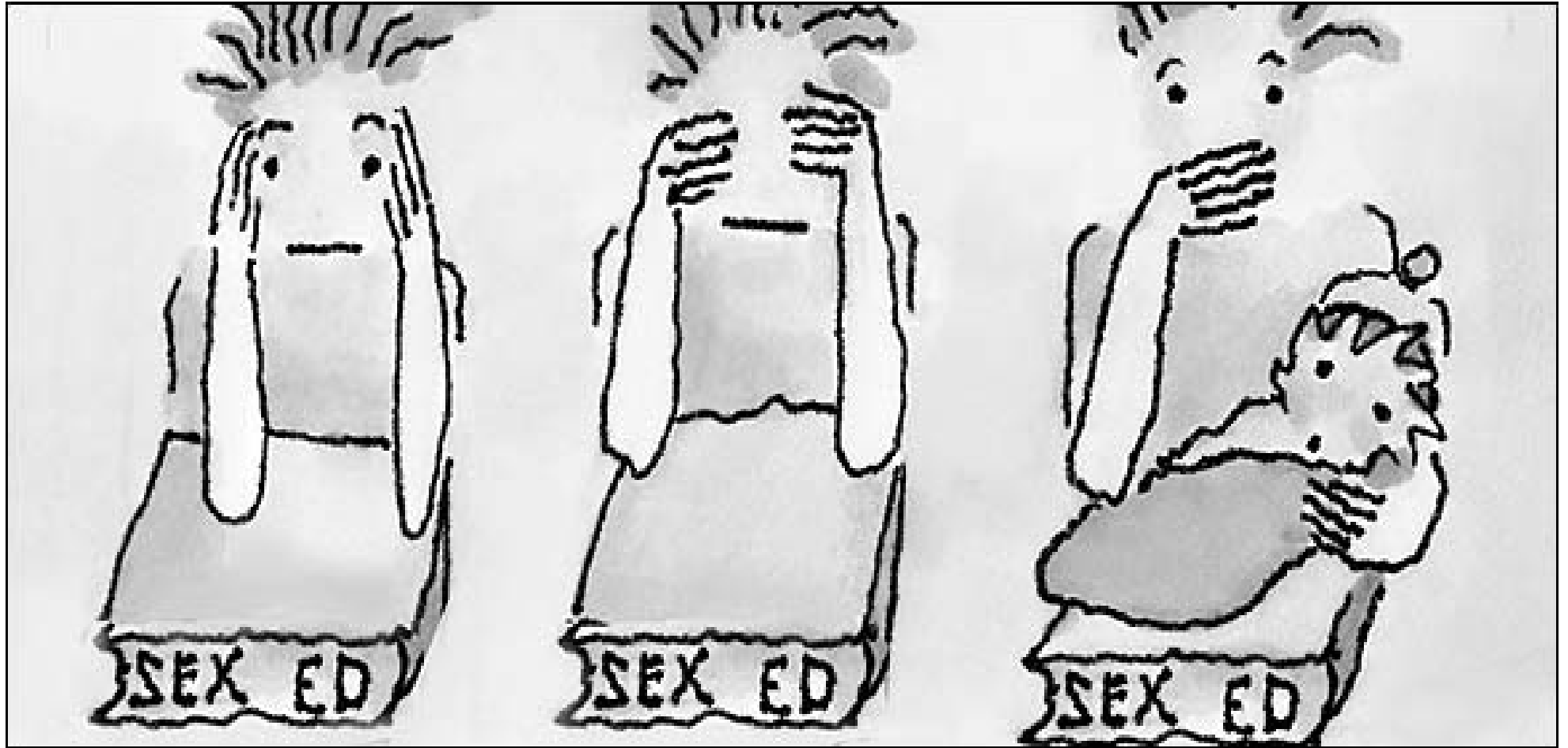


# Abstinence-Only Education: Does It Work?



New York Times, 6/1/04 Jane Brody/ Toni Zules

# **Evaluation des ABC (Abstinence, Fidélité, et Condom) et Abstinence-Only Strategies**

**John Santelli, MD, MPH**

**Heilbrunn Department of Population and Family Health**

**Columbia U, New York**

**Essais D'Intervention et Methodes Quasi-Experimental en  
Santé Publique**

**Paris**

**January 16, 2008**

# **Critiques of U.S. Abstinence-Only Policies and Programs**

- **Not medically accurate, promote misinformation**
- **Poorly designed, lack program efficacy**
- **Inconsistent with demographic realities**
- **A “moral” agenda, not a public health agenda**
- **Withhold life-saving information from youth**
- **Insensitive/ unresponsive to GLBTQ & other youth**
- **Promote sexist and racist stereotypes**
- **Inconsistent with parent preferences**
- **Harm to sex ed, public health and foreign aid programs**
- **Counter to international human rights thinking**

# **Themes from Recent Meeting**

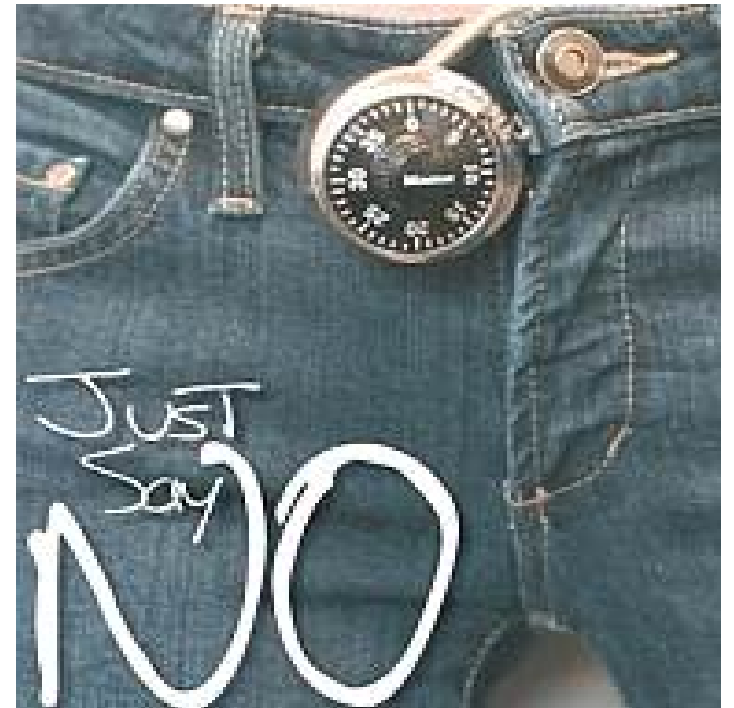
**Abstinence only (until marriage) education:**

- **Reflection of a social identity movement & world view**
- **Underlying motivation: social control of sexuality and women**
- **Part of a broader attack on science and the creation of an ideologically driven “faux” science**
- **Hijacking of multiple agendas: public health, adolescent health, HIV prevention, religious perspectives on sexuality**

# Abstinence-Only Policies: Symptom of a Broader Problem

## A Broader Problem of

- Science and politics
- Data and ideology
  
- Denial of global warming
- Opposition to
  - Stem cell research
  - Emergency contraception
  - HPV vaccine



# **Opinion of the Federal Director**

**"Abstinence is the only 100 percent effective way of ensuring that someone does not become pregnant out of wedlock or get someone pregnant out of wedlock or contract sexually transmitted diseases. I don't think we need any studies [to prove that]."**

