

Adolescents and Victimization

Preeti Patel Matkins, MD, FSAHM

Director, Adolescent Medicine

Levine Children's Hospital

Teen Health Connection

www.teenhealthconnection.org



Faculty Disclosure

- In the past 12 months, I have no relevant financial relationships with the manufacturers of any commercial products and/or providers of commercial services discussed in this CME activity.
- I do not intend to discuss an unapproved or investigative use of a commercial product/device in my presentation.



Goals and Objectives

- Discuss special concerns of adolescents as victims including types of victimization
- Understand anatomic reasons for medical findings
- Be able to educate about medical findings
 - To the patient
 - To the family
 - To agencies involved
- Advocate for adolescent victims
- Discuss common myths about adolescent evaluation of alleged abuse



Adolescents and Sexual Assault

- Incidence

- 11% of HS females report being raped
- 25% females; 16% boys child sexual abuse

(Darkness to Light, 2013, http://www.d2l.org/site/c.4dICIJOkGcISE/b.6143427/k.38C5/Child_Sexual_Abuse_Statistics.htm accessed 9/2/2014)

- 12-24 yo FIVE times more likely to be sexually assaulted than >25 yo (US DOJ 2013)

- 93% of victims know their perpetrator

- (AAP Committee on Adolescence: Adolescent Sexual Assault Victims. Pediatrics, 107 (6) 1476-79)

- Consequences

- Acute physical
- Chronic Physical
- Emotional
- Behavior



“Lifetime Prevalance of Child Sexual Abuse and Sexual Assault Assessed in Late Adolescence”, Finkelohr et al.

J Adol Med, V55, No 3, Sept 2014, 329-333.”

- Meta analysis,
 - Differing questions; telephone
 - Parent may have been in range
- Lifetime prevalance
- Abuse vs Assault – perception

	Females	Males
Lifetime Sexual Abuse (at age 17 yo)	26.6%	5.1%
Lifetime Sexual Abuse (at 15 yo)	16.8%	4.3%
Adult Perpetrator	11.2%	1.9%
Acquaintance	19.6%	3.1%
Stranger	3%	1.4%

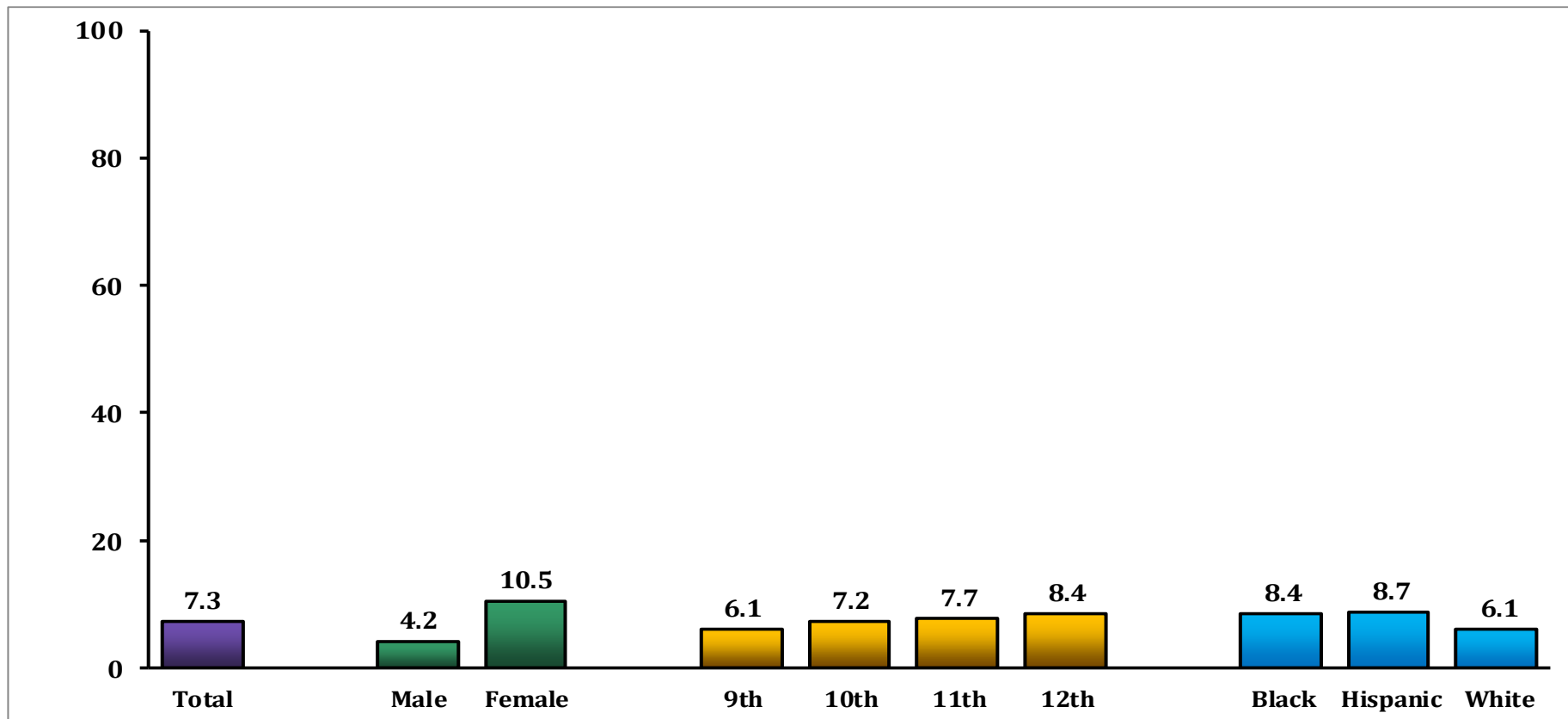


Adolescent Victims

- Victimization
- Sexual Coercion
- Reproductive Coercion
 - 25% of Adolescent females report sexual coercion
- Abuse...Assault
 - Rape
 - Molestation
- “Non forcible”
- IPV
- Exploitation



Percentage of High School Students Who Were Ever Physically Forced to Have Sexual Intercourse,* by Sex,† Grade,† and Race/Ethnicity,† 2013



