you <i>think</i> they come from") -Child needs to learn it's okay to talk about sex -Give booklets or suggest additional educational materials

Age	Child's needs or interests	=Anticipatory guidance
	<p>occur when child is upset</p> <p>-Children become very seductive toward opposite sex parent</p> <p>-Role-modeling (assimilation of characteristics of same-sex role model) takes place</p> <p>-Children begin learning what is socially acceptable, what behaviors are public or private, and how to show respect for others</p>	<p>-Prepare parent for child's seductive behavior</p> <p>-Encourage parents to support each other and put their needs as a couple first (bad time to get divorced)</p> <p>-Remind them to role model the kind of male-female relationship they want their children to imitate (because the kids will)</p> <p>-This is the time to begin demonstrating that women have rights and men are equally responsible for outcomes</p>
5 – 7 years	<p>-“Playing doctor” is universal</p> <p>-Kids have learned parents' discomforts, starting “keeping secrets” about sex</p> <p>-Peer discussions provide many ideas about sex – dirty jokes among playmates common</p> <p>-Four-letter words (for exhibitionist behavior) used for shock value</p> <p>-Starting school – so stranger awareness is important</p>	<p>-Let parents know that childhood genital exploration is typical – it satisfies curiosity about opposite sex</p> <p>-Ask parents about their own childhood experiences “playing doctor”</p> <p>-Discuss ways to handle the situation (“It's normal to be curious – we consider other people's bodies private – I'd like you to get dressed and play other games”)</p> <p>-Same with four-letter words (“be cool”)</p> <p>-Encourage parents to bring up sexual questions, rather than waiting to be asked, utilize “teachable moments” to reinforce that it's okay to talk about sex. Need ample family discussion to balance what is learned from playmates</p> <p>-Discuss sexual molestation as a risk – discuss prevention techniques to teach children</p>
7 – 9 years	<p>-Child needs answers to more advanced sexual questions (often scientific) e.g., “How does the baby get into the womb”</p> <p>-Needs preview of changes in sexual development that will be associated with puberty</p> <p>-Values are instilled now that will last a lifetime (e.g., self-responsibility, kindness)</p>	<p>-Ask if parents have been getting any sexual questions (if not, child may feel it's not okay to ask). Dispel myth that information leads to sexual experimentation or that child is “too innocent” to hear about sex</p> <p>-Encourage them to use experiences such as TV shows, mating animals, new babies in neighborhood, as opportunities to bring up questions</p> <p>-Assure parents it's okay not to know all the answers. Guide them to resources (books) for information</p> <p>-Give parents an understanding of wide range of pubertal development (e.g., breast budding at age 8-9 is normal)</p> <p>-Encourage parents to teach difference between facts and opinions, e.g., that nearly all young men masturbate is a fact; that masturbation is bad (or good) is an opinion (with which others may not agree)</p> <p>-Important to teach child the family values and beliefs, as well as facts</p>

Appendix A. (Continued)