**Wade F. Horn, Assistant Secretary  
for Children and Families**

**Capitol Hill "Abstinence Day"**

**February 2005**

# **Evaluation of ABC et AOE:** *Multiple Levels of Evaluation*

- **US federal abstinence-only programs: content**
- **Program evaluation: program impact**
- **Observational studies of virginity pledgers**
- **Inconsistency with demographic realities**
- **Harm to public health programs/human rights concerns**
- **Medical accuracy of AOE programs**
- **Reframing the debate from ABC**

# **Federal Abstinence-only Programs in the United States**

# U.S. Federal Support for Abstinence-Only Programs

## Major expansions in federal support since 1996

- Adolescent Family Life Act (1981)
- Section 510 of the Social Security Act to fund states (1996)
  - Personal Responsibility and Work Opportunity Reconciliation Act (i.e., welfare reform)
- Community-Based Abstinence Education projects (CBAE, 2000)

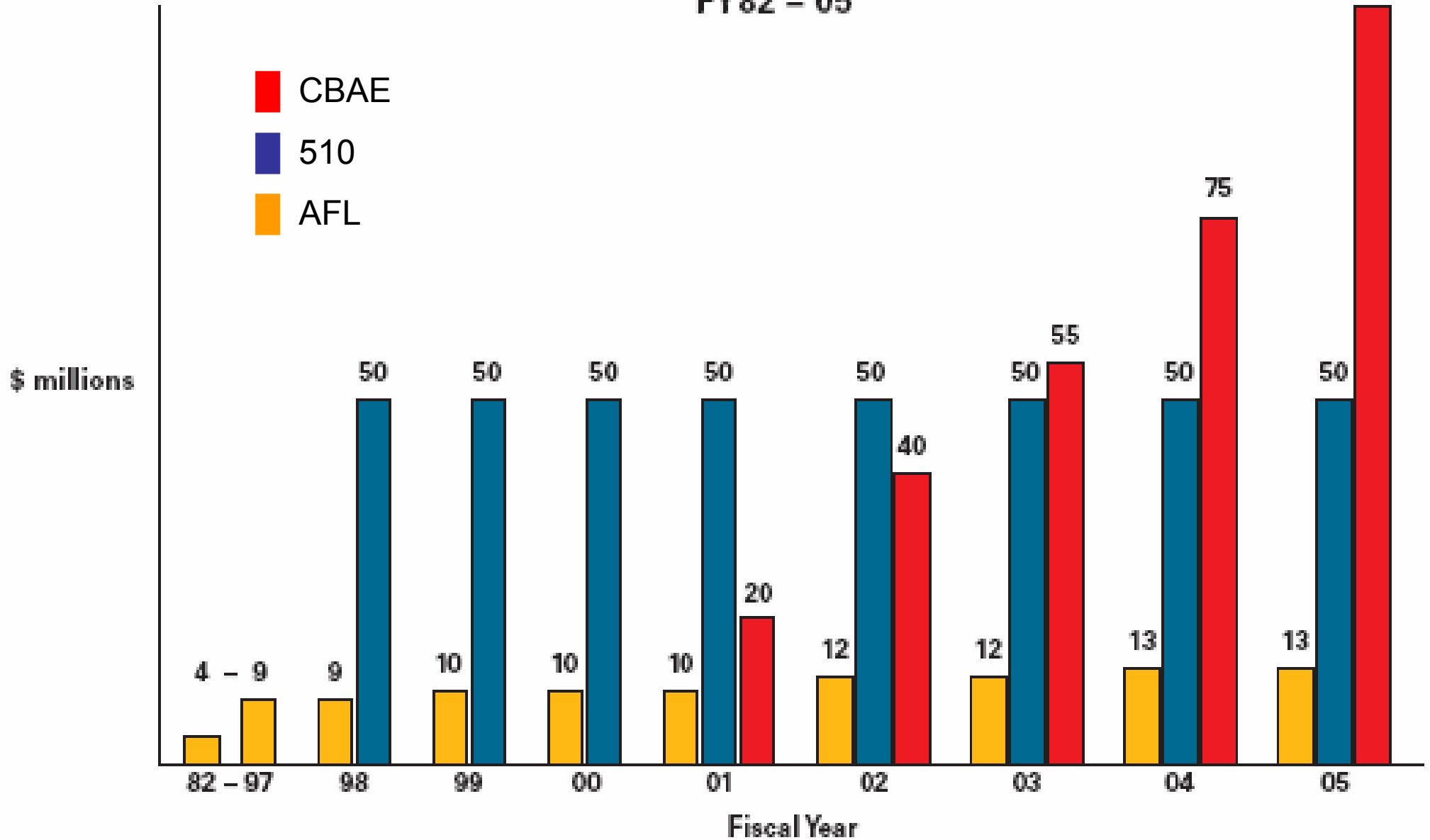
Section 510: “exclusive purpose” the promotion of abstinence outside of marriage

# Federal Support for Abstinence-Only Programs

Section 510 (within funded programs):

- Prohibits information on contraceptive services, sexual identity, human sexuality
- May not in any way advocate contraceptive use or discuss contraceptive methods except to emphasize their failure rates

**Figure 1**  
**Federal Funding for Abstinence-Only Programs**  
**FY82 – 05**



# Section 510, Eight Point Definition of Abstinence-only Education

3 key points

- abstinence from sexual activity is the **only certain way** to avoid out-of-wedlock pregnancy, sexually transmitted diseases, and other associated health problems
- **mutually faithful monogamous relationship** in the context of marriage is the **expected standard of human sexual activity**
- **sexual activity outside of the context of marriage** is likely to have **harmful psychological and physical effects**

# **FY 2006 CBAE Funding Requirements**

**Define:** Marriage must be defined as "only a legal union between one man and one woman as a husband and wife"

**Assert:** "Teen sexual abstinence improves preparation for stable marriage."

**Must teach:** "that teens who are sexually active are also more likely to engage in other risk behaviors such as: smoking, alcohol abuse, drug abuse, violence, and crime."

# **Behavioral Impact Evaluations of Programs Promoting Abstinence**

# Evaluations of Abstinence Promotion: Emerging Answers (Kirby 2007)

- Comprehensive review: all US studies since 1990
- 48 comprehensive and 7 abstinence-only programs
- Evaluation criteria: the same for abstinence-only programs and comprehensive sex ed programs
  - Curriculum-based abstinence, sex or STD/HIV programs
  - Strong experimental or quasi-experimental research design
  - Well-matched intervention and comparison groups
  - Measured change in sexual behaviors
- 2 similar systematic reviews by Underhill (2007)

# **Efficacy of Abstinence Promotion: Emerging Answers (Kirby 2007)**

Among the 48 **comprehensive sex ed programs**:

