The Role of Individual and Relationship Factors on Contraceptive Use among At-Risk Young Adults

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HIV/STIs and unintended pregnancy among young adults

• Adverse consequences of unprotected sex include unintended pregnancy and transmission of HIV and other STIs

• Young adults have the highest rates of new HIV infections and other STIs are epidemic and increasing among this population\(^1,2\)

• Women 18-24 have the highest rates of unintended pregnancy of any age group\(^3\)

• Taken together, the burden of unintended pregnancy and HIV/STIs among young adults is substantial

\(^1\) Centers for Disease Control and Prevention, 2011
\(^2\) Centers for Disease Control and Prevention, 2012
\(^3\) Finer & Kost, 2011

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Contraceptive Use Decision Making

• Pregnancy Prevention
  • A number of highly-effective pregnancy prevention options are available including long-acting reversible contraception (LARC) such as IUDs, Depo Provera, and Norplant
  • However, these methods offer no protections against HIV and STIs

• Condom Use
  • While some other methods are in development or testing (PrEP and other multipurpose technologies), condoms remain the only widely available effective method for preventing HIV and other STIs
  • However, condom use is associated with higher rates of unintended pregnancy than are LARC

• Dual Protection
  • Together, a combination of a hormonal or long-acting method with consistent condom use provides the best defense against unwanted pregnancy and the transmission of HIV/STIs

4 Centers for Disease Control and Prevention, 2014
5 Thurman, Clark, & Doncel, 2011
6 Cates & Steiner, 2002
Contraceptive Use Decision Making

• Previous research on contraceptive choice and use among young adults has focused mainly on individual-level explanatory factors
  • Demographic characteristics (e.g., age, gender, education)
  • Access to services
  • Acceptability of method type and personal preferences

• Contraceptive decisions are often made in the context of a relationship. Researchers posit that partners and relational factors likely influence the type and use of contraceptives
  • A growing body of research has investigated the influence of relationship characteristics (coital frequency, duration, partner type) and qualities (relationship quality, intimacy) on contraceptive choice and use. \(^7\)\(^-\)\(^11\)

7 Katz, Fortenberry, Zimet, Blythe, & Orr, 2000
8 Manning, Giordano, Longmore, & Flanigan, 2012
9 Kusunoki & Upchurch, 2011
10 Manlove, Welti, Barry, Peterson, Schelar, & Wildsmith, 2011
11 Manlove, Welti, Wildsmith, & Barry, 2014

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Gaps

• Most studies are cross-sectional or retrospective and do not account for the dynamic nature of relationships over time

• Most limit to a single relationship or a comparison between two relationship types

• The majority of studies use individual- rather than partner-specific measures
The purpose of this study was to investigate which partner-specific individual and relationship factors predict contraceptive use over time among a sample of at-risk young adults.
Sample

• Data are from a longitudinal study that examined relationship dynamics among women and men aged 18-30 in the Los Angeles area.

• Participants completed 4 in-person interviews over 12 months answering a series of partner-specific individual and relationship questions for each individual partner at each time point.

• Eligibility criteria included:
  • 18-30 years of age
  • Heterosexual sex without a condom at least once in the previous 3 months
  • At least one of the following:
    • More than one sex partner in previous year
    • STI in the previous two years
    • Sex in the previous year with a partner who had an STI or HIV
    • Ever used intravenous drugs
Measurement

• Dependent Variable: Contraceptive Use
  • Condom (Male condoms only)
  • Hormonal or Long-Lasting (Birth control pills, IUD, Norplant, Depo Provera)
  • Dual Protection
  • No Method (Nothing, Withdrawal, Rhythm)

• Because of small reported numbers, those reporting only sterilization, female condom, diaphragm, spermicides, sponge, other, or abstinence were excluded from this analysis
Individual Controls
Gender, Age, Race/Ethnicity, Education, Number of Lifetime Partners, History of STD at baseline

Partner-Specific Individual Factors
Perceived vulnerability to pregnancy, perceived vulnerability to harm (HIV/STIs), condom-use self-efficacy

Relationship Characteristics
Relationship Duration, Coital Frequency

Relationship Qualities
Commitment, Satisfaction, Investment, Alternatives, Attachment, Perceived Partner Exclusivity

Relationship Dynamics
Relationship Power, Sexual Decision Making Power

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Results

• Multinomial logistic regression (4-level dependent variable)

• Partner-specific Individual Factors
  • Those with higher perceived vulnerability to pregnancy were significantly more likely to choose a hormonal method over condom only, dual protection, or no method (OR = 1.39, 1.32, 1.59 respectively) and were more likely to choose dual protection over no method (OR = 1.34).

  • Those with higher perceived vulnerability to harm were more likely to choose both dual and no method over a hormonal method alone (OR = 1.31, 1.21).

  • Those with higher condom use self-efficacy were less likely to choose a hormonal method alone than condom only, dual protection, or no method (OR = 0.28, 0.21, 0.29) and less likely to choose nothing over condom (OR = 0.33).
Results

• Relationship Characteristics
  • Although those with higher perceived coital frequency were significantly more likely to choose a hormonal method over condom only or dual protection and were more likely to choose no method over condom only or dual protection, the odds ratios approached 1.0 and are therefore not substantively significant.

• Relationship Dynamics
  • Those with higher sexual health decision making were less likely to choose no method versus hormone only, condom only, and dual protection (OR = 0.45, 0.29, 0.16) and were also more likely to choose condom only versus hormone only (OR = 1.59).
Results

• Relationship Qualities
  • Those with higher perceived **commitment** were *more likely* to choose hormone only versus dual protection or no method (OR = 1.59, 1.41).
  
  • Those with higher **investment** were *more likely* to choose dual protection over hormone only (OR = 1.31).
  
  • Those with higher **attachment** were *more likely* to choose no method over dual protection (OR = 1.45).
  
  • Those with higher **perceived partner exclusivity** were *less likely* to choose only condom compared to hormone only, dual protection, or no method (OR = 0.63, 0.74, 0.71).
Strengths and Limitations

• **Strengths**
  • Partner-specific measurement
  • Includes relationship qualities and dynamics in contraceptive context
  • Longitudinal study with multiple measurement time points

• **Limitations**
  • Included both contraceptive use and types of use
    • To better understand the impact of these factors, our next step is to examine two research questions separately
      • The predictors of use of effective contraceptive vs. non-use
      • The predictors of contraceptive choice among those using effective methods
  • Averaged effects over time
    • Next steps in this study are to use multi-level modeling to determine at which level (individual, partner, time) these variables are affecting contraceptive use and choice
Conclusions

• Contraceptive choice and use are influenced by both individual and relational factors.

• Relationship characteristics/traditional relationship demographics, while significant, do not substantively predict contraceptive use.

• Relationship dynamics and qualities significantly predict contraceptive use.
Implications for Research and Practice

**Implications for Research**
- Additional research is needed to understand at what levels these predictors effect choice and use.
- Relationship qualities and dynamics should be included in research design in addition to relationship characteristics.
- Theoretical models need to be developed incorporating the relational context.
- Interventions should include relationship-specific targets and utilize the importance of relationship qualities and dynamics in behavior change.

**Implications for Practice**
- Importance of partner-specific discussions and the relational context in regards to contraceptive choices.
Thank You

Questions?
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