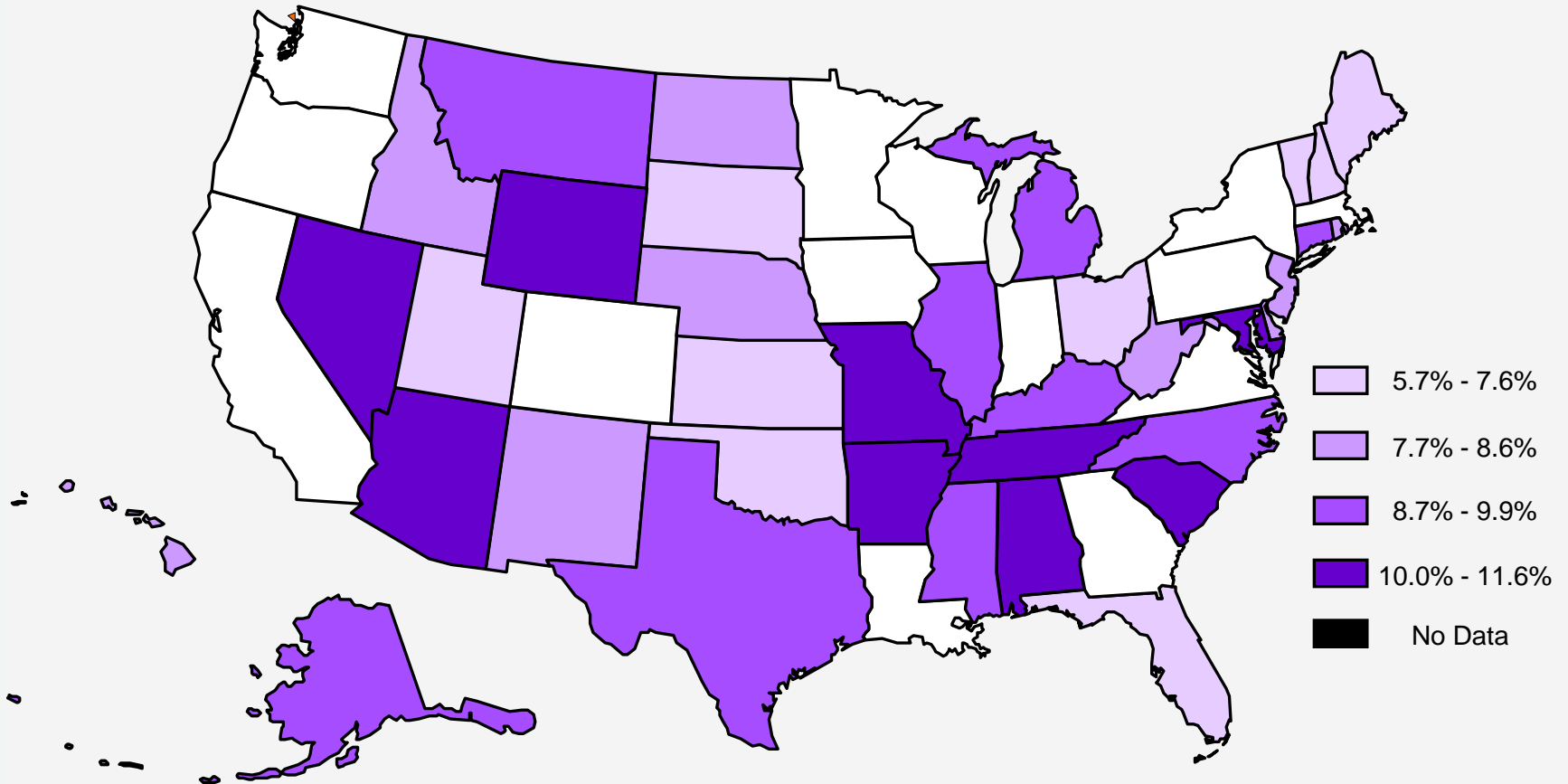
*When they did not want to.

†F > M; 10 > 9, 11 > 9, 12 > 9; B > W, H > W (Based on t-test analysis, p < 0.05.)

Black and White races are non-Hispanic.



Percentage of High School Students Who Were Ever Physically Forced to Have Sexual Intercourse*

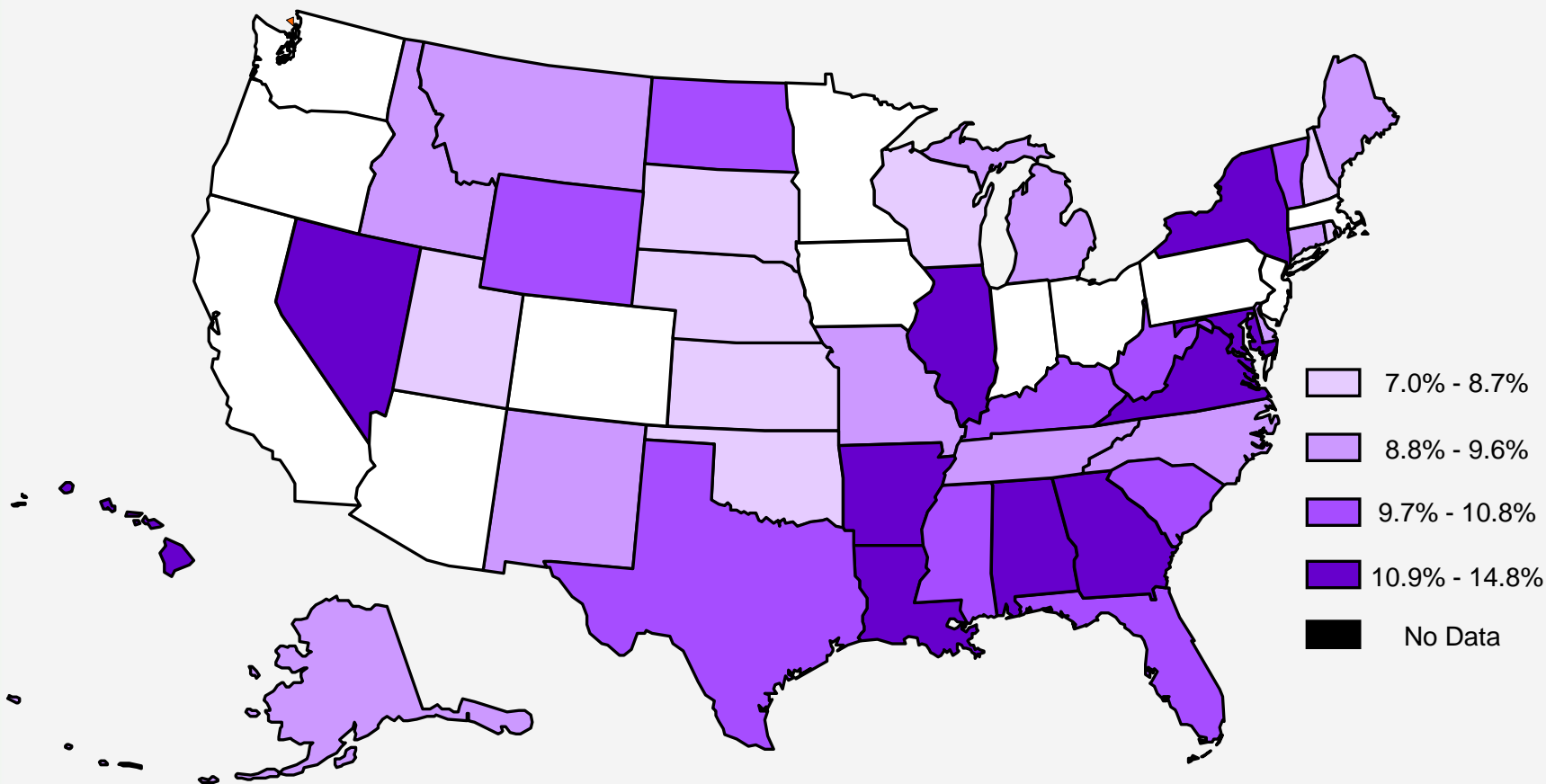


*When they did not want to.

State Youth Risk Behavior Surveys, 2013



Percentage of High School Students Who Experienced Physical Dating Violence*

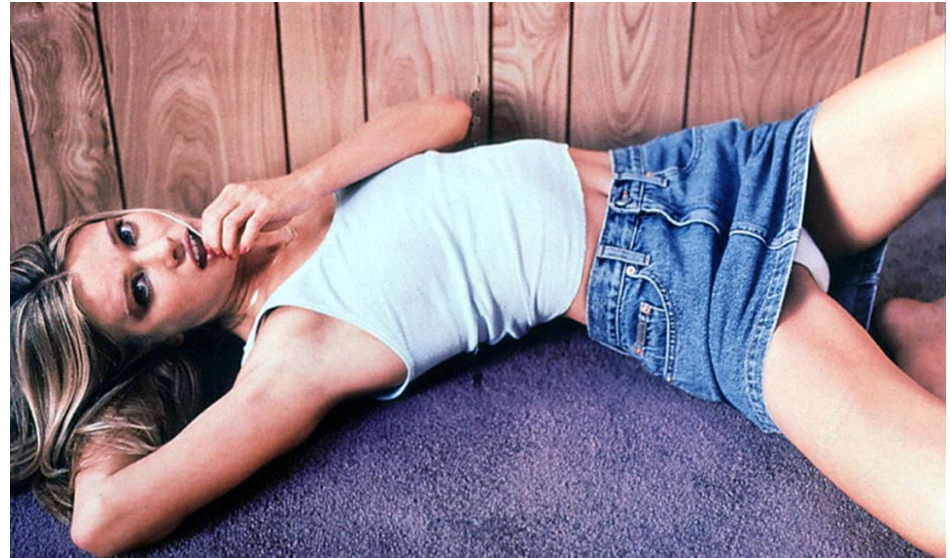


*One or more times during the 12 months before the survey, including being hit, slammed into something, or injured with an object or weapon on purpose by someone they were dating or going out with among the 73.9% of students nationwide who dated or went out with someone during the 12 months before the survey.