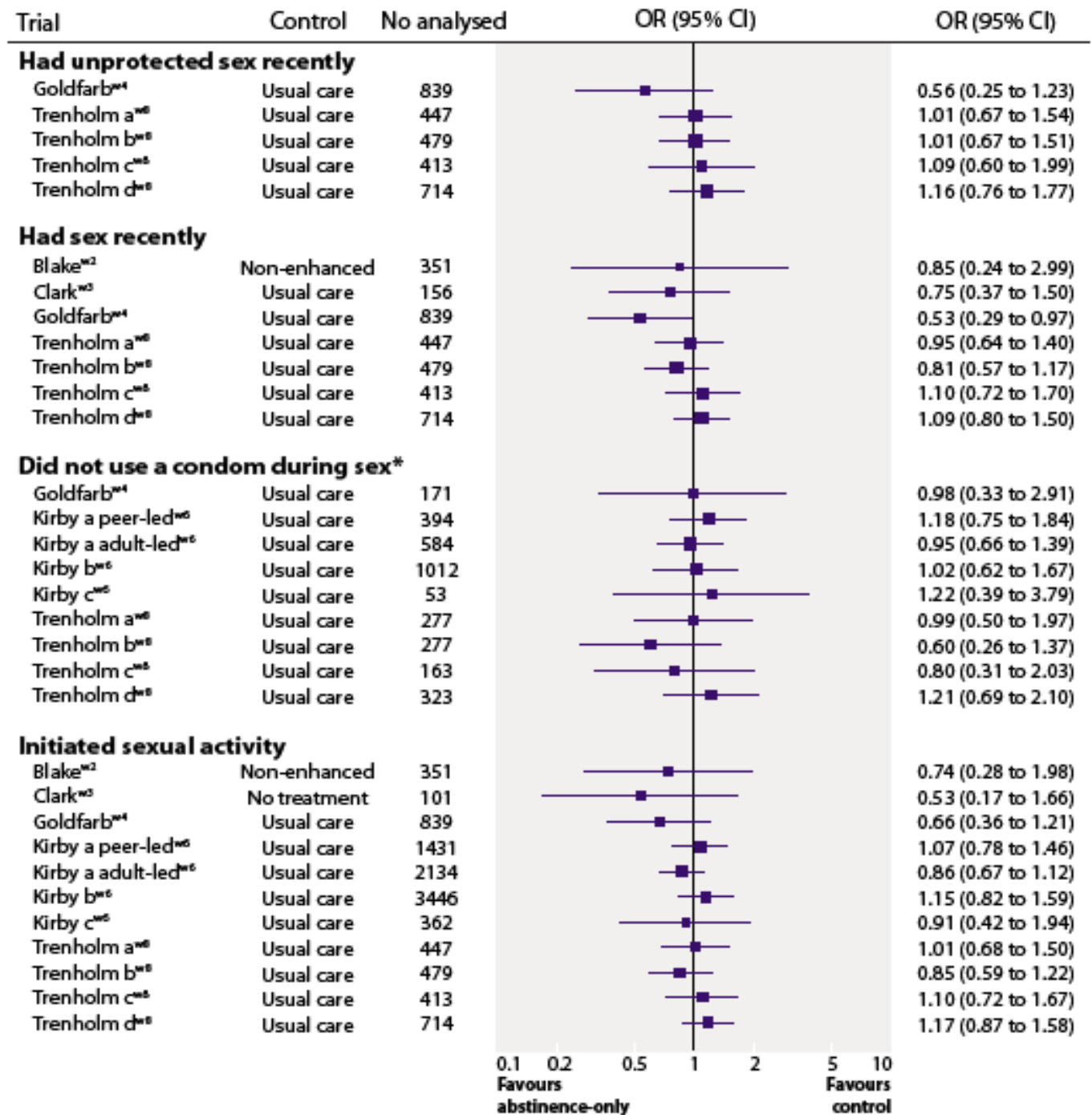
- 45% ↓ initiation of sex, 0% ↑ initiation
- 29% ↓ frequency of sex (6/21), 0% ↑ frequency
- 43% ↓ number of sexual partners (10/23), 0% ↑
- 45% ↑ condom use, 0% ↓ use
- 45% ↑ contraceptive use (4/9), 1 ↓ use
- 63% ↓ sexual risk  $\Delta$  in multiple behaviors (15/24)

# Efficacy of Abstinence Promotion: Emerging Answers (Kirby 2007)

Among the 7 **abstinence-only programs**:

- 0% showed strong evidence of behavior  $\Delta$
- 1 program weak evidence  $\downarrow$  sexual initiation
- No impact: condom or contraceptive use, sexual risk-taking

# Underhill Systematic Review of Abstinence Only Programs



# **Efficacy of Abstinence Promotion: Mathematica Study**

- National evaluation of 510 program
- Randomized clinical trial, 4-6 year follow up
- Four of the best abstinence-only programs
- Small changes in intentions and attitudes
- Final report:
  - No impact on sexual activity, condom use, multiple partners
  - Less confidence that condoms protective against HIV/STD

# Harm to Public Health Programs



# Harm to Sexuality Education and Other Public Health Programs

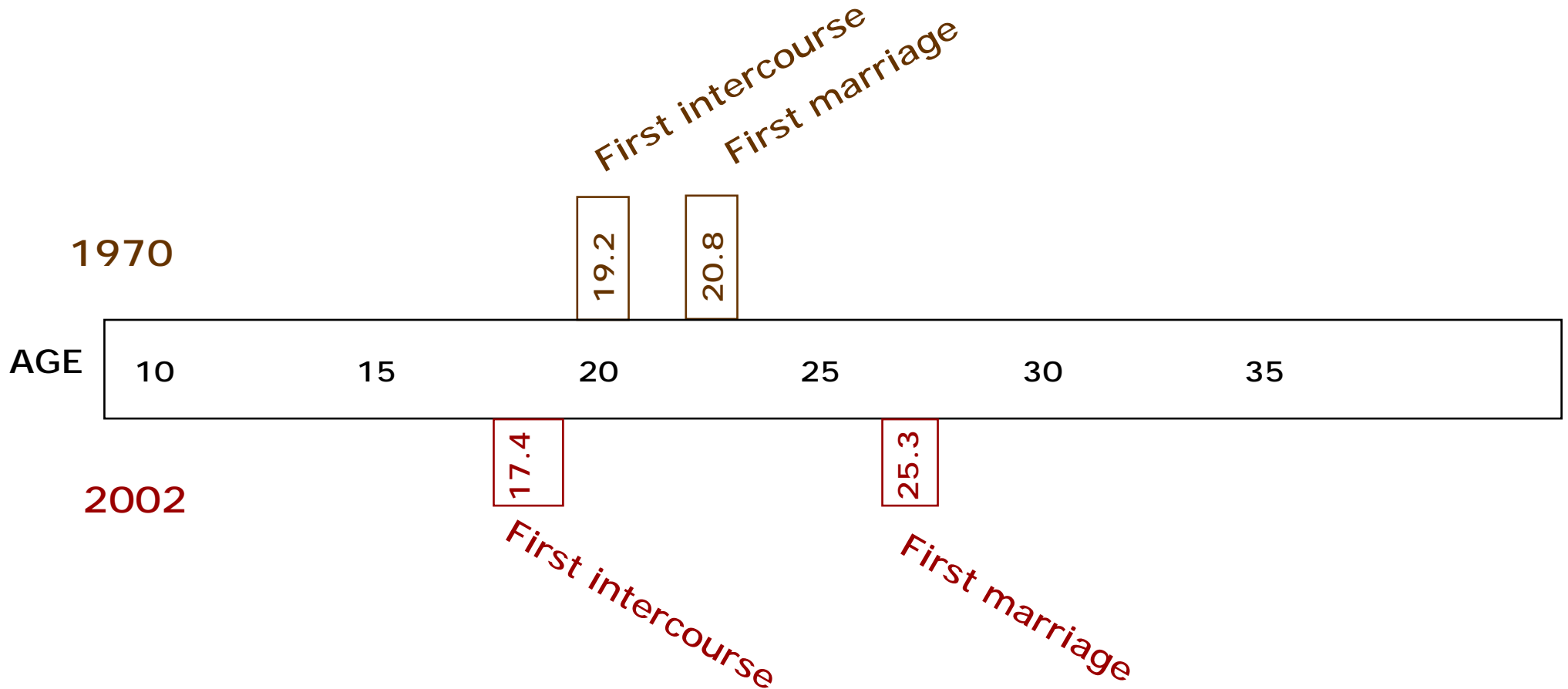
- Censorship of textbooks and teachers
- Abstinence-only education is replacing more comprehensive forms of sexuality education, surveys of teachers, superintendents, and young people
- Requirements for Title X & HIV prevention programs are undermining public health goals for the programs
- Harm to foreign aid programs (PEPFAR prevention)

