

Contribution to Science

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1. **New and existing prevention methods acceptable to women and within their personal control.** I began my research career with a focus on women and the prevention of unintended pregnancy. The epidemics of STIs, however, altered my program of research in the early 1990s and I moved beyond the focus of pregnancy prevention to address both pregnancy and STI prevention. To that end, I have led research over the past several decades that has informed the development of new and existing methods to prevent unintended pregnancy and the transmission/acquisition of STIs that are acceptable to women and within their personal control. Of particular importance are female-controlled methods that women can use without their male partner's knowledge and cooperation. These studies have focused on the vaginal sponge and vaginal diaphragm, both funded by NICHD, and emergency contraception pills (ECPs). Findings from these studies informed the development of new methods and were influential in the approval by the FDA in 1999 of Plan B (a form of ECPs) for prescription use for women of all ages. In 2006, Plan B was approved by the FDA as an over-the-counter ECP for women ages 18 years and older. In July 2015 the SILCS diaphragm, a single-size diaphragm, became available by prescription from healthcare providers in the United States. This contraceptive option was developed to be easy for women to use and for clinicians to provide and represents another step toward expanding contraceptive options for women.
 - a. Harvey, SM, Beckman, LJ, Murray, J. (1989). Factors associated with use of the contraceptive sponge. *Fam Plann Perspect*, 21(4):179-83. PubMed PMID: 2792337.
 - b. Beckman, LJ, Harvey, SM, Murray, J. (1992). Dimensions of the contraceptive attributes questionnaire. *Psychol Women Q*, 16(2):243-59. PubMed PMID: 12344926.
 - c. Harvey, SM, Beckman, LJ, Sherman, C, Petitti, DB. (1999). Women's experience and satisfaction with emergency contraceptive pills. *Fam Plann Perspect*, 31(5):237-239,260.
 - d. Harvey, SM, Bird, ST, Maher, JE, Beckman, LJ. (2003). Who continues using the diaphragm and who doesn't: Implications for the acceptability of female-controlled HIV prevention methods. *Women's Health Issues*; 13(5):185-93. PubMed PMID: 14583167.
2. **Factors associated with sexual risk-taking and use of sexual and reproductive health services among Latino adults in rural Oregon.** Although my early work was limited to women, I was compelled to move beyond including only women in my studies to also examine men's involvement in sexual decision-making and risk-taking. We documented that men are active participants in sexual decision-making and many factors influenced pregnancy and disease prevention among men. Factors included relationship power, attitudes toward condoms, stronger partner condom norms, and greater participation in decision-making about condom use. Among a sample of immigrant Latino men residing in rural Oregon communities, we found that migration-related individual, sociocultural, structural, and environmental factors interacted to render immigrant Latino men at increased risk for HIV/STIs and influenced use of sexual and reproductive health services (SRHS). We identified service delivery barriers to access and use of SRHS including the importance of privacy, need for Spanish speaking providers, and cost of services. In another study with a sample of Latina women in rural Oregon we found that perceived discrimination was negatively associated with satisfaction with contraceptive services received.

- a. Harvey SM, Henderson JT. (2006). Correlates of condom use intentions and behaviors among a community-based sample of Latino men in Los Angeles. *J Urban Health*; 83(4):558-74. PubMed PMID: 16845495; PubMed Central PMCID: PMC2430480.
- b. Winett L, Harvey SM, Branch M, Torres A, Hudson D. (2011). Immigrant Latino men in rural communities in the Northwest: Social environment and HIV/STI risk. *Cult Health Sex*, 13(6):643-56. PubMed PMID: 21462005.
- c. Harvey SM, Branch MR, Hudson D, Torres A. (2013). Listening to immigrant Latino men in rural Oregon: Exploring connections between culture and sexual and reproductive health services. *Am J Mens Health*; 7(2):142-54. PubMed PMID: 23076788.
- d. Oakley, L. P., Harvey, S. M., & Lopez-Cevallos, D. (2018). Racial and ethnic discrimination, medical mistrust, and satisfaction with birth control services among young adult Latinas. *Women's Health Issues*, 28(4), 313-320.

3. Influence of relationship dynamics on protective behaviors and sexual risk-taking among at risk young adults. In addition to including men in our studies, we adopted a more inclusive theoretical framework that included variables to examine how relationship status and characteristics influence protective behaviors and sexual risk-taking among samples of men and women. Interpersonal relationships have particular relevance in the area of reproductive and sexual behaviors because the behaviors and outcomes of interest often, but not always, take place within the context of a relationship. Collectively this body of work provides evidence that both men and women are involved in joint decision-making regarding sexual issues; greater decision-making power increases intentions to use condoms, actual use of condoms, and consistency of condom use among women; and condom use is less frequent in committed, long-term relationships. These findings suggest the importance of studies and interventions that 1) focus on the relational context (relationship-based interventions); and 2) include couples in research efforts (couple-based interventions). With funding from NICHD (R01 and R03) for the Project on Partner Dynamics (POPD) I continued to pursue this program of study using a novel prospective methodological approach for measuring and modeling the dynamics of sexual partnerships over time. These data were collected from men, women, and couples and longitudinally assessed multiple relationship experiences.