Is sexual exploitation normalized?



Abercrombie and Fitch
mailed teen girls 3/2007



Calvin Klein Ad



Comprehensive Adolescent Medical and Mental Healthcare

Adolescent Victims

(≥11 yo)

- Are not children; Are not adults
- Differing Physical and Pubertal Development
- Brain Development
- Issues to consider
 - Communication
 - Plans
 - Explaining!
 - They need/should be involved; not just parents



Adolescent Victims Compassion

- “I’ve said it lots of times...” → Does having to repeat mean
 - No one believes me?
 - They think its my fault?
 - They think I am bad?/deserved what happened?
“What was he/she thinking would happen?”
- Bias of Professionals
- Examiner Comfort/Anxiety



Adolescent Victims and Bias

- Providers and other professional bias
 - Victim characteristics: use of substances, sexual history
 - General discomfort with teens and young adults
- Less likely to have “rape kits” submitted



Sexual Assault Kits (SAK)

- Many victims do not seek medical care or delay
- Many who report are not advised to seek medical care
- >12,000 SAK in storage in LA in 2009 (Human Rights Watch)



Why SAK not submitted: LE Survey 2010

- 44% if no identified suspect
- 24% if no adjudication
- 19% if dismissal
- 17% if LE felt evidence not likely to be useful
- 15% prosecutor did not request
- 12% if no suspect charged

- Strom and Hickman, 2010



SAK and Adolescents

(Shaw and Campbell, 2013)

N=393; ages 13-17

60% submitted (Adult lit 40%)

Submission = Crime Lab Analysis

More likely to submit

- 13-15 yo 2x more likely
- Non white 2x more likely
- Single perpetrator
- More sexual acts

No effect

- Use of substances, etoh by victim
- Use of weapon
- Time b/t assault and exam



SAK and Adolescents

- Different findings from adult studies
 - Is ethnicity of perpetrator a bias (vs victim ethnicity)?
Info not collected
- Sympathetic Victim?
 - Younger
 - More sexual acts
- More perpetrators less likely to submit
 - Investigation bias with teens?
 - Crime lab complexity
- “No effect” had very few numbers



Interesting...



Ideal Response

1. Coordinated Team Response
2. Victim Centered Care
3. Confidentiality
4. Reporting

Medical Response....

Must involve awareness of adolescent
development

DOJ National Protocol for Sexual Assault Medical Forensic Exams 2013



DOJ National Protocol for Sexual Assault Medical Forensic Examinations Adults/Adolescents Second Edition 2013 (145 pages)

- **Victim-Centered Care**
- Patient priority as an emergency case
- Patient privacy
- **Exam adapted to patients' unique needs and circumstances**
- **Issues commonly faced by patients from specific populations**
- Importance of victim services within the exam process
- Presence of personal support persons in the exam room
- Requests for a responder of a specific gender
- Explanation of procedures during the exam process
- **Respect for patients' priorities**
- Integration of medical and evidentiary collection procedures
- Patient safety during the exam process
- Information patients can review at their convenience
- Physical comfort needs of patients



DOJ Guidelines (2013)

- Adolescents may be brought to the exam site by their parents or guardians. **The presence of parents or guardians creates an additional challenge** for those involved in the exam process because they are often traumatized by their child's victimization.
- Understand that parents or guardians may blame victims for the assault if the victim disobeyed them or engaged in behaviors perceived as increasing risk for victimization.



DOJ Guidelines (2013)

- Health care providers **must assess the physical development of adolescent victims and take their age into consideration** when determining appropriate methods of examination and evidence collection. Involved professionals should be well versed in jurisdictional policies related to response to minor victims.
- **Be aware of jurisdictional laws governing minors' ability to consent** to forensic exams and medical treatment. Follow exam facility and jurisdictional policy in obtaining appropriate consent.



DOJ Guidelines (2013)

- Recognize that the sexual assault medical forensic exam may be the first time an adolescent female victim has an **internal exam (NOT REQUIRED)**. There may be a need to go into detail when explaining what to expect.
- Adolescence is often a time of experimentation. **Reassure these victims that regardless of their behavior** (e.g., using alcohol and drugs, engaging in illegal activities, or hitchhiking), no one has the right to sexually assault them, and they are not to blame for the assault.



DOJ Guidelines (2013)

- Ideally, attending health care providers should **gather information from adolescents without parents or guardians in the room**, subject to victims' consent. The concern is that parents or guardians may influence or be perceived as influencing victims' statements.
- **Inform victims**, particularly those who do not involve parents or guardians in the exam process, of facility **billing practices** (e.g., that their parents may get a bill or statement of services provided).
- **Be aware of mandatory reporting laws** regarding minor victims and explain to the victim any mandatory reporting obligations.



Medical Care

- Provider/comfort with adolescents
 - Awareness of development, behaviors
 - Non bias
 - Nonjudgemental
- Facilities
- Forensic Integrity
- STI
- Pregnancy Prevention

Intervention, support, advocacy

PATIENTS RIGHTS (justice needs)

FOLLOW UP CARE

LEGAL TESTIMONY



Challenges to Adolescent Care

- Victim Centered Care
- Confidentiality
- Pt needs vs forensic/legal/justice
- Adolescent Development



Exam

- Maintain privacy and confidentiality as possible
 - Parents not in room for history (any age)
 - Patient decides on history, testing, exam
 - Use of Motivational Interviewing
- Modify Exam to **patient** needs

(DOJ National Protocol for Sexual Assault Medical Forensic Exams 2013)



- 15 year old male denies sexual contact with 57 year old teacher
- Witnesses include other students and adults
- There is videotaped evidence
- Patient says “consensual”-

Let's not use that term



“Non–Forcible” Sexual Assault*

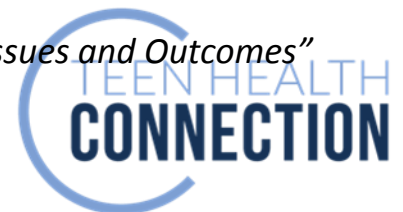
Does Victim Cooperation Affect Prosecution?

Review of cases with Internet related evidence

- Positive predictors
 - Victim acknowledges errors and issues of judgment
 - Safety Issues
- Negative Predictors
 - Cases in which victim truth is in question (71% vs. 95%)
 - Cases involving illicit substances or etoh (81% vs 96%)

*term used by FBI National Incidence Based Reporting System

*“Nonforcible Internet-Related Sex crimes With Adolescent Victims: Prosecution Issues and Outcomes”
Walsh et al; Child Maltreatment:V 10:3, August 2005, 260-271.*



How do Adolescents Become Victims...

- Normal Development/Sexual Curiosity/Vulnerability
 - Fill role model
- Attention
 - Gifts, interest
- Risk taking
 - Normal behavior...
 - Or ...What if 15 yo is failing school; MJ user?

Nonforcible Internet-Related Sex crimes With Adolescent Victims: Prosecution Issues and Outcomes” Walsh et al; Child Maltreatment: V 10:3, August 2005, 260-271



Why is knowledge of adolescent development and the effects of abuse and neglect on development important?

