



The RHANI Wives Intervention: Combating Marital HIV Transmission

Table 2: RHANI Wives Intervention content

Timing	Session	Topics
Week 1	Individual Session 1	Introduction; financial stress and health
Week 1-2	Individual Session 2	Alcohol abuse, spousal violence, financial stress, and poor health of family
Week 2-4	Group Session 1	Group support and education on HIV and marital communication
Week 3-6	Individual Session 3	Alcohol; spousal violence; HIV; women's health, empowerment, and safety
Week 4-8	Group Session 2	Group support; education on local social services and HIV/STI clinical care, marital violence, and alcohol counseling
Week 5-9	Individual Session 4	Alcohol; sexual violence; HIV; local social support and health services available post-intervention termination

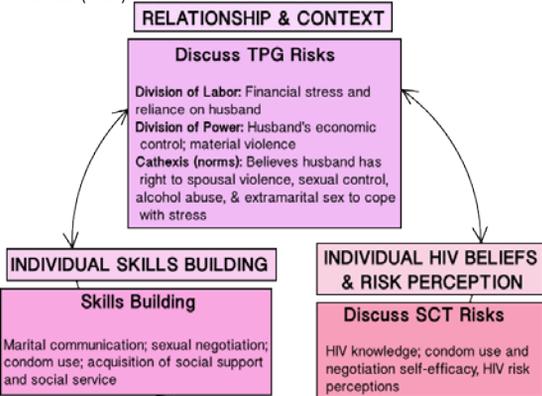
HIV in India

Despite overall reductions in global HIV prevalence, the proportion of Indian women infected with HIV increased by 14% between 2001 and 2009.¹⁻³ Marriage, particularly when characterized by marital violence and husband's risky alcohol use, became the primary risk factor for HIV among women in India.^{1,4-6} The Raising HIV Awareness in Non-HIV Infected Indian Wives (RHANI Wives) Intervention was conducted from 2009 to 2011 to promote sexual and reproductive communication and empowerment among couples at-risk for HIV in Mumbai, India.

The RHANI Wives Intervention

The RHANI Wives intervention curriculum was grounded in Bandura's Social Cognitive Theory⁷ as well as Connell's Theory of Gender and Power⁸ to support gender equity and behavioral change considerations [See Figure 1]. The intervention, supported use of education via storytelling, discussion and skills building on these issues. [See Figure 2] The curriculum included material on safer sex, marital communication, marital stressors, and marital violence [See Table 1]. Over 6-9 weeks, Masters-level counselors conducted four household-based individual sessions and two small group sessions with at-risk Indian wives aged 18-40 years. Counselors were trained in curriculum content and approach, as well as supported referral provision, for both social and clinical care services.

Figure 1: Application of Social Cognitive Theory (SCT) and Theory of Gender and Power (TGP) to the RHANI Wives Intervention



NOTE: Private individual sessions transitioned from less sensitive to more sensitive topics over the course of the program. Group discussions did not include personal disclosure.

Evaluation of RHANI Wives

Using a two-armed randomized controlled trial design, we assessed the short-term impact of the RHANI Wives intervention on mitigating risky sexual behaviors and marital violence, as well as assessing the intervention's feasibility based on program participation, retention rates, and program participant responses. Participants, recruited from a slum community in Mumbai, India, were assigned to receive RHANI Wives, or an educational brochure on HIV/STI risk, and surveyed at baseline and 4.5 month follow-up. Surveys, conducted only with women, assessed socio-demographics, sexual behaviors, and marital violence. Time by treatment analyses assessed program impact on unprotected sex and condom use, sexual communication, and marital violence.

Figure 2: Example Curriculum: Storytelling pictures on father involvement, marital communication and husband alcohol use



