25 Years of Pregnancy Prevention: Reflections on Lessons Learned, Progress Made, and the Promise for the Future

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About 25 Years Ago…

…What did we believe?

…What did we subsequently learn was reality?

Beliefs:

- Many teens do not have a good understanding of contraception, pregnancy and its consequences
- If we can increase their knowledge, they will become more likely to use contraception

Reality:

- Nearly every sex education program did increase knowledge
- Programs that focused primarily on knowledge did not change behavior
- Knowledge is only weakly related to behavior
- But, ignorance is not the answer either
- Knowledge provides a foundation

About 15 to 25 Years Ago...

Belief:

If programs:

- Increase knowledge
- Help clarify basic values
- Teach generic decision-making skills
  - 5 generic steps
- Teach generic communication skills
  - “I” messages

They will reduce sexual risk-taking

Reality:

- Only a few studies measured the impact of these programs
- None found any significant impact on behavior

Belief:

- Sex education programs should be value neutral
- They should provide accurate information and skills and let teens decide what is best for themselves

Reality:

- These programs did not reduce sexual risk-taking behavior
- A “clear message” subsequently became one of the most important characteristics of effective programs
  - (more later today)

Belief:

- If programs simply increase access to contraception, teens will be more likely to use contraception

Reality:

- When school-based clinics simply provided contraception, often contraceptive use did not increase
- However, when SBCs provided contraception *and* gave a clear message, contraceptive use did increase
  - More later

About 10 – 15 Years Ago…

Belief:

- Programs should **not** focus on delaying the initiation of sex, because we can't stop teens from having sex

Belief:

If programs

- Talk about sex,
- Provide accurate information about contraception
- Tell teens where to obtain contraception
- Teach skills to insist on use of contraception

Teens will be more likely to have sex

Belief:

If programs

- Encourage teens to be abstinent and to use contraception if they do have sex,

They will only confuse the teens and not change any behavior

Reality:

NONE of these beliefs is true, either in

- The United States,
- Other developed countries or
- Developing countries

Study Criteria

Programs:

- Targeted young people up to age 25
- Were curriculum-based with structured activities involving groups of youth (not one-on-one interaction)
- Were implemented in schools or community settings
- Were implemented *anywhere in the world*

Study Criteria

Studies:

- Employed experimental or quasi-experimental design
- Had a sample size of 100 or larger
- Measured impact on initiation of sex for at least 6 months and other behaviors for at least 3 months
- Were published in 1990 or later

The Number of Programs with Indicated Effects on Sexual Behaviors (N=83 Studies)

	United States	Other Developed Countries	Developing Countries	All Countries in the World
Initiation of Sex				
Delayed initiation	14	2	6	22
Had no sig impact	15	6	8	29
Hastened initiation	1	0	0	1
Frequency of Sex				
Decreased frequency	7	0	2	9
Had no sig impact	15	1	3	19
Increased frequency	2	1	0	3
# of Sexual Partners				
Decreased number	9	0	3	12
Had no sig impact	16	0	5	21
Increased number	1	0	0	1

The Number of Programs with Indicated Effects on Sexual Behaviors

	Abstinence-Only Programs	Sex & HIV Education Programs
Initiation of Sex		
▸ Delayed initiation	0	14
▸ Had no sig impact	3	12
▸ Hastened initiation	0	1
Frequency of Sex		
▸ Decreased frequency	2	5
▸ Had no sig impact	2	14
▸ Increased frequency	1	1
# of Sexual Partners		
▸ Decreased number	1	8
▸ Had no sig impact	1	15
▸ Increased number	0	1

The Number of Programs with Indicated Effects on Contraceptive Behaviors

	United States	Other Developed Countries	Developing Countries	All Countries in the World
Use of Condoms				
Increased use	18	1	5	26
Had no sig impact	19	4	7	28
Decreased use	0	0	0	0
Use of Contraception				
Increased use	5	1	0	6
Had no sig impact	5	1	2	8
Decreased use	1	0	0	1
Sexual Risk-Taking				
Reduced risk	14	0	0	14
Had no sig impact	11	1	2	14
Increased risk	0	0	0	0