- Proper behavior management (also says: “or discipline strategies”)
- Avoid misinterpretation of the teen’s actions
- Understand which behaviors are culturally-based
- Recognize what is not typical
- Work and communicate collaboratively with parents
- To extent possible, reduce crisis
- Be aware of issues that may increase risk of abuse or neglect

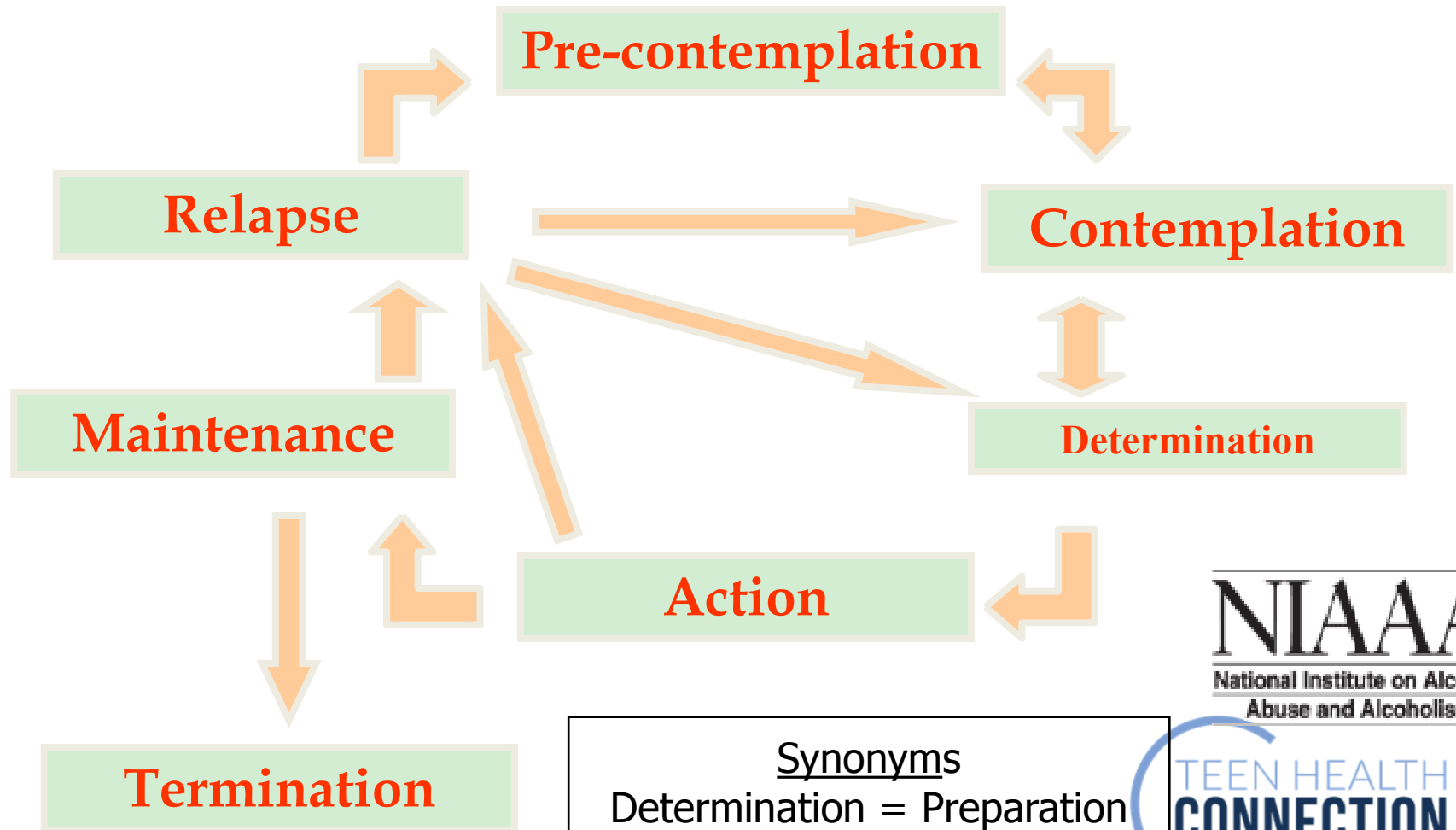
Motivational Interviewing

...in 3 slides or less

- Evidence based approach
- Counsel about behavior
- Address beliefs
- Let patient (victim) feel control in making decision
 - Respectful and egalitarian stance
 - Supportive of patient autonomy
- Motivational Interviewing is not Coercion



Transtheoretical Therapy: Towards a more integrative model of change"
Prochaska, DiClemente; Psychother Theory Res Practice; 1982; 19:276-88.



Synonyms
Determination = Preparation
Termination = Exit

NIAAA
National Institute on Alcohol
Abuse and Alcoholism

**TEEN HEALTH
CONNECTION**

Motivational Interviewing: Create Condition for Change

Make them realize the abuse...

- Empathy
- Avoid Argument
 - But may challenge contradiction
- Support self efficacy
- Roll with resistance
- Develop awareness of discrepancy
- Open door...



Confidentiality

- **§ 90-21.5. Minor's consent sufficient for certain medical health services.**
- (a) Any **minor may give effective consent to a physician licensed to practice medicine in North Carolina for medical health services for the prevention, diagnosis and treatment of (i) venereal disease and other diseases reportable under G.S. 130A-135, (ii) pregnancy,** (iii) abuse of controlled substances or alcohol, and (iv) emotional disturbance. This section does not authorize the inducing of an abortion, performance of a sterilization operation, or admission to a 24-hour facility licensed under Article 2 of Chapter 122C of the General Statutes except as provided in G.S. 122C-223. This section does not prohibit the admission of a minor to a treatment facility upon his own written application in an emergency situation as authorized by G.S. 122C-223.
- (b) Any minor who is emancipated may consent to any medical treatment, dental and health services for himself or for his child. (1971, c. 35; 1977, c. 582, s. 2; 1983, c. 302, s. 2; 1985, c. 589, s. 31; 1985 (Reg. Sess., 1986), c. 863, s. 4; 2009-570, s. 10.)



14 year old reports rape but does not want rape kit. Parents want medical providers to “do all the testing” and rape kit



- Patient has right to decline treatment
- Consider pts needs first
 - STI testing or just treat
 - Emergency Contraception
 - What part of exam is NECESSARY?
- Do no harm
- Our role as **patient's** medical provider



What is the purpose of the medical evaluation?

Does it differ based on setting?

- ED
- PCP
- CMEP
- Advocacy Center



- Medical Exam
 - History
 - Social Issues and Risks
 - Exam
 - Truth about Confidentiality
- Setting
 - ED
 - Urgent needs
 - Forensic
 - Primary Care, CMEP, Advocacy
 - Psychosocial needs
 - Risks
 - Treatment
 - Follow up
 - Long term needs
 - MH assessment



<http://www.insurance-dr.com/blog/tags/tough-decisions/>
accessed 7/15/14



HEADSS



- **H**ome
- **E**ducation
- **A**ctivities/Exercise
- **D**rugs
- **S**ex
- **S**uicide/Esteem
- **S**pirituality

