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Adolescent Health

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Goals/objectives

- Improve adolescent care and prevention
- Increase awareness of adolescent health risks
- Improve communication with a difficult age group
- Review evidence-based approach to adolescent care

Adolescence

- Adolescence (from Latin: *adolescere* meaning "to grow up"), a transitional stage of physical and psychological human development generally occurring from puberty to adulthood
- Age range varies, widest definition is 10-24 years, often considered ages 11-21
- ~42.6 million adolescents, ages 10-19 in the US (2010 census)

Access to Care

- Despite the recommendations for preventive health and annual visits for adolescents, health care is underutilized
  - average 1 wellness visit every 4 years
  - acute or non-preventive care visits typically occur 1-1.5 times/year
- Barriers to care
  - lack of health insurance
  - lack of usual source of care
  - fear of disclosure of confidential information

Approach to Adolescent Health

- Adolescence is
  - the end of childhood?
  - the beginning of adulthood?
  - the healthiest period?
  - a transition period?
- A Family Medicine model is more likely to be able to
  - address the transition
  - approach the adolescent as neither an old child or a young adult

Cognitive Development

- Piaget's stages of cognitive development
  - formal operational stage begins at age 11 or 12 and continues through adulthood, though not everyone reaches this stage
  - change from concrete to abstract thinking, ability to reason hypothetically
- Erikson's stages of emotional and social development
  - identity formation

Cognitive Development

- Tasks
  - develop identity and self-image
  - establish autonomy from parents
  - establish sexual identity and form intimate relationships
  - choose a vocation

Cognitive Development

- Normal adolescent development
  - inconsistent behavior
  - a sense of invulnerability
  - experimentation
  - little recognition of future health outcomes from current behaviors
- Health care providers often expect adolescents will increasingly be responsible for their own health care

They're healthy, so why do we care?

- 31% of US children and adolescents have a chronic health problem
- Many diseases of adulthood begin in adolescence
  - alcohol and tobacco use, sedentary habits, and poor diet, often begin in adolescence
  - only 29 percent of adolescents are physically active at least 60 minutes every day
  - 80% of those who use tobacco began before the age of 18

Preventative Care

- Adolescence is a huge opportunity for prevention that too often gets missed
  - adolescents receive advice about seat belts, bicycle helmets, and second hand smoke during only one-third of preventative visits
  - physician adherence to indicated clinical services is lowest in adolescent preventive care

Health Risk Assessment

- The leading causes of death among adolescents in 2011
  - motor vehicle crashes (26 percent)
  - unintentional injuries (17 percent)
  - homicide (16 percent)
  - suicide (13 percent)
- 75% of adolescent mortality is preventable

Health Risk Assessment

- Male children, adolescents, and men accounted for about 68% of all injury-related deaths in 2010
- Mortality rates for males are nearly three times those of adolescent females
- Injuries from road-traffic incidents were the 8th leading cause of death overall but the leading cause of death among persons 10 to 24 years of age

Health Risk Assessment

- 7.7 percent of high school students rarely or never wore seat belts
- 87.5 percent rarely or never wore bicycle helmets
- 16.6 percent reported carrying a weapon within the previous 30 days

Health Risk Assessment

- In 2008 there were 42 unintended pregnancies per 1,000 females 15 to 19 years of age
- There are 9 million sexually transmitted infections in persons 15 to 24 years of age each year
- Young people aged 13–24 made up about 17% of all people diagnosed with HIV/AIDS in the United States in 2008

Health Risk Assessment

- April 2013 POEM:
  - brief advice (to not start smoking) in a primary care setting to patients aged 11 years to 17 years has a small preventive effect
  - there is no evidence to suggest that smoking cessation efforts work in this age group and setting
  - the time spent for the small benefit of abstinence counseling should be weighed against the relative effect of advice-giving about other risky behaviors in this age group (LOE = 1a)

How to approach an adolescent

- Understand and state the specific approach to confidentiality
- Assess adolescent's ability to understand the consequences of risky behavior
- See them alone for at least part of the visit and raise sensitive topics
- Parental insight can be helpful in limited quantities
- Personalize risk-reduction messages

Confidentiality

- Clarify confidentiality position with adolescent and parents
- Decide ahead of time what situations would make you feel compelled to disclose
  - My mantra:

"Everything you tell me will be completely confidential UNLESS I find out about something that is a serious risk to you or a serious risk to others."

