

Alcohol and HIV Risk Behaviors among Childbearing Women in St.Petersburg, Russia

Phase 1 of International research on biosocial determinants of HIV transmission and prevention in women (preparedness and piloting)



University of Oklahoma Health Science Center, Oklahoma City, OK, USA

St.Petersburg State University, St.Petersburg, Russia



Current HIV epidemic in Russia

HIV transmission is a major health concern worldwide. Statistics indicate growing HIV epidemic in Russia with new cases of HIV increasing by 7-8% every year. Traditionally HIV epidemic in Russia was spread through injection drug use. Currently it is increasingly affecting young sexually active women. The proportion of women among people living with HIV in Russia increased from 20% to 36.2% between 2000 and 2012, and the number of new HIV cases attributed to heterosexual contact continue to increase in Russia, reaching 40% in 2012 (Federal AIDS Center, 2013). Young women with high-risk sexual partners are considered to be an intermediate "bridge" population to the spread of HIV from injection drug users to the general population in Russia (Toussova et al., 2009; Benotsch et al., 2004; Rhodes et al., 2005; WHO, 2008). The health of young women also has a direct effect on the health and welfare of children. The increase in HIV infection among childbearing women has become a major public health concern.

Alcohol and HIV Risks in Women

Alcohol use is one of the contextual factors that may be associated with HIV risk among Russian women. At-risk drinking and having sex after drinking are associated with two major women's health outcomes, abortion and lack of condom use among women attending sexually transmitted diseases clinics (Abdala et al., 2011). There are a number of gender-specific factors related to at-risk drinking and HIV transmission in women. Alcohol consumption and sexual behaviors are influenced by gender-specific norms and expectations. Russia has one of the highest rates of female alcohol consumption in the world (WHO, 2008), and drinking traditions have deep historical and cultural roots, including female binge drinking.

HIV Testing

Regular HIV testing can be considered as one of HIV prevention approaches in general population. Recent US guidelines on HIV screening recommend the adoption of opt-out screening procedure. **Opt-out** screening means presenting HIV test as a routine procedure, often as a part of multi-component health screening bundle. **Opt-in** screening means that patient is required to actively choose or deny just HIV testing and by implication possibly acknowledge or exposed their risk status.

Method

Study procedures:

Participants – 362 childbearing age women at risk for alcohol exposed pregnancy, living in St.Petersburg

1. Health Risk Behaviors Survey. Women were recruited from OB/GYN clinics for the clinical trial evaluating a FASD prevention intervention in St.Petersburg, Russia.
2. Subsample of women with sexual risk of HIV transmission (N=51), those who met at least one of 2 criteria:
 - Two or more sexual partners in the last 12 months, no or inconsistent condom use in the last 3 months
 - Any sexually-transmitted disease in the last 12 months
3. Phone interview with those of having HIV risk transmission who did HIV test in the last 12 months
4. Inviting to the study site and randomized offer of Opt-in/Opt-out HIV testing for those of having HIV risk transmission who did not test in the last 12 months
5. Focus groups with the participants who were offered HIV testing.