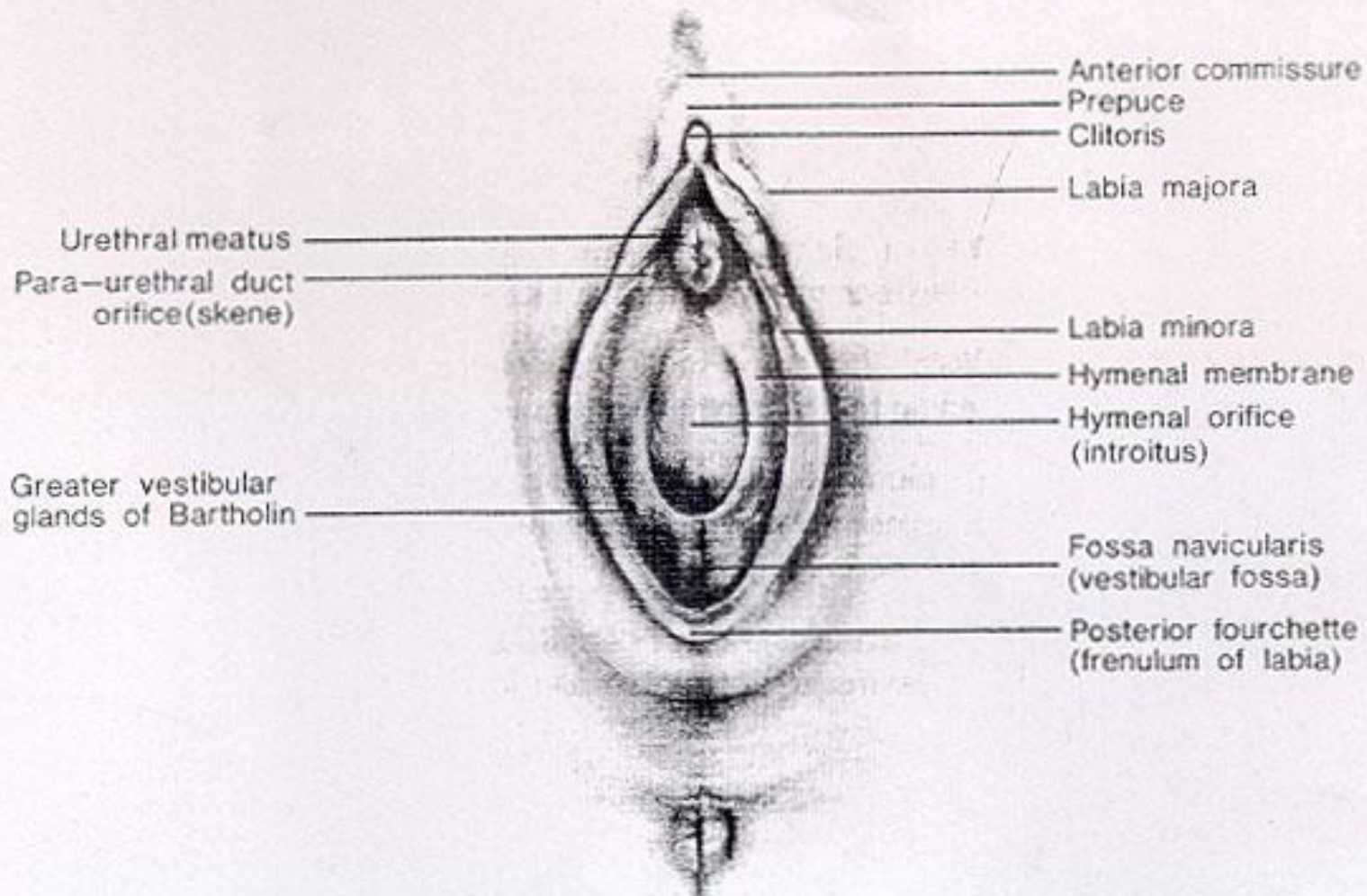


True or False

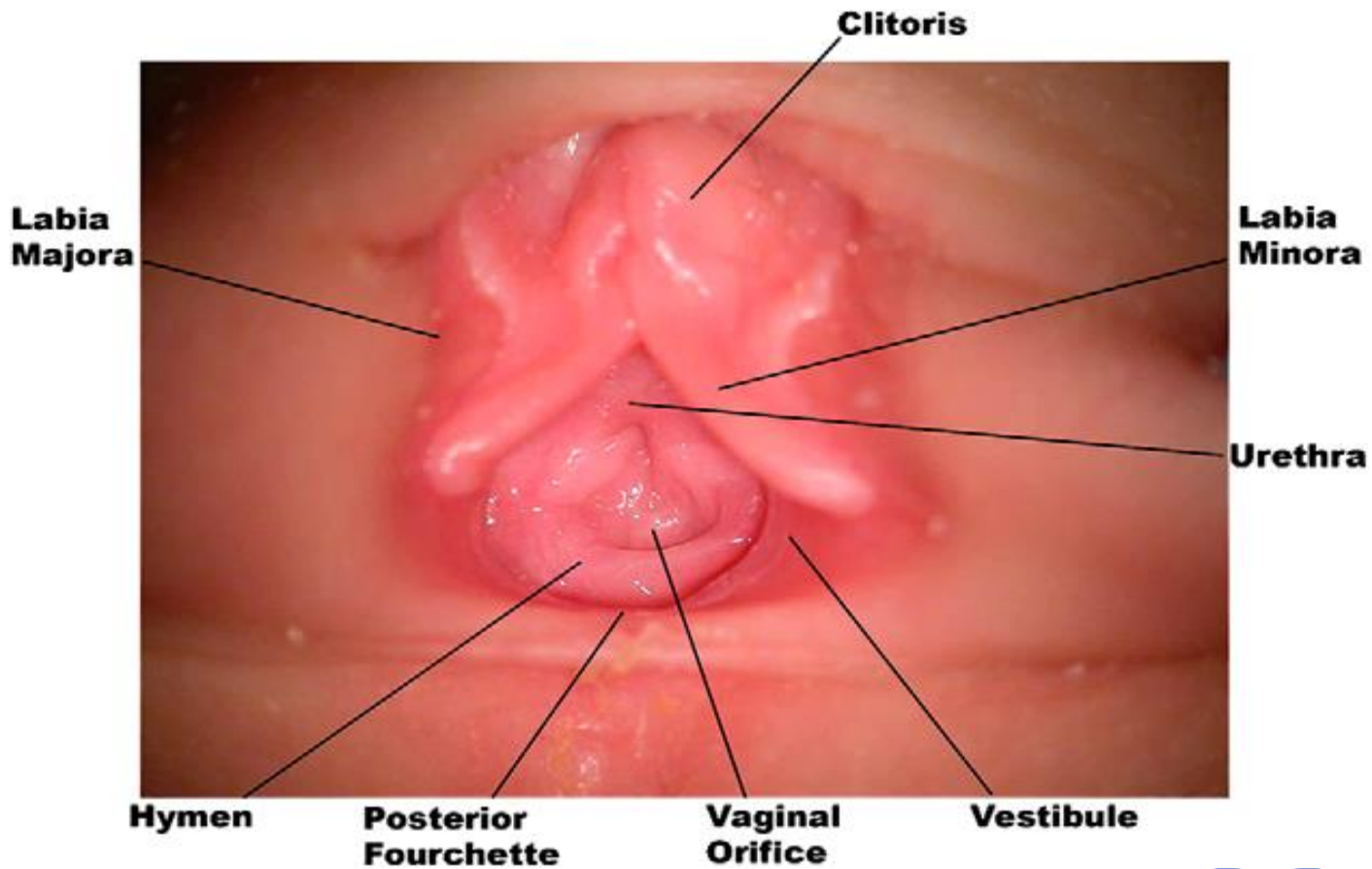
Once puberty hits, you can't tell a difference...



ANATOMIC STRUCTURES IN THE PREPUBERTAL GIRL



Reprinted with permission from Finkel M; DeJong AR: Medical findings in child sexual abuse. In Reece RM: Child Abuse, Medical Diagnosis and Management. Lea & Febiger, Philadelphia, 1994, p. 210.



Hymenal Types

frog leg position

(percentage in prepubertal girls with no history of abuse)

Imperforate = no opening = NOT NORMAL



CRESCENTIC (38%)

Heart shaped

Absence of tissue at 10 and 2 o'clock

NORMAL



ANNULAR

(32%)

NORMAL



TELESCOPIC

(FUNNELLED)

extends outward

NORMAL



FIMBRIATED

(REDUNDANT)

(12%)

ESTROGEN

Difficult to

Examine edges

Without use of

Foley or Q-tip

NORMAL



SEPTATED

NORMAL

-seen in females with estrogen effects: newborns, up to age 1-2 years, pubertal



SEPTAL REMNANTS

MOUNDS with adequate underlying tissue

NORMAL

*Mattins
9/100*



HEALTH
ECTION

Comprehensive Adolescent Medical and Mental Healthcare

Adolescent Sexual Abuse Evaluation

THINGS HAVE CHANGED

- We used to think:
 - Many abused teens have clefts, tears from abuse (based on exams on teens with consensual penetration) (Emans, 1994)
- Now
 - Most teens screened for non-abuse have same findings (Friedrich 2000)
 - Abused teens have nonspecific findings (Heger 2002)



Genital Anatomy in Pregnant Adolescents: “Normal” Does Not Mean “Nothing Happened”