The Number and Percent of Programs with Indicated Effects on *Any* Behavior

	United States	Other Developed Countries	Developing Countries	All Countries in the World
Any Behavior				
Had positive impact	36 (64%)	5 (56%)	13 (72%)	54 (65%)
Had negative impact	4 (7%)	1 (11%)	1 (6%)	6 (7%)
Total number	56 (100%)	9 (100%)	18 (100%)	83 (100%)

Reality

- Sex/HIV education programs
  - Do not increase sexual activity
- Some sex/HIV education programs:
  - Delay initiation of intercourse
  - Reduce number of sexual partners or
  - Increase use of condoms/contraception
- *Some do all three*
- Emphases upon abstinence, fewer partners and condoms/contraception are compatible, not conflicting

Beliefs:

- Programs can only delay the initiation of sex among girls, not boys
- Programs can only increase reported condom use among boys, not girls
- Programs can only reduce sexual risk-taking among lower risk youth (or higher risk youth)
- Programs are more effective with younger youth (before they have sex) than older youth

Reality:

- None of these beliefs is true
- Programs can delay sex and increase condom use with:
  - Both males and females
  - All major racial/ethnic groups
  - Youth in both advantaged and disadvantaged communities
  - Younger and older youth

10 Years Ago…

Belief:

- 10 characteristics distinguish effective sex and HIV education programs from ineffective programs

Reality:

- Most have stood the test of time and results from new research during the last decade
- Most are supported by international research
- Most are supported by summaries of research on smoking, substance use, and other fields
- **But…**
- **There are now 17**

Belief:

- Sex and HIV education programs can only affect behavior for short periods of time
- Its impossible to have a long term impact

Reality:

One program (*Safer Choices*) with

- 10 sessions in 9th grade
- 10 sessions in 10th grade
- On-going school-wide components (that may reinforce clear messages for 11th and 12th graders)

Reduced sexual risk-behaviors over a 31 month period

Belief:

- Comprehensive sex education is *the* answer

Reality:

- The most effective programs can reduce sexual risk behaviors by *very* roughly one-third
- We still need other components in a more comprehensive initiative

Belief:

If programs do not even talk about sex, they certainly cannot reduce sexual risk behavior

Reality:

- Some youth development programs without a good sexuality education program did not reduce teen sexual risk-taking or pregnancy

- But some did!

Service Learning (*Teen Outreach Program*)

- Included:
  - Intensive volunteer service in community
  - Small group discussions
- Reduced teen pregnancy during academic year students were involved

Belief:

- Programs that address both *sexual* and *non-sexual* risk and protective factors may be more effective

Reality: True!

Children's Aid Society Carrera Program

- Included many components (e.g., help with school, job club, sex education, health and mental health services, art and sports)
- Delayed initiation of sex and increased contraceptive use among females
- Reduced pregnancy by half for 3 years as reported by females

Now…

Belief:

- If we implement a program that has been demonstrated to be effective in another part of the country, it may *or may not* be effective in our own community

Reality:

- Programs are effective if they are implemented with somewhat similar populations of youth and with fidelity
  - All activities
  - Similar settings

Replications of Studies: *Reducing the Risk*

California schools: 16 sessions

- Delayed sex; increased contraceptive use

Arkansas schools: 16 sessions

- Delayed sex; increased condom use

Kentucky schools: 16 sessions

- Delayed sex; no impact on condom use

Kentucky schools: 12 sessions

- Delayed sex; increased condom use

Replications of Studies: *Be Proud, Be Responsible*

Philadelphia: 5 hours on Saturdays

- Reduced sex & # partners; increased condom use

Philadelphia: 8 hours on Saturdays

- Reduced freq of sex; increased condom use

86 CBO in northeast: 8 hours on Saturdays

- Increased condom use

Philadelphia: 8 hours on Saturdays

- Reduced sex & # partners; increased condom use

Cleveland: 8 sessions ***in school***

- Deleted one condom activity
- No sig effects on any behavior

Replications of Studies: *Becoming a Responsible Teen*

- Jackson, Miss health center: 12 90-minute sessions
  - Delayed sex; reduced frequency; increased condom use
- Residential drug treatment: 12 90-minute sessions
  - Reduced sex & # partners; increased condom use
- Juvenile reformatory: *6 1-hour sessions*
  - No effects