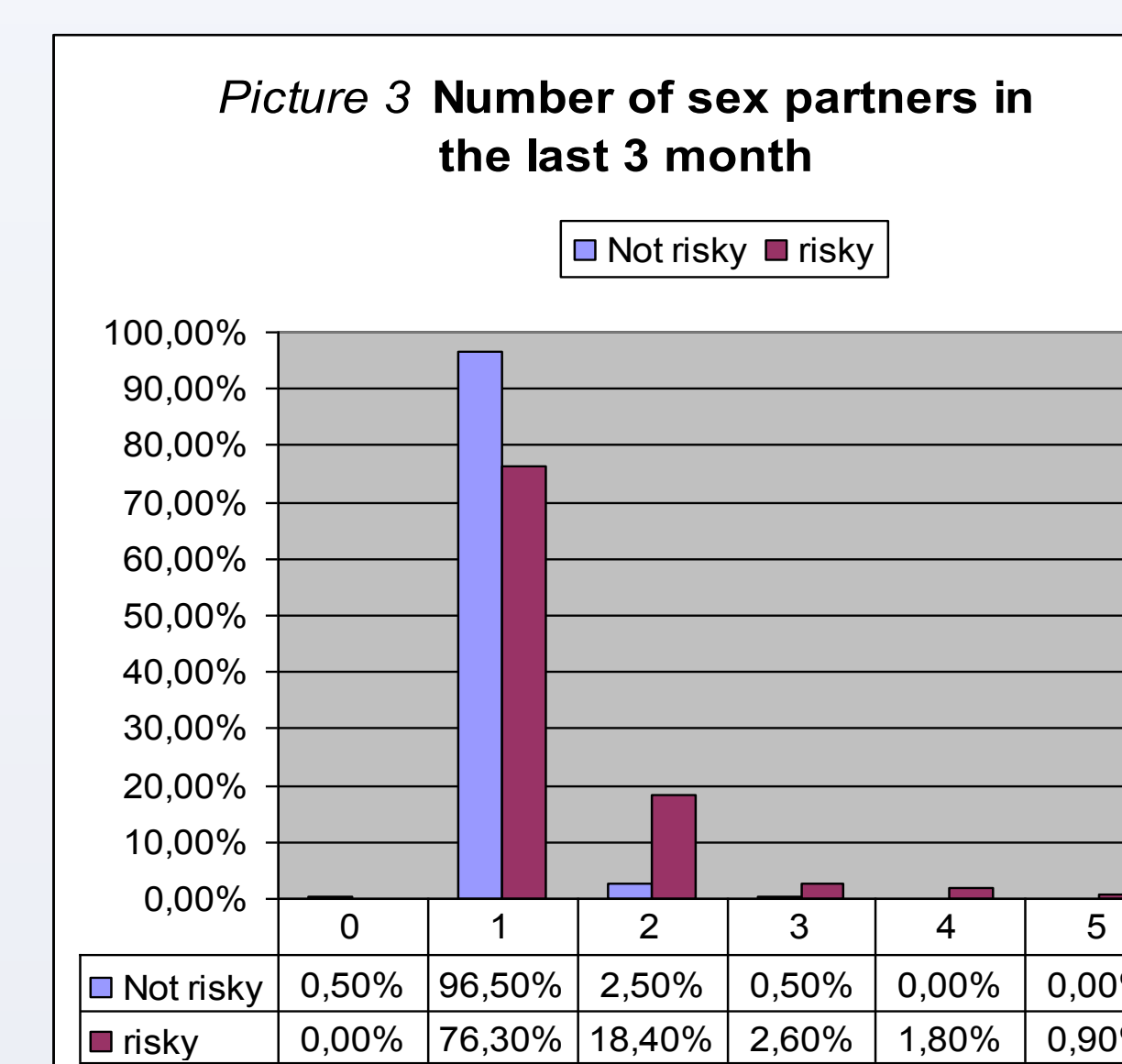