Kellog, 2004

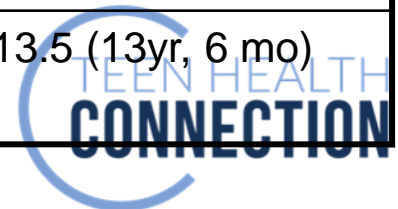
- N= 36 pregnant teens who were seen for sexual assault
(20 preg from assault, 15 consensual, 1 unknown)
- 22 (64%) had normal or nonspecific examination findings
- 8 (22%) had inconclusive findings
 - All but 1 of the inconclusive cases were patients examined >4 years prior to study (OLD GUIDELINES)
- 4 (8%) had suggestive findings
- 2 (6%) had definite evidence of penetrating trauma.
- **Conclusion**
 - MOST EXAMS ARE NORMAL; even with known penetration
 - Never had abnormality
 - Heals quickly



Pubertal Growth and Development

MALE	Average age (years)
Testicular/penile changes	11.6
Pubic, Axillary Hair Voice Changes	13.4
Spermarche	Tanner 3
Peak linear growth (9 cm/yr)	14.1 (Tanner 4-5)

FEMALE (pre-PROS)	Average age/years*
Ovarian/Uterine growth	9
Thelarche	11
Adrenarche	11.2 (11yr 2.4 mo)
Peak Linear Growth	12.3 (12yr 3.6mo)
Acne	13
Menarche	13.5 (13yr, 6 mo)



Sexual Maturity Ratings (SMR)

STAGES OF BREAST AND PUBIC HAIR DEVELOPMENT

In 1969, Marshall and Tanner (38) recorded the rates of progress of pubertal development of 192 English schoolgirls. These stages can be important guidelines in assessing whether an adolescent is developing normally. The Tanner stages—also termed Sexual Maturity Rating (SMR)—for breast development are as follows (Fig. 9) (38,39):

Stage B1 (preadolescent): elevation of the papilla only.

Stage B2 (breast bud stage): elevation of the breast and papilla as a small mound, enlargement of the areolar diameter.

Stage B3 further enlargement of the breast and areola with no separation of their contours.

Stage B4 further enlargement with projection of the areola and papilla to form a secondary mound above the level of the breast.

Stage B5 (mature stage): projection of the papilla only, resulting from recession of the areola to the general contour of the breast.

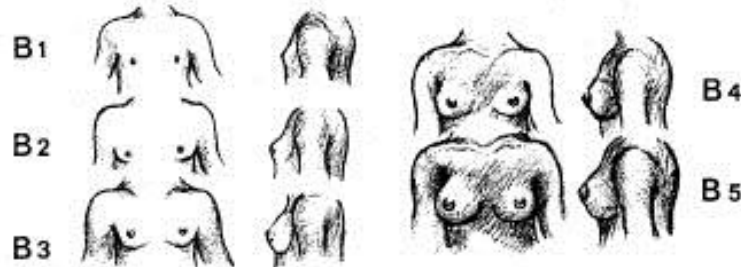


FIG. 9. The Tanner stages of human breast development. (Adapted from Grumbach MM, Styne DM. Puberty: Ontogeny, neuroendocrinology, physiology, and disorders. In: Wilson JD, Foster DW, eds. *Williams Textbook of Endocrinology*, 8th ed. Philadelphia: W.B. Saunders, 1992; and from Marshall WA, Tanner JM. Variations in pattern of pubertal changes in girls. *Arch Dis Child* 1969;44:291.)

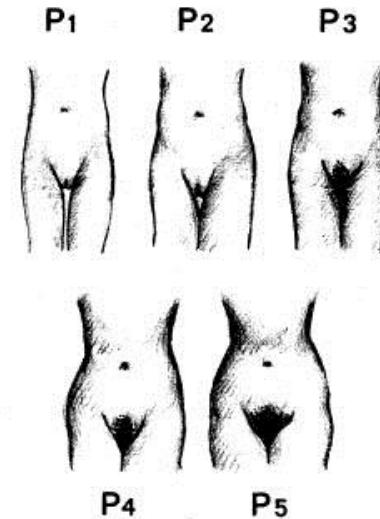


FIG. 10. The Tanner stages for the development of female pubic hair. (Adapted from Grumbach MM, Styne DM. Puberty: Ontogeny, neuroendocrinology, physiology, and disorders. In: Wilson JD, Foster DW, eds. *Williams Textbook of Endocrinology*, 8th ed. Philadelphia: W.B. Saunders, 1992; and from Marshall WA, Tanner JM. Variations in pattern of pubertal changes in girls. *Arch Dis Child* 1969;44:291.)

Stage PH1 (preadolescent): the vellus over the pubes is not further developed than that over the anterior abdominal wall; no pubic hair.

Stage PH2 sparse growth of long, slightly pigmented, downy hair, straight or only slightly curled, appearing chiefly along the labia.

Stage PH3 hair is darker, coarser, and curlier; it spreads to extend sparsely over the junction of the pubes.

Stage PH4 hair is adult in type and spreads over the mons pubis but not to the medial surface of the thighs.

Stage PH5 (mature stage): hair is adult in quantity and type, and it spreads to the medial surfaces of the thighs. Its distribution in an inverse triangle forms the classic feminine pattern

The mean age of each stage of puberty for British girls is shown in Fig. 11 and Fig. 12 (38). The ages of normal sexual development from American data are shown in Table 2 (40).

Puberty

- Menarche
 - 1800's and 1950's earlier onset
 - No changes since except nonhispanic blacks
 - » PROS 1997 (Hermann-Giddens, 1997)
 - » NHANES (National Health and Nutrition Examination Study)
 - Environment factors: BMI; possibly antiandrogens, estrogens
- “Tanner” Stages
 - 1962
 - English Caucasian girls
- Hermann-Giddens 1997
 - Pediatric Research in Office Settings (PROS)
 - 17,077 NC girls
 - 90.4% Caucasian; 9.6% AA
 - No Latinas, No BMI...
- No data to suggest changes in boys
 - Obese boys may have later onset



Pubertal Assessment 2010

- 3 centers; NE, Midwest, Northern CA
- N= 1239; Ages 6-8 yo followed over 2 yrs
- Ht, Wt, Ht velocity
- 34% W, 32% Black, 30% H, 4.6% Asian

- Breast or Pubic Tanner Stage ≥ 2
 - At age 7: 10% W, 23% B, 15% H
 - At age 8: 18% W, 43% B, 31% H

- Factors associated with higher Tanner Stage: Black, Higher BMI

Puberty and Exam Findings

- Estrogen
 - Breast development
 - Leukorrhea
 - Hymen thickens, redundant edges
- After puberty, hymenal edges less sensitive to contact





estrogen effects in adolescence

Evaluation of the Sexually Abused Child: A Medical Textbook and Photographic Atlas.
Heger A and Emans SJ. Oxford University Press. 1992.





14 yo use of tampon to view hymenal edges



Puberty: take home message

- Onset of Puberty is earlier
- Onset of menses has not changed very much (2-3 yr after thelarche)
- Pubertal stage: breast development, axillary hair, pubic hair, and menses should be documented
- With allegations of sexual assault, exam may help delineate pubertal stage and likelihood of there may be physical evidence of abuse



True or False

Once puberty hits, you can't tell a difference...

True and False

- estrogen affects genital appearance
- puberty begins at different ages



True or False

Prepubertal girls are more likely to show evidence of penetration with assault than pubertal victims



True or False

- Prepubertal girls are more likely to show evidence of penetration with assault than pubertal victims

- Maybe...