Replications of Studies: *Focus on Kids*

Baltimore recreation center: 8 sessions

- Increased condom use

West Virginia rural areas: 8 90-minute sessions

- Deleted some condom activities
- No effects

Replications of Studies: Preliminary Conclusions

- Curricula can remain effective when implemented with fidelity by others!
  - Fidelity: All activities; similar structure
- Substantially shortening programs may reduce behavioral impact
- Deleting condom activities may reduce impact on condom use
- Moving from voluntary after-school format to school classroom may reduce effectiveness

1st Policy Implication

Your *most* promising strategy:

- Implement programs with strong evidence that they were effective with populations similar to your own

What are they?

Criteria for Strongest Evidence

- Multiple studies with strong quasi-experimental designs demonstrating positive impact for at least one year

OR

- A single study with a very rigorous experimental design demonstrating positive impact for at least one year

School-Based Sex Ed Curricula with Strong Evidence for Behavior Change

- **Safer Choices**: Preventing HIV, Other STD and Pregnancy
  - School-based
  - Delayed sex for Hispanics; increased condom & contraceptive use
  - Reduced unprotected sex for 31 months or more
- **Reducing the Risk**: Building Skills to Prevent Pregnancy, STD & HIV
  - School-based
  - Delayed sex and increased contraceptive use

Community Sex Ed Curricula with Strong Evidence for Behavior Change

- **Making Proud Choices**: A Safer Sex Approach to STD, Teen Pregnancy and HIV/AIDS Prevention
  - Modified version of “Be Proud! Be Responsible!
  - Not school-based
  - Targeted African-American youth
  - Increased condom use for one year

Community-Based HIV/AIDS Curricula with Strong Evidence for Behavior Change

- **Becoming a Responsible Teen**: An HIV Risk Reduction Program for Adolescents
- **SIHLE**: Sistas, Informing, Healing, Living, Empowering

Community-Based HIV Curricula with Strong Evidence for Behavior Change (continued)

- Common Characteristics of Both Curricula
  - Not school-based
  - Targeted African-American youth
  - Focused primarily on HIV/AIDS
- Effects
  - Both increased condom use for one year
  - SIHLE:
    - Decreased pregnancy rate for 6 months
    - Decrease STD rates for one year

Belief:

