

## Condom use among illegal multi-partners females in the Sudan

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### Abstract

**Background:** Professional multi-partners females have relatively high numbers of sexual partners. The prevalence of HIV among multi-partners is high. Illegal multi-partners females probably have the same high risk.

**Objective:** To describe baseline indicators of condom use during sexual intercourse among a religiously prohibited, and socially non accepted population which is represented by illegal multi-partners females.

**Methodology:** From Oct 2010 to Dec 2010, we collected data on condom use and sexual habits of 102 illegal multi-partners females, in two cities (Khartoum & Kasala). Because it is religiously prohibited, and is a social stigma in an Islamic community, access to multi-partners females for research purpose is very difficult in Sudan. Nevertheless, women were recruited as they were seeking care in STIs at dermatology & STIs public clinics in Khartoum and Kassala

**Results:** The median age of female multi-partners was 36 years (range 21 -56). The reported median number of clients was 80 per month (range 4 – 200 clients). Vaginal intercourse was most common (98%) and anal intercourse was infrequent (10%). Of 102 participants, 97 (95%) reported no use of condom with their clients, whereas five women (4.9%) reported irregular use of condom. Of 102 participants only four (3.92%) are ported being tested for HIV infection.

Of 102 participants 61/102 (60%) did not have condoms during sexual intercourse, whereas 20 (19.61%) reported resistance of the partners, 15% although they knew the benefit if using condoms, but partners pay more if not use and 5% were indifferent if use or not.

**Conclusion:** Our results confirm that illegal multi-partners females may be at increased risk for HIV infection and so their clients will also be at high risk of contracting HIV. Beside being religiously and legally prohibited and socially unacceptable, this unsafe practice can create a serious health problem.

**Keywords:** HIV, Vaginal, sexual.

**P**ROFESSIONAL multi-partners females have relatively high numbers of sexual partners. This in itself does not necessarily increase their likelihood of becoming infected with HIV- if they use condoms consistently and correctly<sup>1,2</sup>. The prevalence of HIV among multi-partners is high. It was 38% in Rwanda (2009), 43% in Membassa, Keynia (2002), and 59% in Kigali, Rwanda<sup>3</sup>.

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Much of the HIV-related intervention research available to date concerning environmental-structural factors has been conducted within the context of multi-partners females<sup>4</sup>. Perhaps the most well-known structural intervention within this context is the Thai 100% condom program, which began in 1991 and centers around a government-sponsored policy requiring that condoms be used in all brothel-based commercial sex acts<sup>5</sup>. However many women reported less control on using of male condoms during sexual intercourse<sup>6,7</sup>.

Islam strictly prohibits prostitutes. Sudan has applies Islamic rules since 1983. Nevertheless illegal multi-partners females do exist. To date there is limited quantitative information in the Sudan on the prevalence of male

condom use among multi-partners and the barriers of using condoms during sexual intercourse.

**Objectives:** We aimed to assess condom use during sexual intercourse and limitation factors among a religiously prohibited, and socially non accepted population that is represented by illegal multi-partners females in the Sudan.

**Methods:**

From October to December 2010, a cross-sectional study was conducted with 102 female multi-partners in Khartoum and Kassala States, Republic of Sudan. Because it is religiously prohibited, and is a social stigma, access to multi-partners females for research purpose is very difficult in Sudan. Nevertheless, we could manage to get such women as they were seeking care in sexually transmitted infections (STIs) at dermatology & STIs public clinics in Khartoum and Kassala. Eligibility criteria included having more than three different sex partners in the past two weeks, age 15-55 years, no known allergy to latex and no physical abnormality that, precluded diaphragm use and acceptance to give informed consent.

A total of 102 eligible women were enrolled. All women gave written informed consent. At the enrollment all women were interviewed using a questionnaire, which collected information on demographic, sexual behavior and practice. Data were managed and analyzed using SPSS software version 17.

**Results:**

**Subjects characteristics:**

Fifty nine percent (60/102), of the participant were from Khartoum, and 41% (42/102) from Kassala. The median age of illegal multi-partners females was 36 years (range 21 -56). The reported median number of clients was 80 per month (range 4 – 200 clients), 3 acts per week.

Fifteen women (18%) were married, 19 (40%) had never been married, and (42%) were separated or divorced. Participants reported an average of 13.1 years of education. Most women (86%) had graduated

from high schools. Two women reported having had a sexually transmitted disease in the previous year. Vaginal intercourse was most common (98%) and anal intercourse was infrequent (10%), Figure 1.

