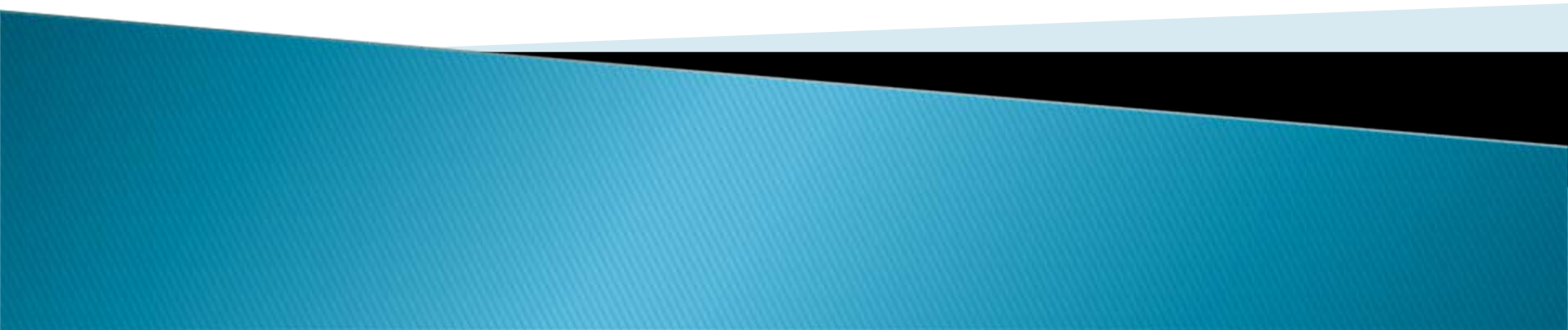



Risk Reduction & Disinhibition in Prevention Research


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Background

- Adolescents a natural target group for HIV vaccine and other biomedical prevention approaches
 - Should, therefore, be included in clinical trials
 - Concern about risks associated with clinical trial participation, including risk-compensation (i.e., sexual disinhibition)
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Background

- As a vulnerable population, adolescents require greater attention to minimization of potential harm
 - Need to work on:
 - Development & implementation of behavioral risk-reduction strategies in the context of clinical trials
 - Informed consent process to maximize comprehension of clinical trials & reduce potential for risk compensation
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Outline

- ▶ Risk–compensation theory
 - ▶ Preventive misconception
 - ▶ Approaches to reduce preventive misconception
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Risk-Compensation Theory

- ▶ Inherent set-point that determines willingness to take risks
 - ▶ Interventions that reduce risk will result in persons increasing their risk-taking behavior to maintain their homeostatic set-point, making the interventions useless
 - ▶ Implies a inherent personality trait
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Risk-Compensation & HIV Prevention


- ▶ Concerns have been expressed about HIV prevention/control strategies
 - **Current strategies**
 - Condom promotion programs
 - Repeat HIV testing
 - HAART
 - Circumcision
 - **Future strategies**
 - HIV vaccination
 - PrEP
 - Microbicides

Evidence for Risk–Compensation

- ▶ Empirical evidence is mixed
- ▶ Review of condom promotion programs accompanied by mathematical modeling*:
 - Some risk compensation may occur
 - Generally does not neutralize the beneficial effects of increased condom use stimulated by the programs

* Pinkerton SD. *Risk Analysis* 2001;21:727-736.

Risk–Compensation in Clinical Trials: Preventive Misconception

- Distinct issue from implemented interventions
 - Two required elements
 - Participant has to over–estimate the probability that she/he has been assigned to the experimental condition
 - Participant has to assume that the experimental biomedical intervention, which is unproven, has some significant degree of efficacy
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Preventive Misconception

- Variation on Therapeutic Misconception
 - *“When clinical research subjects fail to recognize the way in which research participation may involve the sacrifice of some degree of personal care”**
- Applied to preventive clinical trials (2 elements described in last slide)
- Some evidence supporting preventive misconception in a shingles vaccine trial and an HIV vaccine trial

*Appelbaum et al. *IRB: Ethics & Human Research* 2004;26(2):1-8.

Preventive Misconception & Microbicide Trials

- ▶ Preventive misconception relatively common
- ▶ *“The perception of being protected by the method persisted among women despite explicit and repeated informed consent procedures outlining the experimental nature of the study products and the 50% chance of being in the placebo arm for the gel.”*

Guest et al. 2007

Risk-Compensation & Microbicide Trials

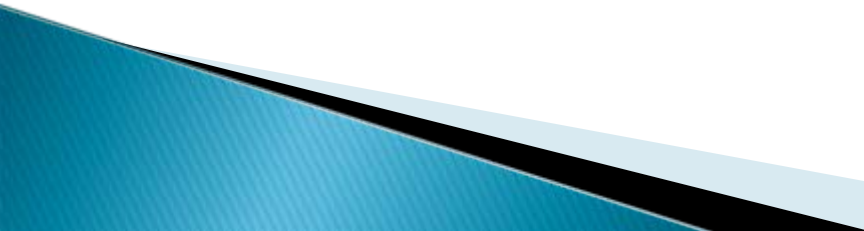
- ▶ Little evidence for risk-compensation
- ▶ Some indication of disconnect between qualitative and quantitative findings
 - *“Participants’ belief in the gel’s efficacy may have stemmed from their strong desire for a method that they could initiate to protect themselves against HIV and other STIs...”*

Mantell et al. 2006


Preventive Misconception, Risk–Compensation & HIV vaccine trials

- ▶ Preventive misconception frequently reported
 - Particularly with respect to stated reasons for participation in clinical trial
- ▶ However, most research studies have not found increased risk behaviors in the context of HIV vaccine clinical trials

Adolescents in Clinical Trials

- ▶ Little or no research related to
 - Preventive misconception
 - Risk–compensation
 - ▶ Adolescents may be developmentally more likely to engage in preventive misconception
 - ▶ Even if risk–compensation is rare we have an ethical responsibility to reduce the potential for risk compensation as much as possible
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Intervention Approaches

- ▶ Behavioral risk–reduction
 - Directly addresses possible risk–compensation, but not preventive misconception
 - Some behavioral risk–reduction must be offered as part of biomedical clinical trial
 - Can be time consuming and costly to implement
 - Adds to burden associated with clinical trial
 - Effect on outcome and study power
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Intervention Approaches

- ▶ Modification of Informed Consent
 - Directly addresses preventive misconception, but not risk–compensation
 - Approaches include
 - Use of multimedia
 - Enhanced/simplified consent forms
 - Extended discussions
 - Testing & directed feedback
 - Mixed results
 - Regulatory issues

Intervention Approaches

- ▶ Supplemental materials outside of informed consent process
 - Directly addresses preventive misconception, but not risk–compensation
 - Could involve persuasive message techniques to address misconceptions
 - Not yet evaluated
 - Avoids potential variations in consent regulations across sites

Summary

- ▶ Important for adolescents to be included in HIV prevention clinical trials, but this inclusion requires particular attention to protection from harm
- ▶ Among adults
 - Evidence for preventive misconception is strong
 - Evidence for risk–compensation is modest
- ▶ Little or no research on adolescents

Conclusion

- ▶ In light of our current knowledge about adolescents & HIV prevention clinical trials...
- ▶ And in anticipation of the need to recruit adolescents into clinical trials...
- ▶ It is clear that we need to work productively to mitigate barriers toward advancing an important scientific agenda for adolescents
- ▶ Need for studies on:
 - Preventive misconception & risk-compensation
 - Interventions to minimize these issues