Sexual Abuse Acts

- Intercourse
- Sodomy
- Oral-genital contact
- Fondling
- Masturbation
- Digital penetration
- Exposure



Physical Findings

- Normal Exam
 - Tissue meant to stretch: vaginal and anal
 - Physiological leukorrhhea
 - Normal response to touch
- Quick Healing
 - Highly vascular tissue



**Healing of Hymenal Injuries in Prepubertal and Adolescent Girls: A
Descriptive Study
McCann et al, Pediatrics, 2007**

- N=113 prepubertal (201 injuries)
 - 21 noninflicted, 73 abuse, 19 unknown
- N= 126 adolescent assault
- Hymenal injuries healed at varying rates



McCann study

Injury	Healing time
Abrasions, mild submucosal hemorrhages	3-4 days
“marked” hemorrhages	11-15 days
Petechiae	2 days prepubertal; 3 days pubertal
Blood blisters	One adolescent 34 days
Hymenal laceration-superficial, intermediate, deep	



TABLE 6 Healed Hymenal Rim Findings by Depth of Laceration: Pubertal Girls

Depth	Yes, <i>n</i> (%)	No, <i>n</i> (%)	UTD, <i>n</i> (%)
Superficial (<i>n</i> = 13)			
Normal scalloped appearance	8 (62)	4 (31)	1 (8)
Continuous	11 (50)	1 (8)	1 (8)
<1 mm in width	3 (23)	6 (46)	4 (31)
Intermediate (<i>n</i> = 9)			
Normal scalloped appearance	6 (67)	2 (22)	1 (11)
Continuous	7 (78)	1 (11)	1 (50)
<1 mm in width	3 (33)	3 (33)	3 (33)
Deep (<i>n</i> = 20)			
Normal scalloped appearance	10 (46)	11 (50)	1 (4)
Continuous	12 (60)	2 (9)	5 (23)
<1 mm in width	10 (46)	6 (27)	6 (27)
Transection (<i>n</i> = 23)			
Normal scalloped appearance	8 (35)	12 (52)	3 (13)
Continuous	11 (48)	8 (35)	4 (17)
<1 mm in width	14 (61)	1 (4)	8 (45)
Transection/extension (<i>n</i> = 13)			
Normal scalloped appearance	4 (31)	8 (62)	1 (8)
Continuous	6 (46)	5 (39)	2 (15)
<1 mm in width	7 (54)	2 (15)	4 (31)

UTD indicates unable to determine for a variety of reasons.

McCann, outcomes

- Hymenal laceration-superficial, intermediate, deep
 - 40 in prepubertal
 - 80 in pubertal
- Deep laceration follow up
 - 15/18 (83%) in prepubertal normal
 - 24/31 (77%) in adolescents normal or scalloped
- **Most hymenal lacerations heal to normal; but it depends on**
 - **Individual**
 - **Timing of exam**





adolescent acute findings

Evaluation of the Sexually Abused Child: A Medical Textbook and Photographic Atlas. Heger A and Emans SJ. Oxford University Press. 1992.



True or False

Prepubertal girls are more likely to show evidence of penetration with assault than pubertal victims

- Maybe...
 - Healing occurs rapidly
 - Hymen and anal sphincter tissue is distensible
 - Estrogen affects findings
 - Type of abuse may not leave evidence
 - Time since assault
 - STI?



True or False

STI testing is indicated in adolescent sexual assault evaluations



STI testing

- In acute evaluations, positive tests may not reflect infection from assault
- Treat prophylactically based on risk, then retest at follow up if indicated
 - GC
 - Chlamydia
 - Anaerobic Coverage
- HIV and RPR testing at follow up and 4-12 weeks

2010 CDC STD Treatment Guideline

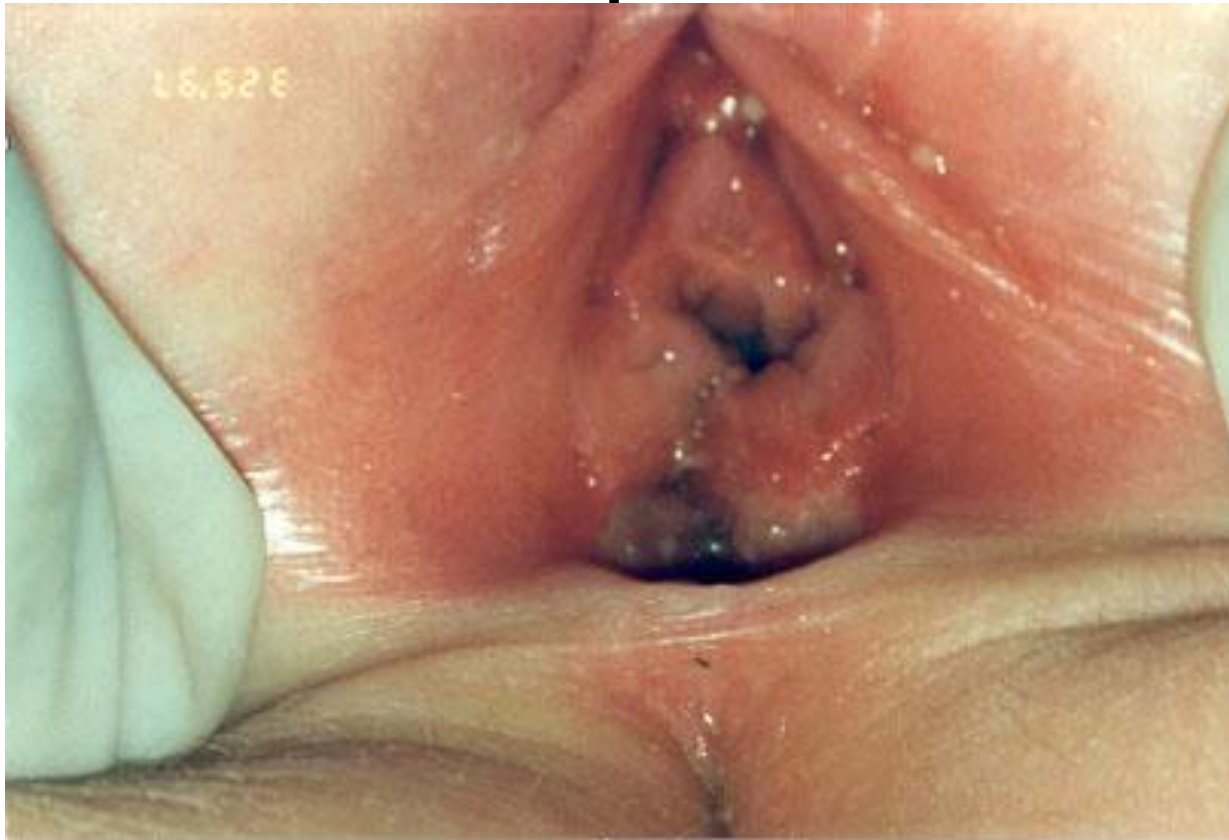
<http://www.cdc.gov/std/treatment/2010/>



True or False

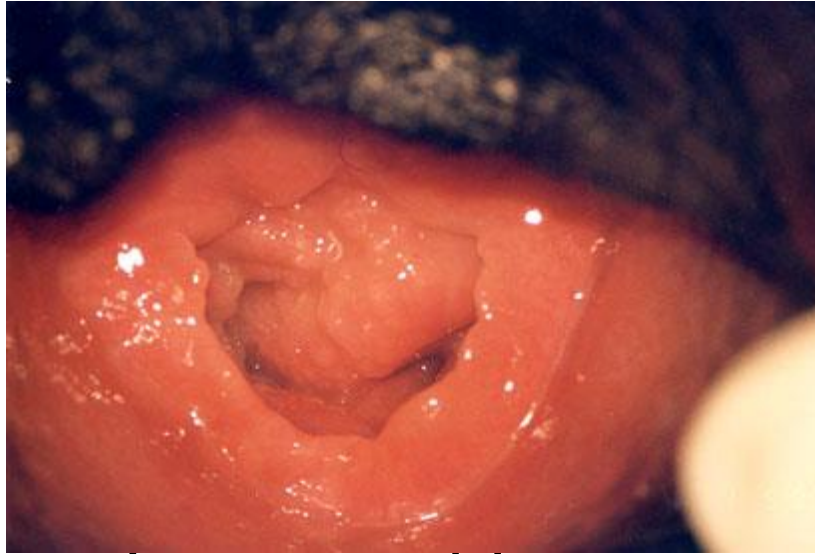
You can tell STI presence by whether there is a vaginal discharge or odor





2 1/2 year old acute injury
yellow/green discharge





- Ten year old
- No disclosure
- Abnormal exam in knee chest
- + *Trichomonas vaginalis*



U NAAT

- Very accurate
 - Better than culture for oral
 - “legal dance”
- Less invasive for males
- Equally accurate in females to vaginal or cervical swabs
- Use as screening
- CDC recommends (non abuse eval)
 - self swab for women
 - urine for men



U NAAT

- “False Positives”
 - Most labs do second line PCR test
 - Approaching or exceeding “gold standard”
 - Cultures may have false negatives
 - U NAAT always good for screening
 - Use “non clean catch”
- Test for DNA- dead or alive
 - So test will remain positive for 2-3 weeks after treatment;
don’t retest for one month



What about wet prep?