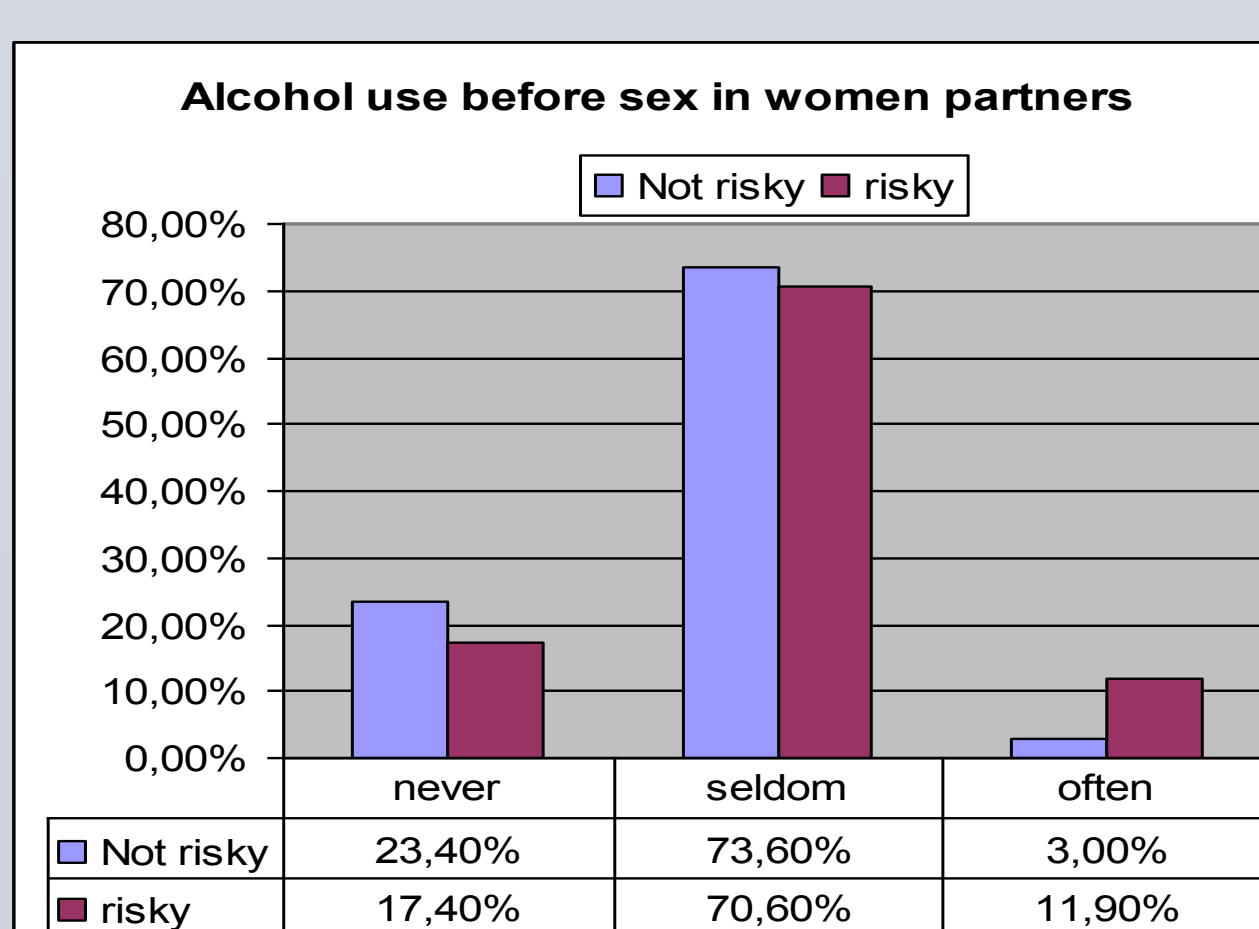