# Reproductive Rights as Human Rights

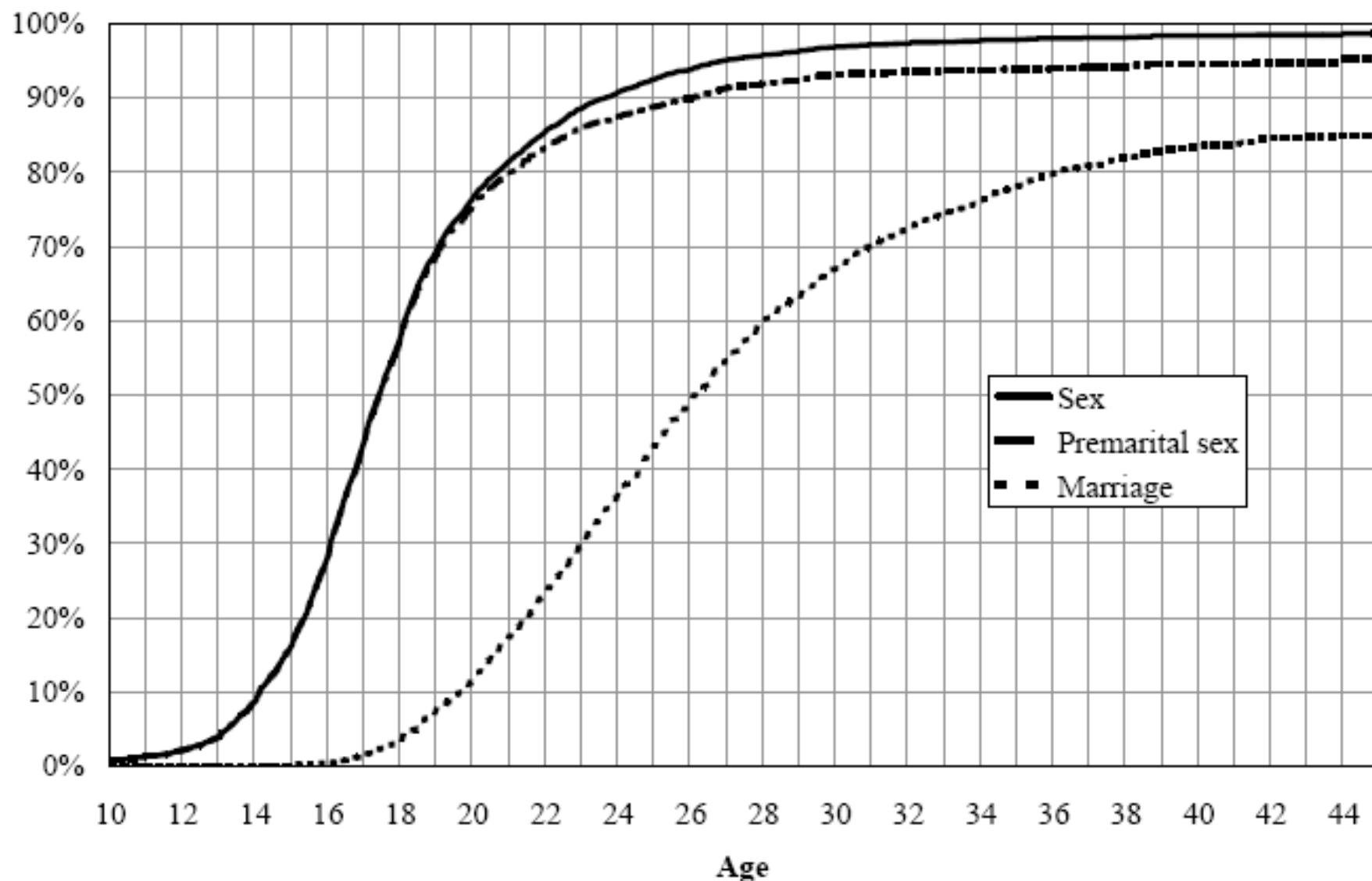
- Access to accurate health information as a basic human right (Coliver and Freedman 1995)
- Withholding information or supplying misinformation to induce specific behaviors or choices by patients is inherently coercive
- Patients have rights to accurate and complete information from their health care providers
- Governments obligated to provide accurate information to their citizens
- Adolescents are *people* with rights as well

# Demographic Realities

# Age of First Intercourse & First Marriage in Women: 1970, 2002



**Figure 1. Proportion of individuals who had had sex, had premarital sex, and married by specific ages, 2002 National Survey of Family Growth**



# Medical Accuracy

- **A critical element in current policy debates around abstinence policies**
- **Language/content analysis of AOE curricula**
- **Specific (mis)information issues**
- **State and local efforts to enforce standards for medical accuracy in education**

# **Congressional Review of Abstinence-Only Curricula (Waxman Committee report 2004)**

- Evidence of major errors and distortions of public health information
- Eleven of 13 curricula contained false, misleading or distorted information
  - False information about effectiveness of contraception
  - Risks of abortion
  - Other scientific errors
  - Treat stereotypes as scientific fact

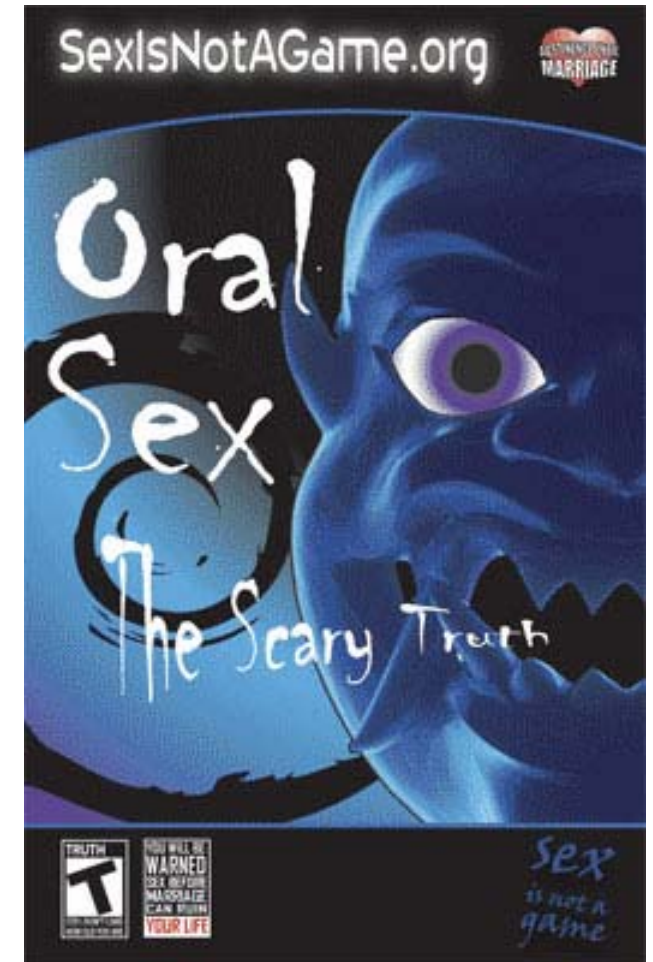
# **Key Themes from the Language of the Federal Program**

- **Moral language: “chaste,” “virgin,” and “promiscuous”**
  - “a mutually faithful monogamous relationship in context of marriage is the expected standard of human sexual activity”
- **Frames abstinence as attitude or commitment**
- **Assertions of medical “facts”**
- **Certainty about the efficacy of abstinence**
- **Denigration of condoms and contraception**
  - Fear of the mixed message
  - Concern that contraception causes sex
- **“Genesis” story, creation of a post-sex syndrome**

# **Underlying Assumptions**

- **Sex education and access to contraception cause teenagers to have sex**
- **Teaching about abstinence and protection is a mixed message**
- **Describing the limitations of contraceptive methods will stop teenagers from having sex**

# What's The Message?



# Abstinence Messages

Don't be fooled by the myth of "safe sex."

