Social and Informational Barriers to Decision Making

Baruch Fischhoff
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Presenting Symptoms

Young women have many sexually transmitted infections (STIs) unplanned pregnancies instances of unwanted sex

Despite (in PA) one year of high school health education
Invulnerability?

No greater than for adults
Many teens exaggerate risk of dying
\[ p(\text{die within year}) \]: mean=20\%; med=10\%
correlated with exposure to violence
Ignorance?

Know a lot about HIV/AIDS
But not what is not taught in school
   sexual details (e.g., definition and rationale for “safe sex”)
   cumulative risk
Know little about other STIs
   messy, unstructured domain
Irrationality?

By mid-teen years, have roughly the (imperfect) abilities of adults, on conventional BDR tasks. Performance on those tasks correlate with presumed antecedents and consequences of d-m competence.
Impulsivity?

Poorer emotional regulation
Increases importance of planning for emotionally demanding situations
Coercion?

Much sex is unwelcome
Strong social scripts for compliance
Self-defense training
  no evidence of effectiveness
  focused on threats from strangers
An Intervention

Tone: respect, autonomy
Information: complete mental models
Self-efficacy: modeling, cognitive rehearsal
Interactive: tailored “decision aid”
Subtext: controlling encounters requires knowledge and planning

With Julie Downs, Wändi Bruine de Bruin, Pam Murray
Elements

Establishing decision points
   (“Choose your own adventure”)
Modeling interactions (condoms, exam)
STI facts (candid, explicit)
We'll be alone
William and Denise join us?

Movie instead
Click on what you want to see.
- Genital Warts
- Trichomonas
- Genital Herpes
- Syphilis
- Chlamydia
- Hepatitis B
- Gonorrhea
- HIV
- DONE
Evaluation

Compared to “usual care,” DVD condition

More than twice as likely to become abstinent
Half as many condom failures
45% less likely to report STI
Less likely to test positive for Chlamydia
Replication

Risk with demonstration studies: unduly tweaked, fragile, unrealistic
Funder prejudice against replication
DHHS call; Mathematica 20-year review
1 of 4 programs to reduce STIs
Award: 3000 young women, recruited in Pittsburgh, Columbus, rural WV; no cost to clinics (other than enrollment); independent evaluation (our measures)
Strategy

Inside view
Intense user testing
Presumption of competence
Atheoretic (polytheoretic)
Implementation
  high capital costs; low operating costs
  design for fidelity
  emphasis on workforce development


Center for Risk Perception and Communication: [http://sds.hss.cmu.edu/risk/](http://sds.hss.cmu.edu/risk/)

Center for Behavioral Decision Research [http://cbdr.cmu.edu/](http://cbdr.cmu.edu/)