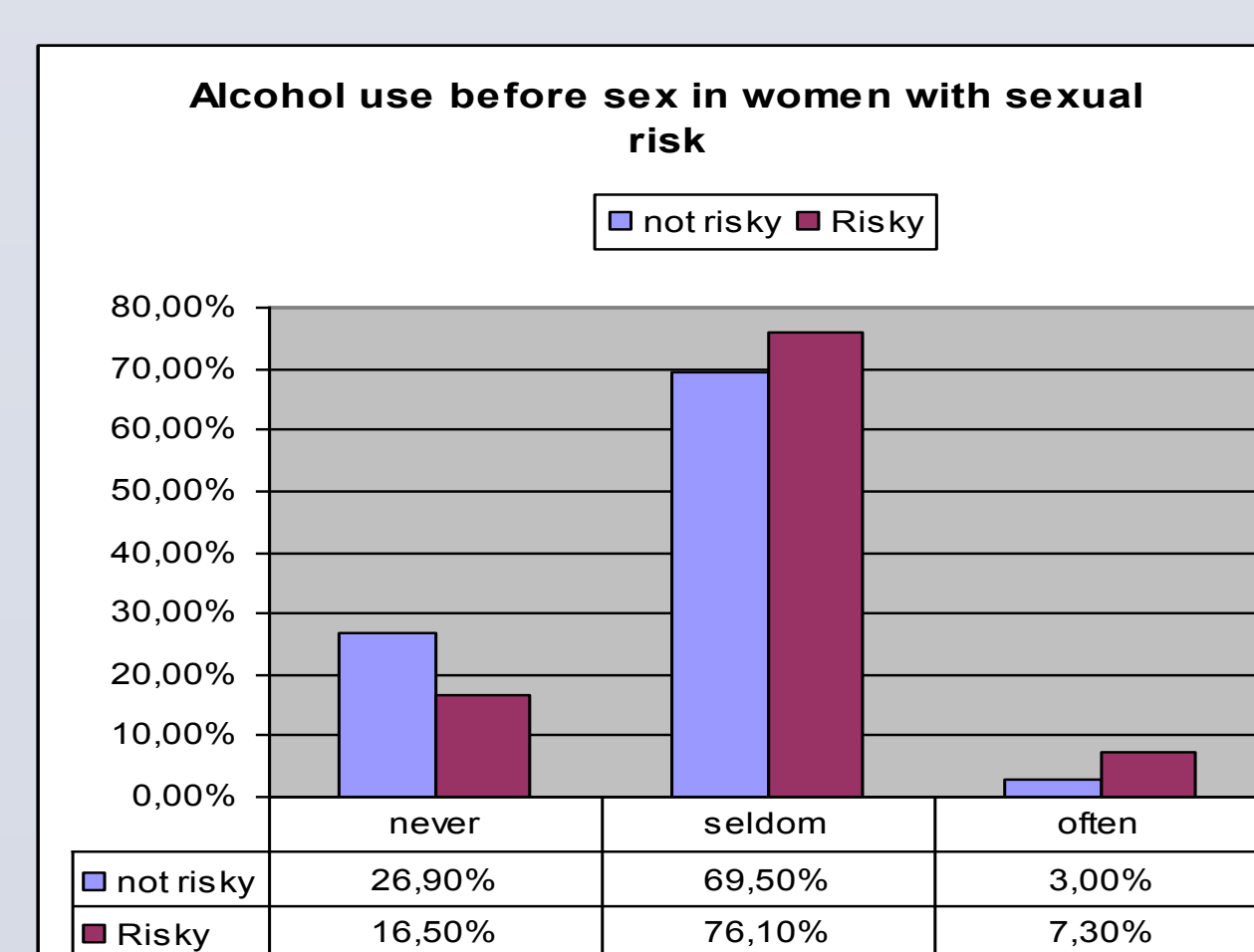
Results