Date rape can send you to prison.

In Russian roulette, if the bullet is in the wrong chamber of the gun, you can die.



Condoms fail to prevent pregnancy 14% of the time.

Spermicides, diaphragms, IUD's sponges, and pills can fail and cause health problems.

Don't depend on birth control – depend on self control.

# **State Requirements for Medical Accuracy**

- **Requirements increasingly appearing in state laws regarding sex education or condoms**
- **Often not defined**
- **7 states do define: CA, IO, NJ, NM, UT, WA, CO**
- **Key features of legal definition:**
  - **Based on generally-recognized scientific methods**
  - **Publication in peer-reviewed journals**
  - ***Accurate, objective, complete* by leading professional organizations: CDC, AMA, ACOG, AAP**

# **Abstinence Only Education: Inconsistent with Scientific Theory?**

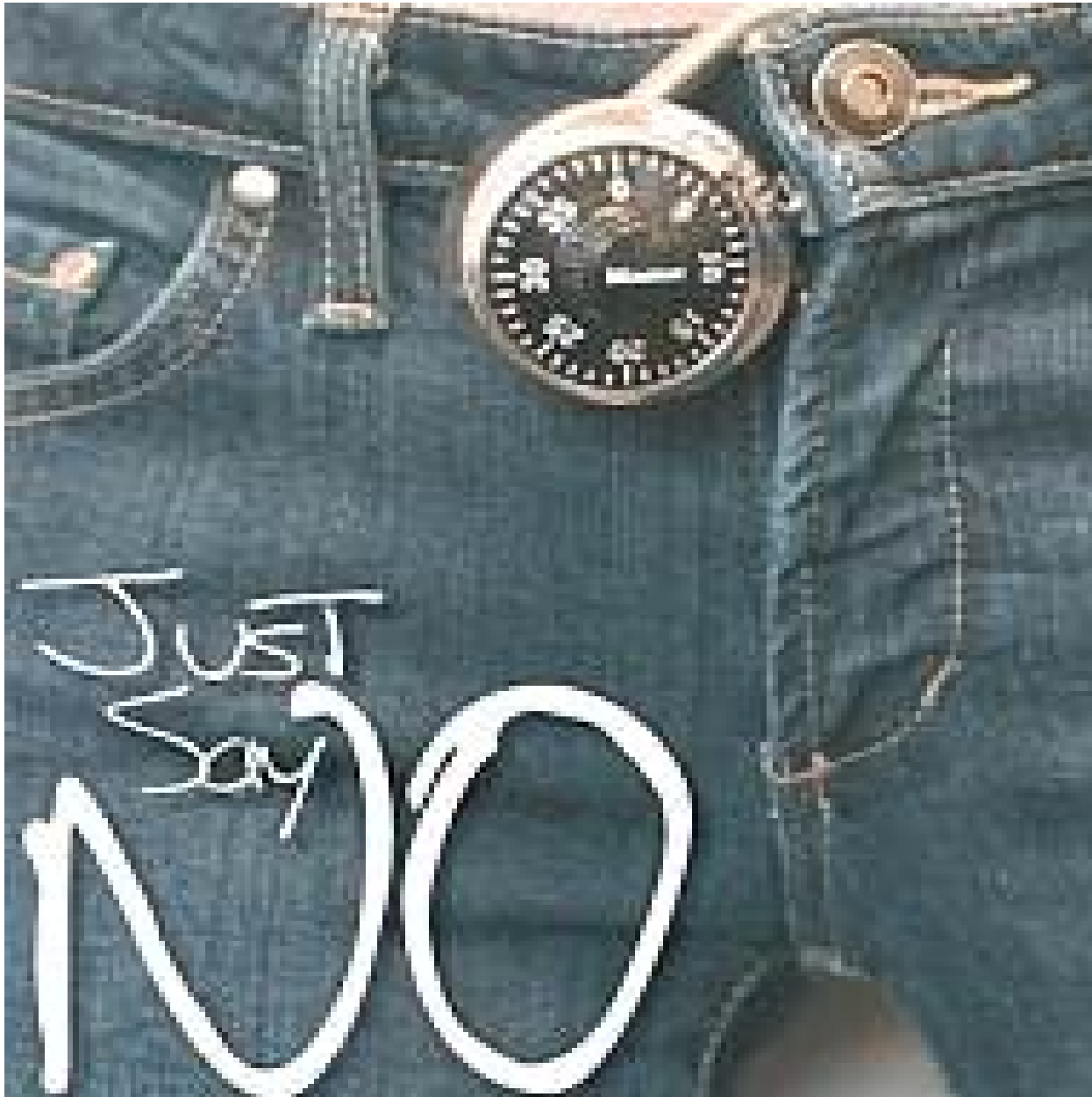
- **Does not build upon scientific findings or create an encompassing paradigm grounded in science**
- **Builds on an ideological belief system which is internally consistent but often not logical**
- **Many separate “facts” are incorrect**
- **Refuses to accept scientific consensus or follow the rules of scientific review (e.g., does not publish)**
- **Creates a veneer of science by using medical professionals and the creating its own communication streams**

# Evaluation of “ABC” policies: The Wrong Way to Frame the Issue)

- **Abstinence** –
  - At best a short term strategy
  - “What do we do for the rest of our lives”
- **Be faithful (monogamy)**
  - Risk for many married woman is her husband
  - Unilateral monogamy ineffective
  - Real issue is concurrency and interconnected sexual networks
- **Condoms** –
  - Effective if used consistently and correctly
  - Limited acceptance in many countries and relationships
  - Interferes with childbearing
  - Substitute use of the C for circumcision!