Age	Child's needs or interests	=Anticipatory guidance
10 – 12 years	<ul style="list-style-type: none"> -Pubertal changes are of great importance – hormone levels rise -Both sexes need to know about body changes, menarche, wet dreams, and sexual fantasies -Sex behavior “rehearsal” is common (looking through <i>Playboy</i>, spin-the-bottle games) -Questions about homosexuality arise -Need for privacy intensifies -Self-esteem is very fragile 	<ul style="list-style-type: none"> -<i>By now, caregivers should start giving anticipatory guidance directly to young teens as well as to parents</i> -Parents need to understand the normalcy of preadolescent sexual concerns and be willing to discuss them in a nonjudgmental way (last chance to be an important source of information – later it will be peers) -Empathize with parental discomfort (“sometimes we feel uneasy talking about sex, but-“) -Model nonjudgmental ways of asking questions (“some parents don’t mind their children looking at <i>Playboy</i>, and some parents disapprove. What are your feelings about that?”) -Parents must set aside time to talk with children about puberty and sexual changes -School and community groups (Scouts, Church) should be encouraged to provide sex education for young adolescents -Build self-esteem – preteens need lots of positive feedback
11 – 15 years (early adolescence)	<ul style="list-style-type: none"> -Obsessive concern with body and appearances (breast size, penile erections, acne, etc.) -Pubertal changes are completed – need for a solid understanding of reproductive physiology -Sexual behaviors emerge (masturbation, homosexual encounters, sex dreams) -“First dates” start – questions about “what is love” -Peer pressure become significant -Need for assertiveness skills, right say “NO” -Boys need to know they are equally responsible for consequences of sexual activity -Both sexes need to be prepared to use contraception when the time comes 	<ul style="list-style-type: none"> -At puberty, parents will reap the results of their past efforts -Parents need to learn how to “let go with love” and let the teen take responsibility for choices -Reflective <i>listening</i> is far more important than talking -Affirm wholesomeness of sexual feelings (“it’s natural to want to have sex”) while conveying own opinions (“it would be wiser to wait until you’re sure”) -Parent should be sure teens have access to educational resources (e.g., <i>books</i>) that will answer questions in detail -Many heterosexual young teens have some experimental homosexual encounters prior to dating. They may need reassurance and information -Parents need to prepare teens to use contraception – discuss realities, give permission, explain about resources. Dispel parental myths (e.g., that access to family planning promotes promiscuity) -Message should be “wait until you’re sure you’re ready, then use reliable birth control each and every time” -Do not give messages that “good girls” don’t have sex – guilt induction leads to denial and inability to accept responsibilities for choices (e.g., unprotected sex) -Risks of STDs and AIDs should be discussed openly. Help teen realistically plan for self-protection (abstinence, monogamy, condoms) -Continue to discuss personal values (continue to separate facts from opinions) -Continue to reinforce positive self-esteem

Age	Child's needs or interests	=Anticipatory guidance
	-Educations about STDs, AIDs prevention is a priority -Self-esteem still low	- <i>Caregivers</i> : The same anticipatory guidance should be given directly to teen in the office setting.
15 – 17 years (middle adolescence)	-Sexual activity begins -Services for sexual issues (family planning, STD, pregnancy tests) are essential -Meaning of relationships is explored (“Does he really love me”) -Life planning becomes serious (high-risk low-income teens needs to see options beyond pregnancy) -Increased independence can lead to risks (date-rape, sexual assault) -Sexual preference becomes apparent to self – homosexual teens may feel much confusion and self-doubt	- <i>Ask parent</i> , “What have you done to prepare your teen to use contraception when the time comes?” “How much have you discussed STD or AIDS with your teen?” -Encourage parents to give teens permission to obtain contraception, and acquaint them with resources and means -Allow confidentiality and independence for teens seeking health care -Parents can continue to raise questions (“What did you think of that TV scene that showed ___?”) and give teens a chance to look at choices and consequences. But be prepared for either unwillingness to talk or challenges to parental viewpoints -Most teens do not want to discuss their personal sexual activities with their parents -Suggest to parents that they discuss teen’s plans for the future, and then ask how plans would be affected by pregnancy, or marriage, etc. -Teens need to know family, society <i>expect</i> them to prevent unplanned pregnancy, STDs if they choose to have sex -Discuss prevention techniques for sexual assault -Sexual orientation should be asked about (rather than presumed) -Referral to support resources may be helpful to gay teens or their parents if emotional or societal stress is present

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RESOURCES

National Federation of Parents and Friends of Lesbians and Gays (PFLAG)

1726 M Street NW-Suite 400
Washington, DC 20036
Phone: 202-467-8180
www.pflag.org

Gay and Lesbian Medical Association

459 Fulton Street, Suite 107

San Francisco, CA 94102

Phone: 415-255-4547

FAX: 415-225-4784

www.glma.org

National Youth Advocacy Coalition

1638 R Street., NW, Suite 300

Washington, DC 20009

Phone: 202-319-7596

FAX: 202-319-7365

E-mail: nyac@nyacyouth.org

<http://www.nyacyouth.org>

(Referral information for youth-serving agencies and services)

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