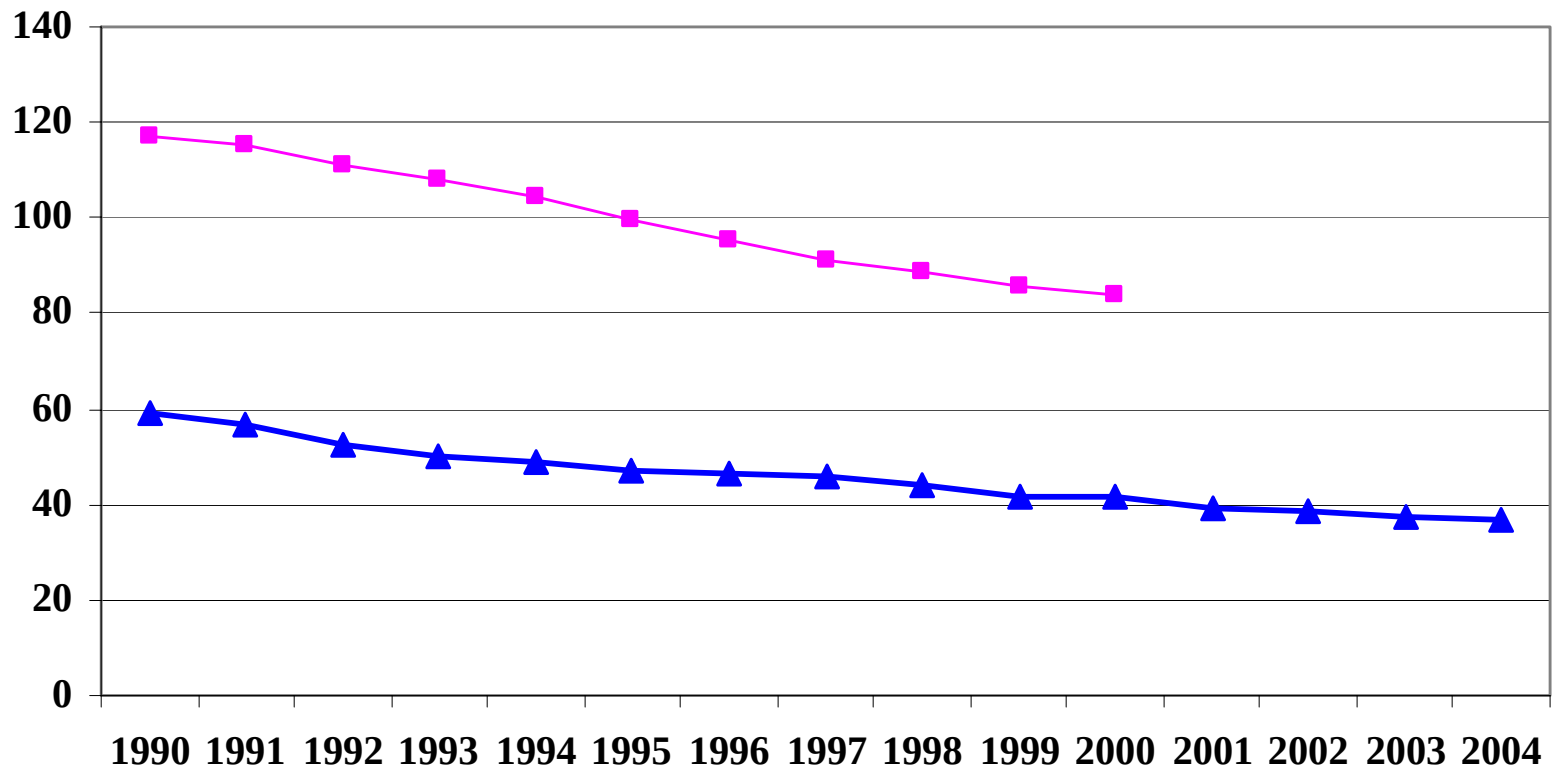
- There are too many factors affecting teen sexual behavior that we cannot control (e.g., media)
- We cannot dramatically reduce teen pregnancy or childbearing
  - Especially in big states with high teen pregnancy rates

Reality:

