Motivational Interviewing Strategies in Public Health: Connecting Adolescent Brain Development to Drugs, Sex, and Rock ‘n Roll

Paul Grossberg, M.D.
Clinical Professor Emeritus
Department of Pediatrics
University of Wisconsin
School of Medicine and Public Health
grossberg@pediatrics.wisc.edu
Objectives

- Review the basic principles, “spirit”, and methods of motivational interviewing and describe how they apply to discussing sexual behaviors with adolescents.

- Discuss the unique influences of the developing adolescent brain on risk-taking behaviors.

- Describe specific strategies you will use in your everyday public health and clinical work with adolescents to discuss sexuality effectively and to promote healthier relationships.
Motivational Interviewing is simple...  
...but not easy\(^1\)

- Complex set of skills, used flexibly and responsively
- Similar to learning to play a complex sport or musical instrument
- Conscious and disciplined use of specific communication principles and strategies
- Not a trick or technique easily mastered in one session or a workshop or two
- Proficiency requires practice with feedback and coaching over time

Clinicians’ Usual Advice about Health Behavior Change

• It’s not very effective
• We do it anyway (we’ve been trained to)
• It lowers our anxiety

If we go into “giving advice mode”, or sound like we’re lecturing, we can re-connect with the patient by saying something like:

“So, what do you make of that?”...
The “Spirit” of Motivational Interviewing

• Collaborative
  • active, cooperative conversation, partnership
  • joint decision-making process

• Evocative
  • evoke from patients that which they already have
  • elicit patient’s own good reasons to change

• Honors Patient Autonomy
  • “there is something in human nature that resists being coerced and told what to do. Ironically, it is acknowledging the other’s right and freedom not to change that sometimes makes change possible.” (Rollnick, Miller, Butler, 2008)
Motivational Interviewing

Basic Principles

1. Express Empathy
2. Develop Discrepancy
3. Roll with Resistance
4. Support Self-Efficacy
Clinical Prevention in Practice

• “If your time is limited, you are better off asking patients why they would want to make a change and how they might do it rather than telling them that they should.

It is the patient rather than you who should be voicing the arguments for behavior change.”

Motivational Interviewing

Methods: O A R S

- Open Questions: not “yes/no”
  - Ask permission first
  - MI is more like “pulling” rather than “pushing”

- Affirm: patient’s positives/values/character
  - Summarize periodically, demonstrating you’re listening

- Reflective Listening: statements
  - Understand content and meaning

- Summarize: main points, then shift
20% of men between 18 - 35 consume
70% of all the beer sold in the US
Sexual Activity Perceptions at UW-Madison

American College Health Association
National College Health Assessment (ACHA-NCHA)
UW-Madison Institutional Data Report, Spring 2006
N= 787, representative sample of all UW-Madison students

Number    of    sexual    partners    in    past    year

- **Actual Self-report**
- **Perceived “typical” student**

0%: 23% actual, 1% perceived
1%: 53% actual, 11% perceived
11%: 11% actual, 11% perceived
32%: 5% actual, 32% perceived
31%: 9% actual, 31% perceived
4%: 8% actual, 4% perceived
2%: 2% actual, 2% perceived
1%: 1% actual, 1% perceived
3%: 0% actual, 3% perceived
0%: 1% actual, 0% perceived
1%: 0% actual, 1% perceived
1%: 0% actual, 1% perceived
1%: 1% actual, 3% perceived
3%: 3% actual, 3% perceived

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Oral Sex in Past Month

- Actual Self-report
- Perceived “typical” student

- Never: 21%
- Not Now: 27%
- 1-2: 19%
- 3-4: 14%
- 5-6: 8%
- 7-8: 4%
- 9-10: 4%
- 11+: 4%
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Actual Self-report
Perceived “typical” student

Never | 75%
Not Now | 20%, 48%
1-2 | 3%, 42%
3-4 | 0%, 7%
5-6 | 0%, 2%
7-8 | 0%, 1%
9-10 | 1%, 0%
11+ | 1%, 1%

Sexual Activity Perceptions at UW-Madison

Actual Self-report
Perceived “typical” student

Never | 75%
Not Now | 20%, 48%
1-2 | 3%, 42%
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9-10 | 1%, 0%
11+ | 1%, 1%

Anal | Intercourse | in Past Month

American College Health Association
National College Health Assessment (ACHA-NCHA)
UW-Madison Institutional Data Report, Spring 2006
N= 787, representative sample of all UW-Madison students
**Alcohol Toxicity:**