# Effective Alternatives Program And Policy Approaches:

- U.S. needs to return to science-based policies
- Importance of political leadership
- Openness about sexuality
- Focus on multiple partnerships and sexual networks
- Circumcision
- Condom use



**To  
A  
B  
C!**

# **Evaluation des ABC (Abstinence, Fidélité, et Condom) et Abstinence-Only Strategies**

**John Santelli, MD, MPH**

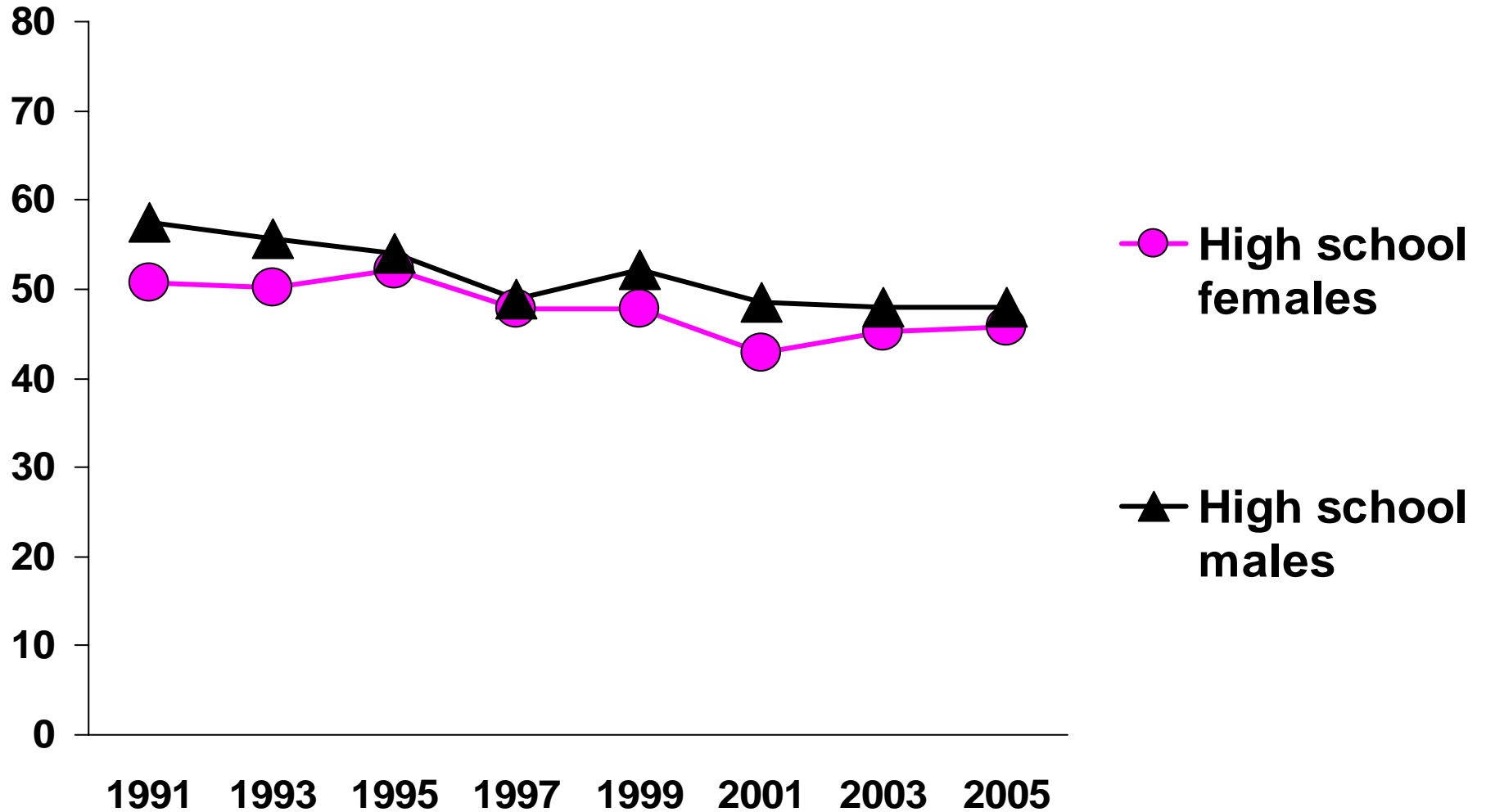
**Heilbrunn Department of Population and Family Health  
Columbia U, New York**

**Essais D'Intervention et Methodes Quasi-Experimental en Sante Publique**

**Paris**

**January 16, 2008**

# Ever had Sexual Intercourse, Grades 9-12, National YRBS



**Accuracy of Condom Information in  
Three Selected Abstinence Only  
Education Curricula**

*Alison J Lin, MPH & John S Santelli, MD, MPH*

*Mailman School of Public Health,  
Columbia University*

# **BACKGROUND/ OBJECTIVES**

- **Although previous reports identified these inaccuracies in abstinence-only education (AOE) curricula, these reports do not detail the specific informational faults**
- **Deconstruct how three commonly-used curricula provide (mis)information about condoms to youth**
- **The basis for an ACLU deposition to pressure DHHS review for medical accuracy**

# **METHODS**

- **Reviewed three curricula commonly used in federally-funded programs:**
  - **Me, My World, My Future (Teen Aid)**
  - **Sexuality, Commitment and Family (Teen Aid)**
  - **Why kNOw Abstinence Education Programs**
- **Developed typology of medical errors:**
  - **Out-of-date information**
  - **Selective reporting**
  - **Use of non peer-reviewed information**

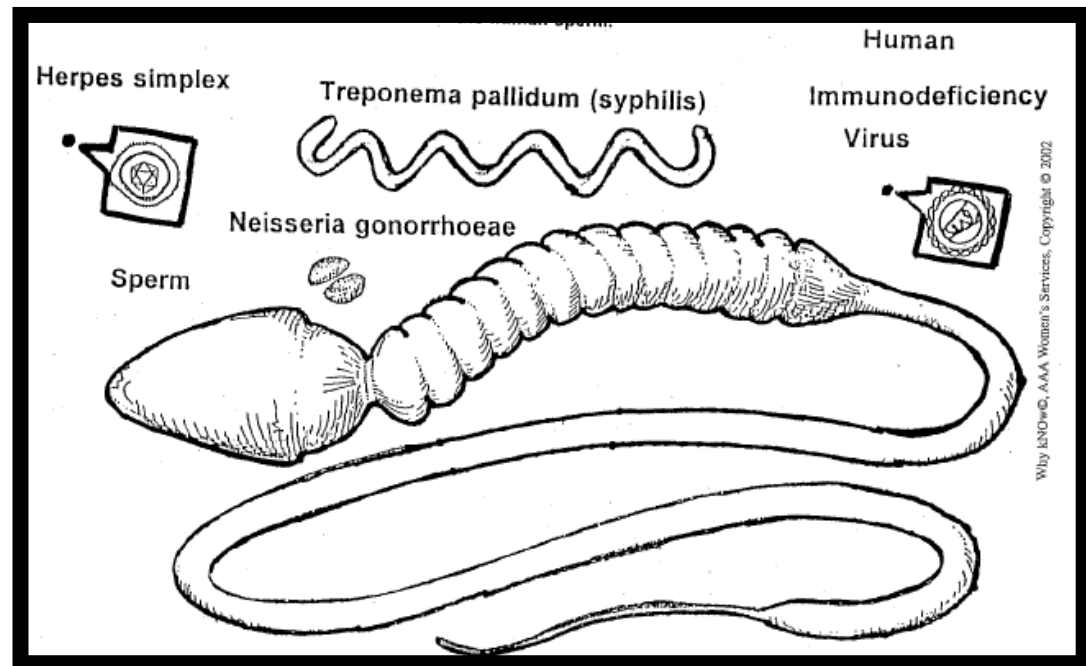
# **Teen Aid and Russian Roulette**

**“If condoms and condom usage are not reliable, wouldn’t relying on them be like playing the insane ‘game’ of Russian roulette? . . . if one continues to perform this act, the chamber with the bullet will ultimately fall into position under the hammer, and the game ends as one of the players dies.**

**Condoms are like Russian roulette. Condoms do not prevent pregnancy, STDs or AIDS; they only delay them. Theoretically, the longer one relies on them, they will fail and the ‘game’ is over”**

# Why kNOw and Speedy the Sperm

“Since the HIV virus is smaller than a sperm and can infect you any day of the month, the failure rate of the condom to prevent AIDS is logically much worse than its failure rate to prevent pregnancy”