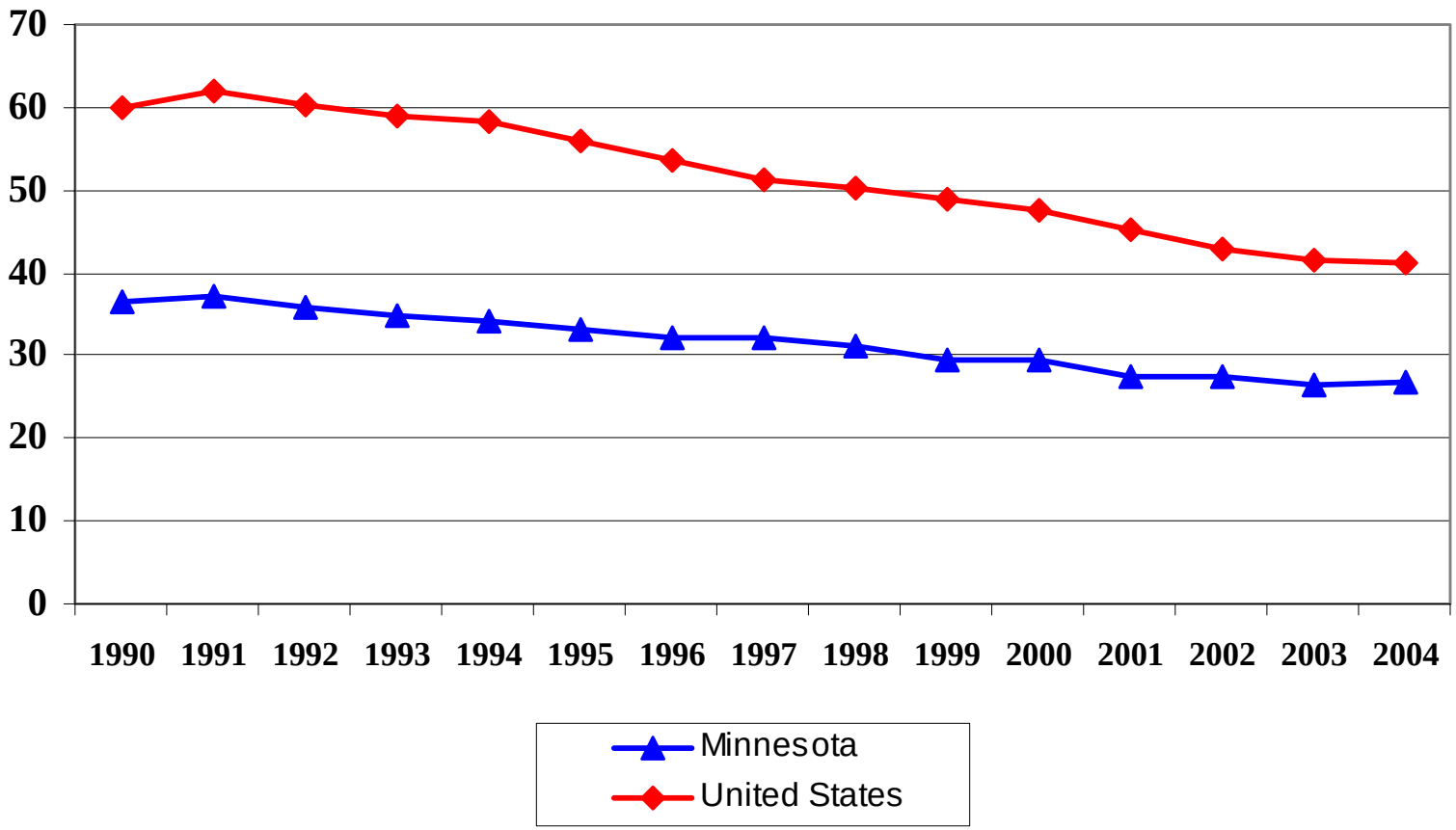
We can DRAMATICALLY reduce teen pregnancy and childbearing