References

- National AIDS Control Organization (NACO). NACO Annual Report 2010-2011. http://aidsdatahub.org/dmdocuments/NACO_Annual_Report_2011_12.pdf. Accessed 3 Aug 2013
- Gangai D, Mahapatra B, Sagurti N. Male migrants' non-spousal sexual partnerships in the place of origin: an in-depth investigation in two rural settings of India. *Cult Health Sex*. 2013;15(3):341-57.
- Sagurti N, Mahapatra B, Sibalava S, et al. Male out-migration: a factor for the spread of HIV among married men and women in rural India. *PLoS One*. 2012;7(4):e3222
- National Family Health Survey (NFHS-3), 2005-06: India, Mumbai: International Institute for Population Sciences (IIPS) and Macro International; 2007.
- Population Council. HIV Transmission among Married Men and Women in Districts with High Out-migration in India. Study Brief. http://www.populationcouncil.org/pdfs/2011HIV_indiaWandMigrationStudyBrief.pdf.
- Silverman JG, Dickler MB, Sagurti N, et al. Intimate partner violence and HIV infection among married Indian women. *JAMA*. 2008;300(6):703-10.
- Bandura A. Social foundations of thought and action: A social cognitive theory. Prentice Hall, Inc, 1986.
- Connell RW. Gender and power: Society, the person and sexual politics. John Wiley & Sons; 2014 May 15.
- Raj A, Saggurti N, Battala M, Nair S, Dasgupta A, Naik DD, Abramowitz D, Silverman JG, Balakrishna D. Randomized controlled trial to test the RHANI Wives HIV intervention for women in India at risk for HIV from husbands. *AIDS and Behavior*. 2012 Nov 12;17(9):1064-80.
- Sagurti N, Nair S, Silverman JG, Naik DD, Battala M, Dasgupta A, Balakrishna D, Raj A. Impact of the RHANI Wives intervention on marital conflict and sexual coercion. *International Journal of Gynecology & Obstetrics*. 2014 Jul 31;126(1):18-22.
- Frone PR, Hargreaves JR, Kim JC, et al. Effect of a structural intervention for the prevention of intimate partner violence and HIV in rural South Africa: a cluster randomized trial. *Lancet*. 2006;368(9551):1879-83.
- Raj A, Ananya-Krishnan S, et al. Is a general women's health promotion program as effective as an HIV intensive prevention program in reducing HIV risk among Hispanic women? *Public Health Rep*. 2011;134(6):599-607.
- Wechsberg WM, Browne FA, Ellerson RM, et al. Adapting the evidence-based Women's Co-Op intervention to prevent HIV infection in North Carolina and international settings. *N C Med J*. 2010;71(5):477-81.
- Wagman JB, Namutoro F, Nakigoda F, Kiwanuka D, Nakiggi G, Gray R, Wawer MJ, Serwadda D. A Public Health Approach to Intimate Partner Violence Prevention in Uganda The SHARE Project. *Violence against women*. 2012 Dec 1;18(12):1395-412.



Table 3: Characteristics of Sample, Married women aged 18-40 years, at Baseline Survey

Sex risk	<ul style="list-style-type: none"> 73.6% No Condom Use, past 90 days
Marital Communication	<ul style="list-style-type: none"> 89.1% Never Asked Husband to Use a Condom, past 90 days 62.3% Never Asked Husband about FSW Involvement, past 90 days
Husband Alcohol Risk	<ul style="list-style-type: none"> 76.8% Husband drank alcohol, past 30 days 74.0% Husband heavily drunk at least once, past 30 days
Spousal Violence	<ul style="list-style-type: none"> 34.1% Physical or Sexual Violence from Husband, past 3 months 21.0% Coerced at Last Marital Sex

Impact of the RHANI Wives Intervention

The RHANI Wives Intervention effectively reduced HIV risk by decreasing unprotected sex (via increased condom use) and sexual communication among couples.⁹ Reduction in marital sexual violence was also observed, though no effects were seen on marital physical violence.¹⁰

Observed effects were strongest for those receiving all four individual counseling sessions. Participation in groups proved difficult for many women due to constraints on their time. A goal of the original intervention design was to include access to microfinance, but low group participation impeded engagement with microfinance opportunities in practice. These findings corroborate studies conducted in Asia, Africa, and the U.S. that document the utility of gender-equity focused sexual risk reduction programs, inclusive of counseling for partner violence, for women at risk for HIV.¹¹⁻¹⁴

Recommended Citation

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- Saggurti, N., et al. Impact of the RHANI Wives intervention on marital conflict and sexual coercion. *Int J Gynecol Obstet* (2014);126(1):18-22.

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Please email geh@ucsd.edu if you have any questions about the RHANI wives study.

Access to the full papers can be reached at:

- <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4058338/>
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4053482/>

Case Study

A 22 yr old housewife, married for three years and living with her in-laws, used to characterize her marriage as difficult due to her husband’s alcohol consumption. She believed that his alcohol use caused or exacerbated his physical and sexual violence toward her.

“After drinking alcohol, he shouts and sometimes, beats me. Because of his intoxication he wants to have sex but I don’t like the smell of alcohol. He watches some (pornographic) movies, and wants to experience all this, and demands anal sex. My father-in-law sleeps in same room.”

Due to the RHANI Wives program, she can now negotiate for a healthier, and safer marriage:

“When he demanded anal sex, I told him that it is not good and shared information and pamphlets on STI and HIV. After listening to this, my husband stopped reacting like he used to with me before. He doesn’t force me to have sex.”

Figure 3: A counselor at work



Conclusion and Implications

RHANI Wives is a promising counseling intervention for women at risk for HIV and potentially for those contending with marital sexual violence. Given the findings of effectiveness related to unprotected sex with married women of childbearing age, the program could be extended to addressing contraceptive use and unintended pregnancy as well. This intervention may not be suited for women contending with very severe or potentially life-threatening violence, as it is not focused on safety planning or separation from husbands. However, for women experiencing marital sexual violence who wish to remain in residence with their spouse, this approach could be promising in terms of supporting women to voice their sexual preferences and affect their sexual interactions with their husbands in ways that allow them more respect and control over sexual decision-making. Longer term follow-up is needed to determine longer term effects of the intervention. Additionally, more research is needed on how the intervention may be scaled up and adapted for other locations and populations.