Confidentiality

- Adolescents will forego healthcare due to fear of confidential information being disclosed
- Health care professionals can encourage and facilitate communication between adolescents and parents
- Healthcare *without* parental involvement is preferable in some situations to *no* health care

Confidentiality

- Vermont Statutes:
  - Contraceptive services
    - minors 12 years or older may give informed consent to treatment for sexually transmitted diseases (including HIV and AIDS), drug dependence, and alcoholism
    - if a minor requires immediate hospitalization for treatment of any of these conditions, the parents must be notified of the hospitalization
    - no parental notification necessary for abortion services

Confidentiality

- Outpatient/inpatient mental health
  - adolescent may consent after age 14
- Regular health care
  - minors of any age may give informed consent to medical treatment associated with rape, incest, or sexual abuse (MD mandated reporter)
  - adolescents may give informed consent after age 18 for all other medical services

Preventive Health Exam

- Get to know your patient
- Continuity is vital to adolescent care
- **HEADDSSS**
  - **H**ome, **E**ducation, **A**ctivities, **D**rugs, **D**iet, **S**exual activity, **S**uicide/depression, **S**afety

HEADDSSS

- Home: Who do you live with? How do you get along? Ask about supports—friends, family.
- Education: School? College? Work: Any trouble? Grades?
- Activities: Ask what they like to do—sports, video game, TV/computer/social media. Any social groups/church?
- Drugs: Any exposure at home or with friends? Do any of your friends use..? Have you ever tried…?
- Diet: Typical meals? Breakfast? Soda? Vegan/vegetarian? Body image? Dieting?

HEADDSSS

- Sex: Men, women or both? Ever been naked with anyone? Oral sex, penetration? Contraception, EC, STIs, number of partners?
- Suicide: How is your mood? Feeling hopeless or worthless? Any previous suicide attempts?
- Safety? Seatbelt, helmet, risk taking. Texting and driving. Safe at home, school, in relationships?

Preventive Health Exam

- Bright Futures by AAP
  - http://brightfutures.aap.org/
- AMA GAPS (guidelines for adolescent preventative services) is another alternative
- Annual screening and health guidance
  - BP, height, weight, BMI
  - Lipids, A1c if high risk

Preventive Health Exam

- Physical development and growth
  - Tanner Stages
  - No pelvic/GU exam necessary
  - Ask about menarche
- Paps (only after age 21) and STI screening
- Immunizations
  - Catch-up
  - Adolescent specific (Tdap, HPV, MCV4, flu)

Adolescent Immunizations

- Hep A- 2 doses at least 6 months apart
- Hep B- accelerated schedule for catch up: 0, 1 month, 4-6 months after 2nd dose, Recombivax 2 dose okay for ages 11-15
- Influenza- consider LAIV for healthy teens
- Tdap- minimum age 11 for Adacel, 10 for Boostrix
- Varicella and MMR- 2 doses, at least 4 weeks between booster

Adolescent Immunizations

- Meningococcal (MCV4)- 2 doses, minimum age 11, first at age 11-12 and booster at age 16-18
- HPV4- Gardasil minimum age 9, approved for girls and boys age 11-12, schedule is 0, 1-2 months, 6 months
- Pneumococcal- for high risk (chronic illness, CV dz, sickle cell, asplenia, HIV), give PCV13 and PPSV23
- PPD- something to consider if incarcerated, homeless or IVDA, immigrant

Evidence Based Approach

- USPSTF Recommendations regarding adolescent care
  - much of adolescent care not well studied
- Just because we were taught to check something doesn't mean it's necessary
- Just because EBM doesn't support something doesn't mean it's not useful

AFP SORT: KEY RECOMMENDATIONS FOR PRACTICE

- ***Clinical recommendation rating*** ***Evidence***

- Sexually active adolescent females should be screened for chlamydia. A
- Physicians should recommend that adolescents participate in school-, faith-, or community-based sex education programs. B
- Sexually active adolescent females should be screened for gonorrhea. B

- *A = consistent, good-quality patient-oriented evidence; B = inconsistent or limited-quality patient-oriented evidence; C = consensus, disease-oriented evidence, usual practice, expert opinion, or case series.*

SORT: KEY RECOMMENDATIONS FOR PRACTICE

Clinical recommendation	***Evidence***
Adolescents should be offered screening for HIV infection.	B
Adolescents should be screened for obesity, and offered behaviorally based counseling if indicated.	B
Adolescents should be screened for depression if follow-up treatment and monitoring are available.	B
Physicians should address the following issues with adolescents: sexual activity, violence, and substance abuse.	C