Women with sexual risk significantly more often reported about alcohol use before sex ($p < 0.05$); as well as about their sexual partner's alcohol use; they significantly more rarely reported intention to use condom with casual partners. At the same time they more often assessed their sexual behavior as "risky".

We also assessed the

partner's risk of HIV transmission based on such factors as history of drug use, sexually transmitted diseases, serving in prison, homosexual contacts, cheating and others. Among all women 69.9% have main partner with risk of HIV transmission;

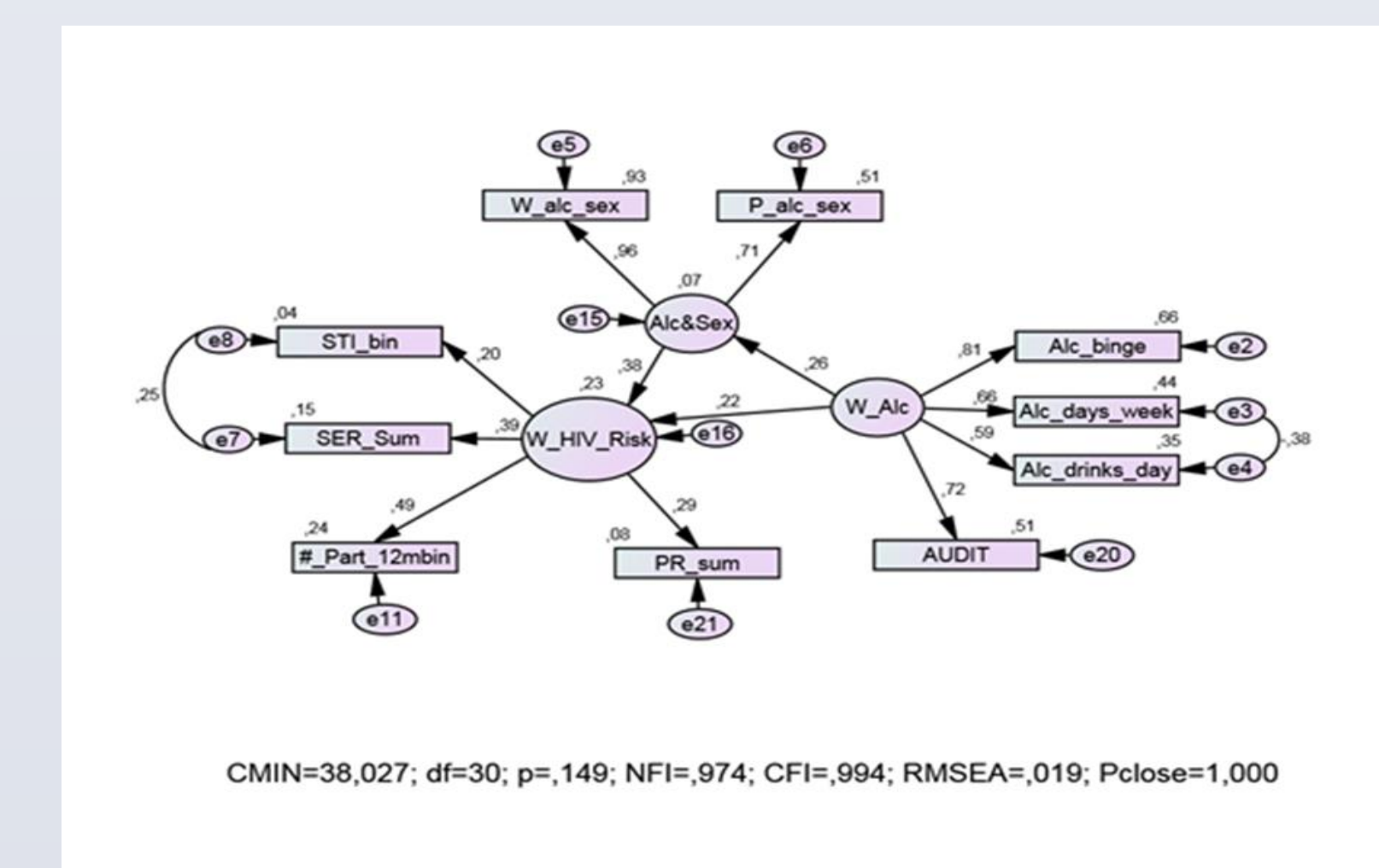
in these women 78.8% reported about irregular condom use and 42.9% - about no condom use at all. Only 20.9% of women reported about constant condom use.



Risky sexual practices such as anal sex were mainly reported by women who have main partner with risk of HIV transmission; and also by women with sexual risk behavior ($p < 0.01$). Women with risk

of sexual transmission more often reported about having risky partner than other women. Women who were in a stable relationship did not perceive themselves as being at risk and did not use any protection despite the HIV risk of the partner.

Mathematical modelling (SEM) proved the connection between alcohol drinking and risky sexual behavior: women who used alcohol before sex significantly more rarely used condoms ($p < 0.02$) and reported larger number of sexual partners in the last 3 months ($p < 0.01$).



10.6% of women did HIV test in the last 12 months. Among the reasons of not doing test, the most often was "I don't think I am at risk". All women selected who showed up at the study site (N=15) and were offered HIV testing accepted to do test despite of opt in/opt out procedure. The main reasons of doing test "to protect myself from HIV" and "for my own health". When taking part in the focus group discussion women said that they accepted testing mainly because of their participation in the previous project and their trust and good relationship to the study personnel.

Discussion

Prevention messages aimed at increasing condom use as protection against HIV/STD may not reach women who do not belong to any risk group, especially those who are in stable relationships. Additional research is needed to identify prevention strategies including utilization of HIV testing.

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