**MORE Effect on:**
- Cognitive function
- Memory
- Drug-seeking

**LESS Effect on:**
- Sedation function
- Motor Coordination

**Teen + EtOH = More Awake, More Mobile, Less Cognition**

- Increased risk Alcohol Use Disorders
- Longer term impairments: cognitive, process emotions, facial expressions

**Well connected...**

**by age 25...**

**Spatial Relationships**
- Sensory Function
  - Auditory
  - Language
  - Visual

**Prefrontal Cortex**
- Emotions
- Risk-taking
- Thrill-seeking
- Sexual, social

- Judgment
- Impulse Control
- Problem-solving
- Organizing
- Higher reasoning

**Prefrontal Cortex**
- Grey Matter
- White Matter

**Limbic System**
- Amygdala
  - Fight or Flight
  - Memory

**Hippocampus**
- Fight or Flight
- Memory

**Corpus Callosum**

**Parietal**

**Lateral Temporal**

**Occipital**
- Visual
- Spatial Relationships

**Sensory Function**
- Auditory
- Language
Adolescent Neurodevelopment: Brains, Behavior, Booze, & Brakes

Prefrontal Cortex - the “brakes” - still “under construction”

Alcohol’s neurotoxic effects: ongoing research on short and long term (?)

“Those who are most likely to drink heavily are those who may be already most “handicapped” neurologically to begin with.”
-- Peter Monti, PhD
Sexual Intercourse, 1993-2009
Wisconsin Public High School Students

Changes in sexual intercourse, 1993-2009

- Ever had sex
- Sex past three months

1 Wisconsin Youth Risk Behavior Surveys
Condom and OCP use, 1993-2009
Wisconsin Public High School Students

Of those sexually active, % with same sex partners:
Overall statewide: 10%  (2:1 f:m)
Milwaukee: 19%  (1:1 f:m)
Higher rates: depression, suicidality, being bullied, earlier sexual debut, less comfort talking with teachers
These questions only asked in 2007 and 2009
Teaching our kids about sex

We have a culture that is obsessed with sex, but phobic about sexuality...
Sexual Identity Formation Among Youth

- Sexual orientation
- Questioning
- Gender identity
- Gender roles
- Anatomic or natal sex
- Bisexual or bi
- Transgender
- Straight or heterosexual

Building healthy relationships

Help teens explore their sexuality in ways that are respectful, healthy, safe, and attuned to their developmental stage and individual values.
Talking with Youth about Sexuality
Goal: Building Healthy Relationships
Respecting values and telling the truth

- “Bad” News: You may need to leave your comfort zone
- Good News:
  - It's NOT about you; it’s about your patients/clients. The more you leave your comfort zone, the more comfortable and skilled you become.
  - If you don’t occasionally have a patient/parent get upset with you, you’re probably not doing a thorough enough job of talking about sensitive issues.
  - More sensitive topics discussed → more positive impact on youth perceptions of care and provider satisfaction.
  - Conversations can usually be BRIEF.
  - Impact is often life-altering, and may be life-saving
  - Reimbursement for your counseling time is getting better

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3 EXCEPT: ABUSE, ASSAULT, HARM (self or others), SIGNIFICANT MENTAL HEALTH ISSUES
Reimbursement for Preventive Counseling

- Extended office visit CPT codes, >50% counseling:
  - 99214 (25 min)
  - 99215 (40 min); plus 99354 for additional 30-74 min.
- Adjustment reaction (309.9) for alcohol/drug issues
- SBIRT codes: 99408, G0396, 99409, G0397, 99212 (Medicaid)
- Dx Code: V82.9 (screening for unspecified condition)
- Others
Communicating with Teens about Sexuality
Building Healthy Relationships

- Do NOT Assume:
  - that all patients are heterosexual
  - that straight males do not also have same-sex partners
  - that self-identified lesbian does not require birth control
  - that patients with developmental delays are not sexually active
  - that female teens do not engage in anal sex
  - that teens have been given factual information about sex
  - that “abstinence,” “safer sex,” or “sexually active” are clear terms
Communicating about Sexuality
Avoid nonspecific or vague terms

- Clinician: Are you sexually active?
  Patient: You mean, do we bounce around?

- Clinician: Do you have multiple partners?
  Patient: Are you crazy, Doc? Just one at a time!

- Clinician: Abstinence is the only 100% safe way to go.
  Patient: No problem, we love abstinence...
We love abstinence

That's cool. We can wait...

That's cool. We can wait...

Yeah, I'm not ready for that... not here... not now... not at this point in our relationship...

That's cool. We can wait...