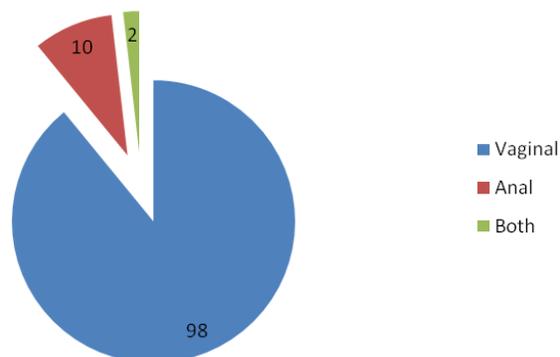


Figure 1: Distribution percentage of sexual intercourse among illegal multi-partners females in two States in Sudan, 2010.

**HIV-AIDS Awareness and Risk Behavior:**

All study participants knew HIV/AIDS and the means of transmission and prevention. Unprotected sexual intercourse was most frequently mentioned as a behavior risk of HIV infection. The majority (90%) of illegal multi-partners females described AIDS as, fatal, incurable, and preventable.

**Condom use practice:** Of 102 illegal multi-partners females, 97 (95.1%) reported no use of condoms with their clients, whereas five (4.9%) reported irregular use of condom. Only four (3.92%) are reported being tested for HIV infection. The association of not using condoms and HIV testing is significant (P =0.0034), odds ratio was 97. Table 1

Table1: Association of use of condom and HIV testing among study population in two States in Sudan.

HIV testing	Condom Use		Total (%)
	No.(%)	No. (%)	
Yes	2 (1.96)	2 (1.96)	4 (3.92)
No	1 (0.98)	97 (95. 1)	98(96.08)
Total	3 (2.94)	99 (97.06)	102 (100)

P-value\*= 0.0034. \* Fisher's Exact Test  
Odds ratio=97

Sixty one (60%) participants did not have condoms during sexual intercourse, whereas 20 (19.61%) reported resistance of the partners. Although 15% knew the benefit if using condoms, but they are not using it because their partners pay more if it is not used. 5% were indifferent to use it. Figure2.

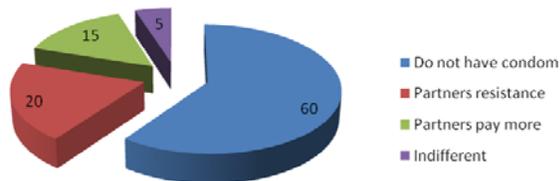


Figure2: Percentages of reasons of not using condoms during sexual intercourse among the study population in Sudan, 2010

### Discussion:

As it is not accepted neither religiously, socially nor legally, access to multi-partners females for research purposes is very difficult in Sudan. The majority of the multi-partners females were from younger age groups (median age was 30 years), which was similar to the age of female multi-partners in the previous studies<sup>8</sup>.

The result of the study revealed lowest condom use practice in the Sudan (6%), compared to some studies in Europe, Asia and Africa, where condom use practice among multi-partners was 95% in Italy, 56% - 96% in Karnataka districts in Southern India in 2008 and 69% in Madagascar<sup>9-11</sup>.

The study reported low HIV testing practice among multi-partners, only 5% had HIV test before the study. There was significant association between condom use and HIV test ( $P = 0.0034$ ), and odds ratio was 97, that indicates, using condom is 97 times more in those who did HIV testing compared to those who did not use condom and did not have HIV testing before the study. However, a dramatic decrease of HIV among multi-partners-when they were exposed to HIV testing and voluntary counseling- was found in a previous study in Abidjan, Cote d'Ivoire<sup>12</sup>.

The study results revealed that 60% of the participants did not have condoms during sexual intercourse. However 20% reported

resistance of the partners and 15% accept because partners pay more if condom is not used. This indicates the crucial role of the partners' preferences, as well as the financial demands of the illegal multi-partners females. This finding is consistency with a similar study conducted in Durban, South Africa, where financial problems appeared to be the primary reason for waiving the condom rule<sup>13</sup>.

### Conclusion:

It is predicted that illegal multi-partners females are at high risk of HIV infection. Following our Islamic instructions and rules will definitely eliminate this problem. Raising awareness on HIV, HIV testing and voluntary counseling is highly recommended in the Sudan.

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