- United States
- Minnesota
- California

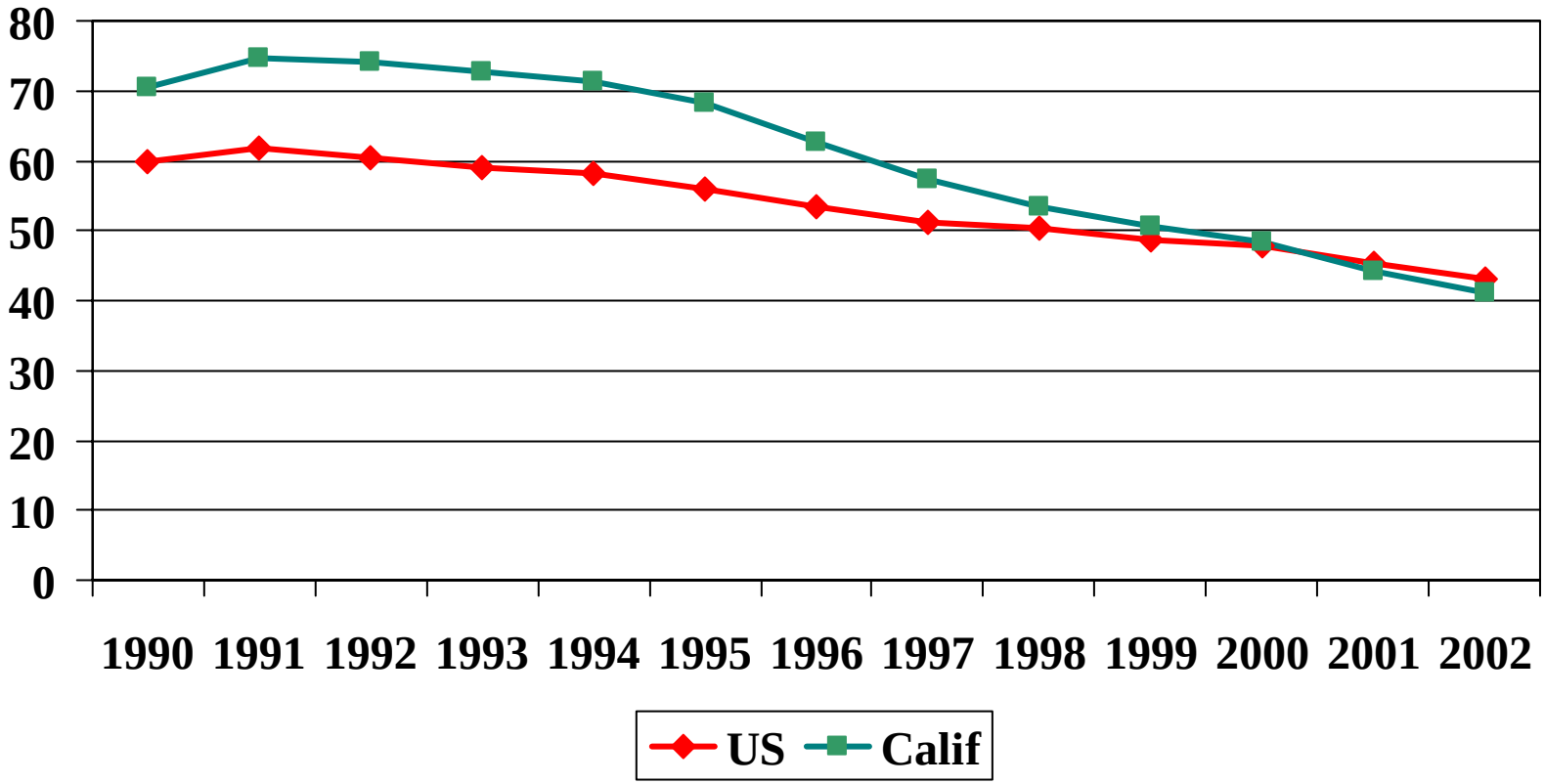
Number of Pregnancies Per 1,000 15-19 Year Old Females – U.S. and Minnesota



Number of Births Per 1,000 15-19 Year Old Females U.S. and Minnesota



Number of Births Per 1,000 15-19 Year Old Females California vs. U.S.



Reality:

- Between 1991 and 2002, California birth rates declined by 45%!
- That’s impossible!

What did California do?

- Enacted welfare reform that placed greater limitations on payments to teen mothers
- Devoted substantial and diverse resources to reducing teen pregnancy
- Targeted “hotspots” (areas with very high birth rates)
- Achieved common ground on a comprehensive approach
- Turned down federal abstinence-only funds

What did California do? (Continued)

- Implemented media campaign
  - To delay initiation of sex
  - To encourage responsible fatherhood
  - To encourage parent/child communication
- Funded implementation of research-based programs in schools and communities
- Funded youth development programs

What did California do? (Continued)

- Made contraception more available free of charge through Medicare health providers
- Established more linkages to contraceptive providers
- Made emergency contraception more available through pharmacies
- Conducted on-going evaluation to continuously improve programs

Major Conclusions:

- We have learned a huge amount in 25 years
- We CAN reduce teen sexual risk behavior
- We CAN reduce teen pregnancy, birth and STD rates dramatically
- Programs that address both sexual and non-sexual risk and protective factors can be effective
- A clear message may be one of the most important programmatic elements

And together we can continue to do the impossible!