Yeah, I'm not ready for that... not here... not now... not at this point in our relationship...

We love abstinence

Sure... this is good

Sure... this is good

Help teens figure out what they can say "yes" to

Kissing... touching... rubbing... cuddling... mutual masturbation... orgasm(s)... no oral sex, no intercourse, no alcohol

Kissing... touching... rubbing... cuddling... mutual masturbation... orgasm(s)... no oral sex, no intercourse, no alcohol

Kissing... touching... rubbing... cuddling... mutual masturbation... orgasm(s)... no oral sex, no intercourse, no alcohol
What is Abstinence?

Would you say you “had sex” if...

- 599 Midwestern undergraduate students

Not having had sex

- Masturbation with a partner: 85%
- Oral genital contact: 59%
- Penile-anal intercourse: 19%

Many teens grow up getting little or no information about body changes, menstrual periods, wet dreams, masturbation, or sexual feelings or experiences. So I ask all my teenage patients about this. Is it ok if we talk a little about that? ("ok")... Are any of your friends at school in sexual relationships... Have you been dating, or ever been in a sexual relationship with anyone? Are your sexual feelings or attractions for guys, girls, both, or neither? Sometimes teenagers have been hurt physically or sexually, or have been forced to have sex that they didn’t want. What about you? Has anything like that ever happened to you? What’s it like talking with your parents about your friendships, or relationships? Do you talk with them about sex, or values, or staying healthy? You mentioned you weren’t sure where things are headed with __________. The most important parts of maintaining a healthy relationship are mutual respect, communication, responsibility, and thinking through your values. Many teens wait as long as possible, since sex certainly makes things complicated, and I’m glad to see you’re not rushing things. You’re the one who will decide what happens. If you choose to have intercourse, there are many ways to protect yourself and your partner. What have you talked about? What would you like to do? We can help you stay healthy...
MI Clinician Conversation “Starters”
Affirming strategies for “non-conforming” teens

- I’ve talked with many teens who are unsure about who they are, or who they are attracted to. How do you see yourself? What about your friends?
- Who do you have crushes on, or fall in love with?
- We have many teens in our practice / clinic who are gay, lesbian, or transgender, or just unsure about all this. And that’s OK. What are your thoughts?
- It’s entirely acceptable to be whoever you turn out to be.
- At your age, everything changes daily. We can talk about this again sometime.
Stages of Change\textsuperscript{1} Intervention Strategies

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<thead>
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<th>Stage</th>
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Prochaska & DiClemente 1982, 1992

Slide adapted from Jason Kilmer, Ph.D.

1 Prochaska & DiClemente 1982, 1992
Stages of Change\(^1\) Intervention Strategies

- **Pre-contemplation Stage**
  - Not considering change
  - Problem exists, but patient minimizes, denies problem

- **Contemplation Stage**
  - Ambivalent about change
  - Thinks about problem, costs, and benefits of change

- **Determination Stage**
  - Decides, commits to change
  - Hasn’t started yet, but plans to

- **Action Stage**
  - Involved in change
  - Daily efforts to overcome problem

- **Stable change**
  - Vigilant
  - “I don’t need to change my drinking. I’m doing fine.”
  - “I’d like to stop smoking, but it’s just too hard right now.”
  - “I’m gonna try much harder to use condoms every time”
  - “We’re using condoms AND I’m on birth control pills too”
  - “I stopped weed altogether and only have 2 drinks twice a week.”

- **Relapse**

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1 Prochaska & DiClemente 1982, 1992

Slide adapted from Jason Kilmer, Ph.D.
Motivational Interviewing
Pre-contemplation

- Clinician: What do you think about condoms?
- Patient: I don’t like them.
- Clinician: Why not?
- Patient: I don’t know. They don’t feel good.
- Clinician: I have many patients who have gotten HIV or other STIs or had unintended pregnancy from unprotected sex. What are your thoughts about what’s the worst thing that could happen...
- Patient: Well, I could get pregnant or get AIDS or something.
- Clinician: That’s true. Sounds like you might be willing to think a bit more about protecting yourselves. Here’s something to read, and we can talk more about condoms and protection at your next visit.

Adapted from Schoeberlein et al, AIDS Reader, 1999
Motivational Interviewing

Contemplation

- Clinician: What do you know about condoms?
- Patient: Well, they can prevent pregnancy, HIV, and other stuff.
- Clinician: What do you think about using condoms the next time you have sex?
- Patient: Yeah, well, maybe.
- Clinician: What would make it easier for you to use condoms?