USPSTF Recommendations for Screening and Counseling in Adolescents

- **Cancer**
  - Cervical-Start screening every three years at 21 years of age
  - Skin-Insufficient evidence to recommend for or against screening in the general population
  - Testicular-Screening with physician examination or self-exam is not recommended

USPSTF Recommendations for Screening and Counseling in Adolescents

- **Cardiovascular**
  - Blood pressure-Start screening at 18 years or older at every visit
  - Lipid levels-Insufficient evidence to recommend for or against screening
- **General health**
  - Obesity-Screen with BMI measurements annually, and offer behaviorally based interventions if indicated
  - Scoliosis-Routine screening is not recommended for asymptomatic adolescents

USPSTF Recommendations for Screening and Counseling in Adolescents

- **Injury prevention**
  - Motor vehicle crashes-Insufficient evidence to recommend for or against counseling about drinking and driving
- **Mental health**
  - Depression-Screen adolescents 12 to 18 years of age for major depression if adequate treatment and follow-up can be provided
  - Suicide risk-Insufficient evidence to recommend for or against screening in the general population

USPSTF Recommendations for Screening and Counseling in Adolescents

- **Sexually transmitted infections**
  - Chlamydia-Screen sexually active females- Insufficient evidence to recommend for or against screening in males
  - Gonorrhea-Screen sexually active females- Insufficient evidence to recommend for or against screening in males, even if high risk
  - HSV-Routine serologic screening is not recommended
  - HIV-Screen those with risk factors or in areas with high prevalence annually (CDC recommends offering screening to all regardless of risk)

USPSTF Recommendations for Screening and Counseling in Adolescents

- **Substance abuse**
  - Alcohol, illicit drugs, tobacco-Insufficient evidence to recommend for or against routine screening or counseling

Relating to Adolescents

- Adolescents are more satisfied with physicians who themselves raise sensitive topics, and are more likely to share personal information with these physicians
- In one study, male adolescents reported that the relationship with their physician, the physician's demeanor, and continuity of care are crucial to their willingness to share sensitive information

Relating to Adolescents

- Keep the conversation personal
- Adolescents are self-centric
- Target specifically what is happening in their lives (e.g., regarding substance use and sex)
- Be watchful of the hidden agenda

Future Approaches

- One study showed that adolescents are more comfortable seeking advice and information from anonymous, online sources.

In Summary

- Review confidentiality
- Assess adolescent's ability to understand the consequences of risky behavior
- See them alone and review HEADDSSS
- Personalize risk-reduction messages
- Be a supportive and a positive influence during this time of transition

References

- Branson BM, Handsfield HH, Lampe MA; Centers for Disease Control and Prevention. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. *MMWR Recomm Rep. 2006;55(RR-14):1–17.*
- CDC Leading causes of death. http://www.cdc.gov/nchs/fastats/lcod.htm
- Eaton DK, Kann L, Kinchen S, et al.; Centers for Disease Control and Prevention. Youth risk behavior surveillance–United States, 2011. *MMWR Surveill Summ. 2012;61(4):1–162.*
- Ham P, Allen C. Adolescent Health Screening and Counseling. *Am Fam Physician. 2012 Dec 15;86(12):1109-1116.*
- Guttmacher Institute. State policies in brief. An overview of minors' consent law. May 2013. http://www.guttmacher.org/statecenter/spibs/spib_OMCL.pdf.
- Nordin JD, Solberg LI, Parker ED. Adolescent primary care visit patterns. *Ann Fam Med. 2010;8(6):511–516.*
- Patnode CD, O'Connor E, Whitlock EP, Perdue LA, Soh C, Hollis J. Primary care-relevant interventions for tobacco use prevention and cessation in children and adolescents: a systematic evidence review for the U.S. Preventive Services Task Force. *Ann Intern Med* 2013;158:253-260.
- Rubin SE, McKee MD, Campos G, O'Sullivan LF. Delivery of confidential care to adolescent males. *J Am Board Fam Med. 2010;23(6):728–735.*
- US Census Bureau. http://www.census.gov.
- U. S. Preventive Services Task Force. http://www.uspreventiveservicestaskforce.org.
- Vermont Medical Society. Consent, privacy and medical records. http://www.vtmd.org/consent-privacy-and-medical-records#minor-consent.