- Wet prep from vaginal canal sufficient
- External GU exam
- Self swab
- Don't forget trichomonas!
 - Wet prep miss between 36-64%
 - THC study missed 25%
 - Rapid trichomonas test PCR
 - \$10 a test



Expedited Partner treatment (EPT) ok in NC

- "It is the position of the **North Carolina Medical Board** that prescribing drugs for an individual whom the licensee has not met or personally examined **may be suitable** when that individual is the partner of a patient whom the licensee is treating for gonorrhea or chlamydia." (November 2009)
- "It is up to the Pharmacist to determine the legitimacy of each prescription, which arrives in the Pharmacy. **NC Pharmacy Board.**
- Other states:

Green specifically permits EPT
Orange may permit; certain providers,
certain dx
Red may prohibit EPT



SC says "when necessary, the health department shall adopt other accepted national public health recommendations such as CDC guidelines, or make other policies as needed."

<http://www.cdc.gov/std/ept/legal/default.htm>



EPT in SC?

- CODE - “It is unprofessional conduct for a physician to prescribe drugs to an individual without establishing a proper physician patient relationship...This will require that the physician: (1) Personally perform an appropriate history and physical examination...

BUT....

- SCBME - It is the position of the SCBME that EPT of STDs should be used "in accordance with the most current established guidelines as published by these organizations, even in the absence of a previously-established patient-physician relationship.”

<http://www.cdc.gov/std/ept/legal/southcarolina.htm>



“Test of Reinfection”

- High *C. trachomatis*, *N. gonorrhoeae* and *T. vaginalis* reinfection rates
 - treated persons resume sex with untreated partners or initiate sex with new partners
- Retest for chlamydia/gonorrhea/trichomonas ~3 months after treatment or whenever persons next present for medical care
- Regardless if patients believe sex partners treated



2010 CDC STD Treatment Guidelines

- GC
 - 250 mg ceftriaxone PLUS 1 g azithromycin
- Chlamydia
 - 1 g Azithromycin once
- Anaerobic
 - Metronidazole or Doxycycline
- Trichomonas
 - 2 grams Metronidazole once
- HIV prophylaxis
- Patients should abstain from sexual contact until 7 days after they and their partners have completed treatment
- **Test of Reinfection 4-12 weeks**

2010 CDC STD Treatment Guidelines <http://www.cdc.gov/std/treatment/2010/>



Emergency Contraception

- IS
 - Safe, effective
 - Appropriate for contraceptive failure, no contraception, sexual assault
- IS NOT
 - Teratogen
 - Abortifacient
 - PlanB and Yuzpe may work b/t conception and implantation



Emergency Contraception



- Most effective taken earlier
- May give up to 5 days after
- Every hour doubles pregnancy rate
- Plan B One Step
 - generic, OTC \$30 Progestin only: 89% effective within 72 hrs
- Yuzpe Method
 - Estrogen + progesterone
 - 75% effective within 72 hours
- Ella
 - \$43
 - NOT OTC
- Copper IUD

Accessed 1/30/11 from powerpoint “Contraception: A problem-based approach” Alice Chuang, MD, FACOG UNC Department of Obstetrics & Gynecology. Division of Women’s Primary Health Care



OCP and OCP-like

- OCP
 - Hormone types/dose
 - Progestin only 🙅
 - Estrogen/Progestin
 - Bi/triphasic 🙅
 - Low Dose 🙅
 - Cycle
 - Traditional 28 day
 - 24 day
 - Extended Cycling

- The Patch: Ortho-Evra
- The Ring: NuvaRing
- OCP-LIKE?

Depot medroxyprogesterone acetate (DMPA)



Long Acting Reversible Contraception

LARC

- Implanon
- IUD
 - Copper T (Paraguard)
 - Levonorgestrel-releasing intrauterine system (LNG-US; Mirena, Skyla)
- LARC-like?

Depot medroxyprogesterone acetate (DMPA)



Wrap up:

Possible Behavioral Consequences

- More likely to have sex with multiple partners
- Less likely to use contraception
- More likely to have been pregnant or fathered a child
www.childtrendsdatabase.org, accessed 7/15/18
- Girls who are sexually abused are 28 times more likely to be arrested for prostitution
- (Sharon Cooper, MD quoted at NC Peds Society 8/19/11)

Therapy should address issues of behavior and trauma.



The Wrap -Up

Sexual Victimization: **Possible Long Term Consequences**

- Fatigue
- Chronic Pain
- Emotional and Psychological Consequences
 - Depression
 - Anxiety, Panic Disorder
 - Stress
 - PTSD
 - Sensory Integration Disorder
 - Reactive Attachment Disorder
 - Trust, Relationship

 - Recognize concerns may not be evident for YEARS



The Wrap –Up

Medical

- Reassure, to extent possible
 - “Virginity”
- Confidentiality, to extent possible
 - Other agencies may share info...
- Medical tests
- Future Communication/confidentiality
 - Test results
 - Get patient cell phone
 - Text?



Conclusion

- Adolescents \neq Children
- Adolescent \neq Adult
- Adolescents = Fun

- It is medical role to:
 - Educate MDT members about adolescent victims
 - Advocate for teen victims
 - Acknowledge and encourage MH screening in addition to investigation, prosecution
 - STD testing, education
 - Contraceptive education and implementation



Selected References

- **Adolescent Sexual Assault Victims.** AAP Committee on Adolescence: *Pediatrics*, 107 (6) 1476-79
- **“Adolescents Who Have Ever Been Raped”** www.childtrendsdatabase.org; accessed 7/22/11 DOJ National Protocol for Sexual Assault Medical Forensic Exams 2004
<https://www.ncjrs.gov/pdffiles1/ovw/206554.pdf>) accessed 8/1/11
- **2010 CDC STD Treatment Guidelines** <http://www.cdc.gov/std/treatment/2010/>
- **Genital Anatomy in Pregnant Adolescents: "Normal" Does Not Mean Nothing Happened** Nancy D. Kellogg, Shirley W. Menard and Annette Santos *Pediatrics* 2004;113;e67
- **Healing of Hymenal Injuries in Prepubertal and Adolescent Girls: A Descriptive Study;** John McCann, Sheridan Miyamoto, Cathy Boyle and Kristen Rogers; *Pediatrics* 2007;119;e1094-e1106
- **Predicting Sexual Assault Kit Submission Among Adolescent Rape Cases Treated in Forensic Nurse Examiner Programs** Shaw, J and Campbell R. *Journal of Interpersonal Violence*. 2013 28:18. 3400-3417
- **Unanalyzed evidence in law-enforcement agencies: A national examination of forensic processing in police departments.** Strom K and Hickman M *Criminology and Public Policy*, 9, 381-404.
- DOJ National Protocol for Sexual Assault Medical Forensic Exams April 2013
<https://www.ncjrs.gov/pdffiles1/ovw/241903.pdf>
accessed 7/15/14



Other References

Some historic...

- *Emans SJ, Woods ER, Allred EN, Grace E. Hymenal findings in adolescent women: impact of tampon use and consensual sexual activity. Pediatrics; 1994;V 125 :154–160*
- *Heger A, Ticson L, Velasquez O, Bernier R. Children referred for possible sexual abuse: medical findings in 2384 children. Child Abuse and Neglect; 2002; 26:645–659*
- *Friedrich WN, Grady JJ. A case-control study of anatomic changes resulting from sexual abuse. Am J Ob Gyn.; :2000: 182 820-834*