SPEEDY THE SPERM ©

# **Why kNOw and Speedy the Sperm**

- **2001 NIH Condom Report explicitly states that latex condoms are impermeable to sperm and viruses, such as HIV, regardless of size (National Institute of Allergy and Infectious Diseases 2001)**
- **By emphasizing this biological size difference, the curriculum implicitly builds on myths that condoms have holes in them or might be porous.**

# KEY FINDINGS

These AOE curricula:

- Explicitly and/or implicitly convey the message that **condoms fail to provide protection** against STIs.
- Include references commonly **out of date** or those that **do not represent our current medical knowledge**.
- Often **misrepresented studies** (e.g. reporting only the highest condom failure rates).
- Draw **conclusions that go beyond the findings** from the study cited.
- Did **not explain differences between typical use and perfect use contraceptive failure rates** associated with condoms
- **Incorrectly compare HIV transmission risk and pregnancy risk.**

# **State Refusal of Federal Funding for Abstinence-Only Education**

*Marissa Raymond, Lylyana Bogdanovich, Dalia Brahma,  
Laura Jane Cardinal, Gulielma L Fager, LeighAnn C  
Frattarelli, Gabrielle Hecker, Elizabeth A Jarpe, Adam  
Viera, Leslie Kantor, John S Santelli*

*Mailman School of Public Health,  
Columbia University*

# **State Refusal of Federal Abstinence \$**

## **Columbia Graduate Student Study**

- **States refusing funding by end of 2006**
  - **California, Pennsylvania, Maine, New Jersey**
- **State Case Studies (n=7)**
  - **Key informants and archival records**
  - **Critical factors among early refusers**
    - **Politic beliefs and coalitions**
    - **Evaluations of state programs**
    - **Concerns about medical accuracy, state educational standards, and stricter federal requirements**



# State Refusal of Federal Funding for Abstinence-Only Education

- Common Characteristics of Title V Refusing States:
  - Progressive state governors
  - Alliances between government and advocates for comprehensive sexuality education
  - Concern about the medical accuracy of abstinence-only sexuality education resulting in dialogue, evaluation, or legislation
  - Attention to the results of AOE program efficacy evaluations

# **State Refusal of Federal Funding for Abstinence-Only Education**

- **Each state's decision to accept or reject Title V AOE funding is influenced by the state's political, social, and economic environment.**
  - **Liberal state governments, public dialogue about comprehensive sexuality education, and legislation requiring medical accuracy or comprehensive sexuality education occurred more frequently in Title V rejecting states.**
  - **Conservative state governments, lack of public dialogue, and lack of state legislation for medical accuracy or comprehensive sexuality education occurred more often in Title V accepting states.**
- **Challenges to the efficacy and medical accuracy of AOE have facilitated the rejection of Title V AOE funds in multiple states.**

# **State and Federal Requirements for Medical Accuracy**

# Requirements for Medical Accuracy

- **While seemingly uncontroversial, these requirements respond to the increasing injection of ideology into sexuality education**
- **Health professionals and government advisory groups within the United States provide critical mechanisms to reach scientific consensus**

# **The Process of Scientific Consensus**

- **Based on research and weight of scientific evidence**
- **Peer review publication**
- **Importance of scientific theory**
- **Recognition by mainstream scientific and health organizations to review science and provide recommendations.**
  - **AMA, APHA, AAP practice committees**
  - **Federal advisory committees: ACIP, USPSTF, IOM**
  - **Federal agencies: CDC, NIH, FDA**

# **The Medical Institute and AOE Organizations: Definition of Medical Accuracy**

- **Importance of correctly quoting scientific research**
- **Peer review and publication in a medical journal**
- **Reject the scientific consensus process:**
  - *“not all government agency recommendations meet this standard [of medical accuracy].” (MISH)*

## **Fail to acknowledge:**

- **Positive importance of scientific consensus**
- **Predominance of scientific evidence**
- **Use of theory in guiding scientific discovery**

# Scientific Theory

- **Scientific discovery builds upon theory**
- **Creation of paradigms, i.e., all encompassing theoretical constructs that attempt to explain a body of scientific findings (Kuhn)**
- **A paradigm is expected to be consistent with all of the scientific findings within a specific area of scientific investigation and not inconsistent with other theories**
- **Theoretical paradigms are not static, but substantial alternative findings are required to incite a paradigm shift or scientific revolution.**

# **Scientific Theory: An Example**

## **Darwin's discovery of natural selection**

- **The foundation for a new theory of evolution**
- **Essential to modern biology and medicine**

## **Intelligent Design**

- **An alternate “theory” to natural selection so-called**
- **This “theory” fails to follow the rules of science discovery and collapses under the accumulated body of scientific evidence**
- **Makes little attempt to be encompassing and is rejected by mainstream organizations of biologists**

# **A Proposed Definition of Medical Accuracy**

**Information relevant to informed decision-making**

- **Based on the weight of scientific evidence,**
- **Consistent with generally recognized scientific theory,**
- **Conducted under accepted scientific methods,**
- **Published in peer-reviewed journals,**
- **Recognized as accurate, objective, and complete by mainstream professional organizations**
  - **AMA, ACOG, APHA and AAP,**
  - **CDC, FDA and NIH,**
  - **Scientific advisory groups: IOM, ACIP**

# Section 510 Definition of Abstinence-only Education

8 point definition:

- e. **sexual activity outside of the context of marriage is likely to have harmful psychological and physical effects**
- f. teaches that bearing children out-of-wedlock is likely to have harmful consequences for the child, the child's parents, and society
- g. teaches young people how to reject sexual advances and how alcohol and drug use increases vulnerability to sexual advances
- h. teaches the importance of attaining self-sufficiency before engaging in sexual activity

# A Proposed Definition of Medical Accuracy

*The deliberate withholding of information that is needed to protect life and health (and therefore relevant to informed decision-making) should be considered medically inaccurate.*

**An Update on  
Abstinence-Only Education:  
Medical Accuracy, Program Efficacy,  
and Political Expediency**

**John Santelli, MD, MPH**

**Heilbrunn Department of Population and Family  
Health, Columbia U**

# ABC Message for Title X Providers

Federal guidance to Title X providers:

- Education regarding the prevention of HIV/AIDS should incorporate the 'ABC' message.
- **For adolescents and unmarried individuals, the message is “A” for abstinence**
- For married or individuals in committed relationships, the message is “B” for being faithful
- For individuals who engage in behavior that puts them at risk for HIV, the message is “C” for condom use”

# HPV Vaccines

Vaccines to prevent HPV/ cervical cancer

- High efficacy, recent federal approval
- Mixed reaction among U.S. conservatives
- Bridget Maher, Family Research Council
  - *“Giving the HPV vaccine to young women could be potentially harmful, because they may see it as a license to engage in premarital sex”*
- Opposition to mandated vaccination

# **Insensitive to GLBTQ Youth? CBAE Program Requirements**

**“Abstinence** means voluntarily choosing not to engage in sexual activity **until marriage.**”

**Marriage** must be defined as "only a legal union between one man and one woman as a husband and wife”

# Sexually Active and GLBTQ Youth

Abstinence until marriage programs unlikely to meet health needs of sexually active or GLBTQ youth

- Ignores specific needs: counseling, STI screening
- Largely ignore issues surrounding homosexuality (except when discussing transmission of HIV/AIDS)
- May stigmatize homosexuality and reinforce homophobia and exacerbate feelings of isolation