- a. Harvey SM, Beckman LJ, Gerend MA, Bird ST, Posner S, Huszti HC, Galavotti C. (2006). A conceptual model of women's condom use intentions: Integrating intrapersonal and relationship factors. *AIDS Care*, 18(7):698-709. PubMed PMID: 16971278.
- b. Warren JT, Harvey SM, Washburn IJ, Sanchez DM, Schoenbach VJ, Agnew CR. (2015). Concurrent sexual partnerships among young heterosexual adults at increased HIV risk: Types and characteristics. *Sex Transm Dis*, 42(4):180-4. PubMed PMID: 25763670; PubMed Central PMCID: PMC4377640.
- c. Harvey, SM, Washburn, I, Oakley, L, Warren, J, & Sanchez, DM. (2016). Competing Priorities: Partner-specific relationship characteristics and motives for condom use among at-risk young adults. *The Journal of Sex Research*. 54(4-5):665-676. doi: 10.1080/00224499.2016.1182961.
- d. Harvey, SM, Oakley, LP, Washburn, I, & Agnew, CR. (2018). Contraceptive method choice among young adults: Influence of individual and relationship factors. *The Journal of Sex Research*, 55(9):1106-1115. Advance online publication. doi: 10.1080/00224499.2017.1419334

4. Studies of Couples: Prevention of unintended pregnancy and STIs among young Latino adults. Based on our earlier work, we were compelled to focus our research and interventions on couples and to intervene with both members of a couple. Fundamental to this concept is the simplistic idea that it takes two to tango, two to prevent the transmission of STIs, and only couple studies can fully address issues involved in understanding the relative influence of each member of a sexual dyad. In an exploratory study with couples of Mexican origin (funded by CDC), we found that although

couples shared decision making about sexual activities and contraceptive use, men were seen as initiators of sexual activity and women were more likely to suggest condom use. In a couple-based intervention (funded by CDC) evaluated using a RCT, we found no difference in contraceptive use or condom use between couples in the intervention and control conditions. Instead we found increased contraceptive and condom use in both conditions suggesting that bringing couples together for an educational session may have been sufficient for prompting relationship changes that led to increased condom use. Involving couples together in interventions may have, therefore, been more important than the specific content or format of each condition. This work contributed to the development of a research agenda for understanding the relational context for different types of dyads and how these qualities influence protective behaviors. In June 2013, I was an invited participant at the NICHD workshop on “Developing a Research Agenda for Addressing Mistimed, Unintended, Unplanned Pregnancy in the US” and presented on “Couples, Relational Context, and Contraceptive Use: Gaps in the Research Fabric.”

- a. Harvey SM, Beckman LJ, Doty M. (1999). Couple dynamics in sexual and reproductive decision-making among Mexican immigrants, in LJ Severy & W Miller (Eds.) *Advances in Population: Psychosocial Perspectives* Vol. 3 (p.251-279). London: Jessica Kingsley Publishers
- b. Harvey SM, Beckman LJ, Browner CH, Sherman CA. (2002). Relationship power, decision making, and sexual relations: an exploratory study with couples of Mexican origin. *The Journal of Sex Research*, 39(4):284-91. PubMed PMID: 12545411.
- c. Harvey SM, Henderson JT, Thorburn S, Beckman LJ, Casillas A, Mendez L, Cervantes R. A. (2004). A randomized study of a pregnancy and disease prevention intervention for Hispanic couples. *Perspect Sex Reprod Health*, 36(4):162-9. PubMed PMID: 15321783.
- d. Harvey SM, Kraft JM, West SG, Taylor AB, Pappas-Deluca KA, Beckman LJ. (2009). Effects of a health behavior change model--based HIV/STI prevention intervention on condom use among heterosexual couples: A randomized trial. *Health Educ Behav*, 36(5):878-94. PubMed PMID: 18784350.

5. **Health policy and health care reforms.** More recently, I have extended my research focus to examine the impact of new health policies and health care reforms on women’s reproductive health. Oregon has been leading national efforts to transform Medicaid programs with innovative health care policies that could impact both access to services and outcomes for women enrolled in Medicaid. As PI on a six-year CDC funded project, I have analyzed data and co-authored presentations and manuscripts to examine the effect of Oregon’s Coordinated Care Organizations (CCOs) on contraceptive utilization, access, and utilization of prenatal care, and neonatal outcomes among women of reproductive age. We recently conducted analyses to examine the impact of Medicaid expansion on the health of women and infants including the receipt of preventive reproductive care, including STI screening. In addition, I recently received funding to investigate the impact of Oregon’s Medicaid reforms on abortion access and utilization. Findings from these studies will exert a powerful influence on health policies and health services in Oregon and nationally and will advance knowledge of the impact of innovative health care reforms on increasing access to health services and to improving the health of women and their families.

- a. Oakley, LP, Harvey, SM, Yoon, J, & Luck, J. (2017). Oregon’s Coordinated Care Organizations and Their Effect on Prenatal Care Utilization among Medicaid Enrollees. *Maternal and Child Health Journal*, 21(9): 1784-1789. doi 10.1007/s10995-017-2322-z
- b. Harvey, SM, Oakley, LP, Yoon, J, & Luck, J. (2017). Coordinated Care Organizations: Neonatal and Infant Outcomes in Oregon. *Medical Care Research and Review*, Nov. 21: 1-16. DOI: 10.1177/1077558717741980

- c. Harvey, SM, Oakley, LP, Gibbs, S, Mahakalanda, S, Luck, J, & Yoon, J. (2018). *Impact of Medicaid expansion on prenatal outcomes in Oregon*. Presented at CityMatCH Leadership & MCH Epidemiology Conference. Portland, Oregon.
- d. Gibbs S, Harvey SM, Bui L, Oakley L, Luck J, Yoon J. (2020). Evaluating the effect of Medicaid expansion on access to preventive reproductive care for women in Oregon. *Prev Med*. 130:105899. doi: 10.1016/j.yjmed.2019.105899