Schoeberlein et al, AIDS Reader, 1999
Motivational Interviewing
Determination

• Clinician: Now that you know how to use condoms the right way, what do you need to do so you’re ready to use them the next time you have sex?

• Patient: I’m going to take some of those free condoms and lubricants from the waiting room, and I’ll keep them with me. But how am I going to tell my boyfriend he’s got to wear one?

• Clinician: What do you think would happen if you brought the condoms out or insisted he wear one? What would you say to him?

from Schoeberlein et al, AIDS Reader, 1999
Motivational Interviewing
Action

- Clinician: So, how are you doing using condoms?
- Clinician: That’s great! Do you need more condoms? How’s your relationship going?
- Patient: We did it! I can’t believe it wasn’t so hard; I mean it was okay.

Adapted from Schoeberlein et al, AIDS Reader, 1999
Motivational Interviewing
Maintenance

- Clinician: I’m really proud of you! It’s great that you’re using condoms when you’re having sex. What are you going to do to make sure that you keep using them?

- Patient: Well, I haven’t gotten high recently, so it’s been pretty easy to remember to use the condoms, but when I’m partying it’s going to be a lot harder to take a time-out from the moment, you know what I mean?

- Clinician: What’s going on when you feel like you need to party? What other ways could you deal with those issues? What other choices do you have?

Adapted from Schoeberlein et al, AIDS Reader, 1999
Teen Birth Rates, WI & US 1990-2008

Births per 1000 females Ages 15 - 19

United States

Wisconsin

60

42

31


70

60

50

40

30
Comprehensive Sexuality Education

- Comprehensive Sexuality Education encourages abstinence as safest;
  - but for those who decide to be sexual: condoms, contraception
- 48 programs studied: Strong evidence of positive effects in 2 out of 3\(^1\)
  - delayed sexual initiation
  - fewer numbers of partners
  - increased condom and contraceptive use
- Abstinence Only programs proven ineffective; over $500M spent
  - 25 States (including WI) refused funds or withdrew
- Federal $ for Comprehensive Sex Education so far: $0
- Personal Responsibility Education Program (PREP) funding pending
- California’s comprehensive education--40% drop in teen pregnancy
- Wisconsin--25% drop in teen pregnancy. 2005: 10th lowest in US

Non-sexual Motivations of Sexual Behavior

- Peer approval
- Rebellion
- Expression of hostility
- Escape
- Depression / cry for help
- Search for love or affection
- Confirm masculinity or femininity
Oxnard, California, February 12, 2008

Remembering Lawrence King

15-year-old Lawrence King was murdered at school on February 12, 2008.

Friends say the reason was his sexual orientation and gender expression.

Make sure Lawrence is not forgotten.
Risks Factors for Acquiring HIV Infection in Young Adults

- Sexual messages influence perception and behavior
- Young women: physiological and social vulnerabilities
  - cervical mucosal exposure to STIs
  - often older male partners with prior partners
  - power imbalance
- Alcohol and drug use accompanying sex
- Men having sex with men
- Multiple heterosexual partners
- Injection-drug users and their partners
- Persons who exchange sex for money or drugs
- Sex with persons who are HIV-infected
Listen for “Change Talk”: Themes

- **D: Desire**
  - “I wish I could lose some weight”
  - “I like the idea of using condoms more often”

- **A: Ability**
  - “I might be able to talk with my partner about that”
  - “I could probably keep condoms with me more often”

- **R: Reasons**
  - “Cutting down on drinking would be good for my health”
  - “I’d sure have more money if I cut down”

- **N: Need**
  - “I must get better sleep”
  - “I really need to take better care of my body”

Examples from and/or adapted from: Rollnick, Miller, & Butler (2008)
Clinical Prevention in Adolescents

- Every adolescent clinical conversation is an opportunity to elicit a prevention “motivational moment”, however brief, but always teen-centered, relevant to the presenting concern, and designed to stimulate individual, specific efforts at behavioral risk reduction.
- Ideally, the teenager will verbalize the need and the plan to start changing behavior.
References

- US Preventive Services Task Force (USPSTF)
- Crews F. Alcohol-induced neurodegeneration secondary to oxidative stress and proinflammatory proteins that are neurotoxic. *Alcohol Alcohol* 2009, Mar-Apr; 44 (2): 115-127.
- www.thecoolspot.gov (12-14 year-olds)
- www.collegedrinkingprevention.gov/HSParentStudents (15-17 year-olds)
- www.collegedrinkingprevention.gov/CollegeStudents (18-20 year olds)
- Wisconsin Clearinghouse for Prevention Resources. http://wch.uhs.wisc.edu