# **The Medical Institute's Definition of Abstinence**

**Abstinence is refraining from all sexual activity.**

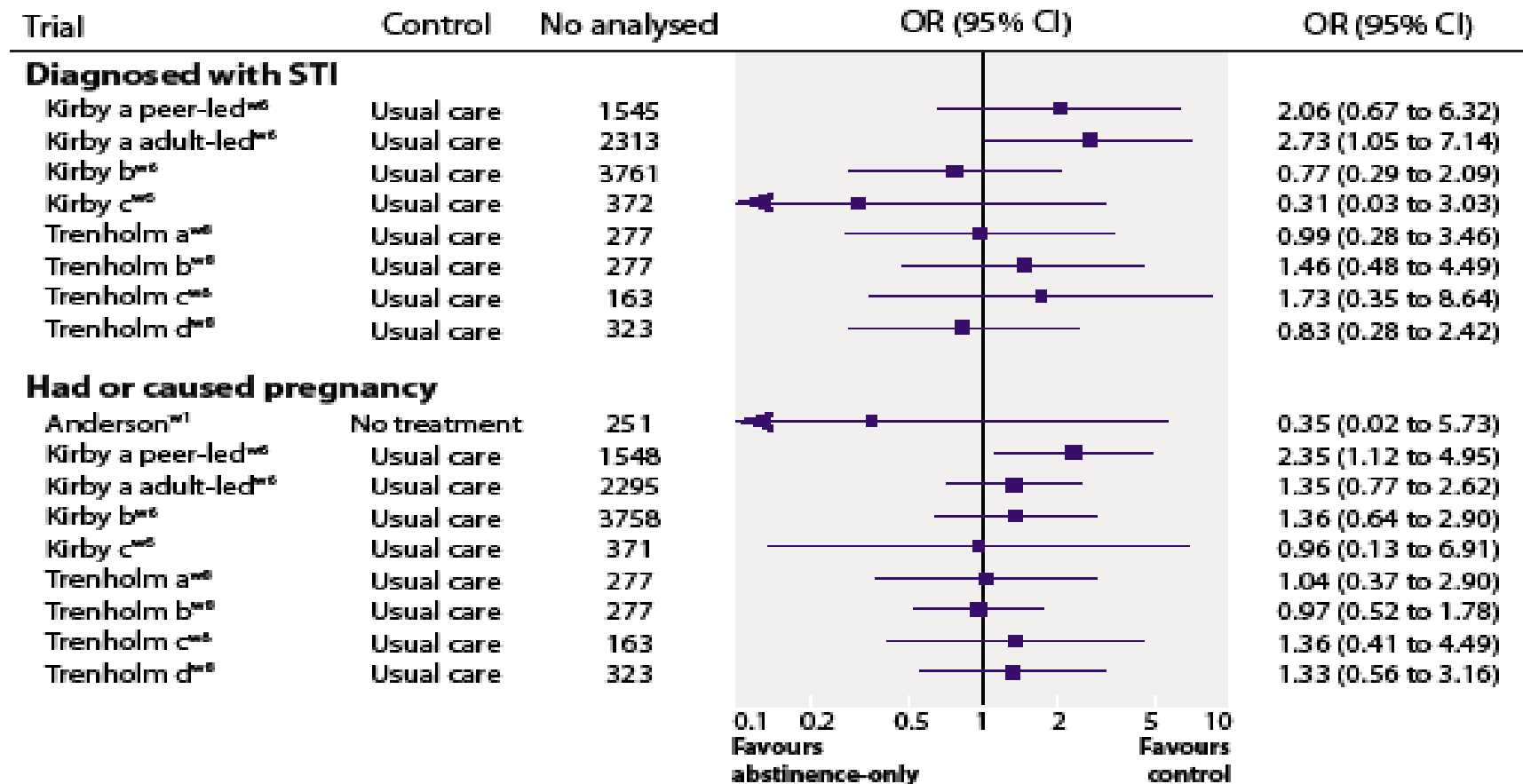
**Sexual activity means sex as well as other actions intended to result in sexual arousal or gratification.**

- Sex includes penile-vaginal, anal and oral sex.**
- Other actions intended to result in sexual arousal or gratification, include, but not limited to, masturbation, mutual masturbation, fondling, the use of sex toys and the viewing of pornography.**

**Abstinence is the healthiest behavior for unmarried individuals.**

(<http://www.medinstitute.org/>)

# Underhill Systematic Review of Abstinence Only Programs



**Fig 2 | Biological effects of interventions at each trial's longest follow-up**

STI=sexually transmitted infection. Follow-up intervals (months after baseline): Anderson=12, Goldfarb=2, Kirby a-c=17, Trenholm a approx. 62.5, Trenholm b approx. 65, Trenholm c approx. 62.5, Trenholm d approx. 59.

# What's The Message?



Many women want guys to care about them.

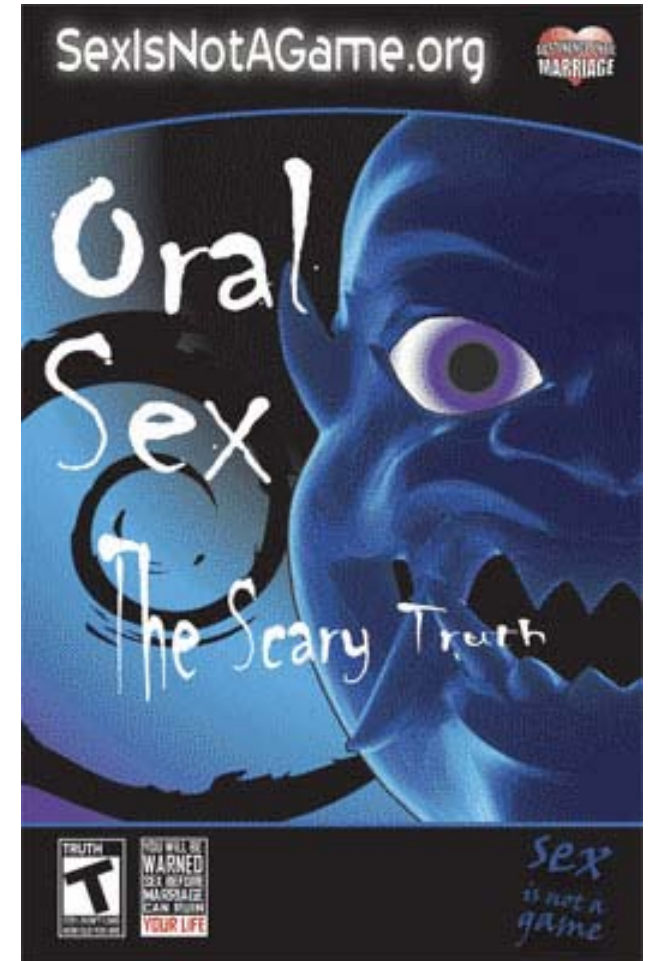
Many guys just want sex. That's how they are made.

Relationships can become a blurred memory. Unless, of course, you are left with something to remember him by – like a disease.

# What's The Message?

Oral sex, like other methods of sex, carries with it the risk of **serious, untreatable, and even life-threatening diseases. . .**

Oral sex has been found to spread syphilis, gonorrhea, HIV, HPV, genital herpes, chlamydia, and possibly Hepatitis C.



# The Truth about Condoms

**Just using condoms is like playing  
Russian roulette. . .**

**In chamber one you have a condom that  
breaks and you get syphilis,**

**In chamber two, you have an STD that  
condoms won't protect against at all,**

**In chamber three, you have a routinely  
fatal disease,**

**In chamber four you have a new STD  
that hasn't even been studied. . . .**

