

*Full Length Research Paper*

# Perceptions and practices regarding microbicides: a baseline survey of the sociale institute of health and hygiene of Dakar

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The social health is one of the medical centers in the south district of Dakar. It has a population of 230 000 people, so knowing that people's perception would assist in developing a focused and effective microbicide use in a developing country. From March to June 2008, a cross sectional descriptive survey was carried in the social health institute center in order to establish the community's current knowledge levels, gap, attitudes about microbicides. The study was aimed at establishing baseline information to be used in setting up a programme for educational community. Quantitative data was called through a random house hold survey of 600 women in the 21-59 years age group using a structured questionnaire. Quantitative information was elicited. Epi-info version 2002 was used to analyse data. On knowledge about 98% knew that HIV is transmitted sexually, 55% on contact with infected blood and 28% through mother to child transmitted, only 0, 1% know what microbicide is, 80% mentioned that never heard about microbicide(P<0,001). About 80% felt that it was good for women in order to prevent HIV transmission From the finding we concluded that knowledge on microbicide was low among women. Microbicide as a new product requires a lot of educational community information.

**Keywords:** Perceptions, Practices, Knowledge, Microbicides, Dakar

## INTRODUCTION

Senegal has one of the Africa's lowest HIV/AIDS infection rates less than 2% but vulnerable groups such as sex workers have higher HIV prevalence. Currently (UNAIDS/WHO, 2010), HIV infection among legal sex workers in Dakar has risen to 21%, compared to 1% 20 years ago. The rate is as high as 30% in the southern city of Ziguinchor (Senegal, 2004). The HIV prevalence for clandestine sex workers is not available; it thought to be much higher than the rate for registered sex workers. We estimate that more than 80% of Senegal sex workers do not register. Although it is one of the poorest countries in the world, with a per capita annual income less than \$600

in 2008, Senegal is considered one of the world's success stories in HIV prevention. While other sub-Saharan African countries are experiencing the worst epidemic in the world. with a "concentrated" epidemic, the general population in Senegal has remained relatively free of AIDS, through vulnerable populations have significantly higher prevalence among commercial sex workers. Senegal' success at maintaining low overall prevalence has been attributed to the confluence of a number of factors, including strong political leadership, early involvement and leadership among religious leaders, conservative cultural norms regarding sexual practices, and a comprehensive strategic approach implemented early in the epidemic. (UNAIDS/WHO, 2009).

The degree of government commitment in the fight against AIDS is visible in its well developed public sector

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ART program, the Initiative Senegalese Access aux ARV (ISAARV (UNAIDS/WHO, 2006).

In this study we set out to measure the perceptions and practices regarding microbicides.

## MATERIAL AND METHODS

Participants study included a convenience sample of 600 women recruited from March to June 2008, at the institute of health and hygiene of Dakar. It is a public health hospital where women receive medical care for family planning, registration as a female sex workers or ARV-treatment. There were no refusals to participate among these hospital patients.

Data was collected by social workers and physician-administered questionnaire on preventive behaviours (condom use and microbicides perceptions) as well as 30 focus groups. The study used a descriptive survey design to obtain data from women regarding their existing knowledge base about microbicides and the impact that knowledge had on HIV/AIDS prevention. Microbicide knowledge of was evaluated by asking the patients to state the name or to recognize the rule of microbicide and give their respective aspect.

The use of a condom by a partner was measured. Patients were considered "consistent condom users" if they reported "always" using condom and used condom at last intercourse with regular partners.

Information was also collected on socio-demographics and economic condition. *Data*

Factors associated with microbicides perceptions and practices were identified using bivariate and logistic regression models with staggered data entry. Qualitative and qualitative data were assessed with statistical and thematic analysis, respectively and then combined. Analysis was performed with *Epi-info* statistical software.

## RESULT

In response to their knowledge about microbicides 490 women or (81.6%) of the sample reported that they were never heard about microbicides.

Sources of information about microbicide were not multiple and varied. Of the sources of information reported by the 588 (98%) women who indicated that about HIV, identified a health care provider as one of their sources. Specific sources of information included HIV newsletters (10%), physician or nurse practitioner (65%), HIV magazine (0.1%), TV talk (0%), social workers (10%), friend (10%), other sources (4.9%) Because women were asked to identify all sources of information. Of the belief among women who stated they knew about microbicide use to prevent HIV, 1 (1%) identified. 129 identified about microbicide to prevent pregnancy and 112 as to prevent sexual transmitted

disease;. Although 358 (59.6%) of the women reported that they do not know anything about microbicide

Table 2 Summarizes the responses of women to each item of a question asking them to identify what they believed to be true about the use of microbicide: Women were presented with four Options and asked to circle all Responses that they believed to Be true of the use of microbicide...To be scored as having accurate, subjects had to select only the single correct opinion. To determine if there was a relationship Between microbicide knowledge versus education, khi microbicide 2 analyse knowledge was performed.

*There was a relationship between knowledge about microbicide and women's education indicating that most of them would consider been illiterate That they would consider microbicide knowledge, khi2 (2,N=600) = 714.98(odds ratio 84.64, 95%CI, seuil=3,84) (p=0,000). There was, however, a relationship, khi2 (2,N=600)=468.50 (odd ratio 0.01, 95%, seuil 3.84) (p=0.000) between HIV knowledge and the beliefs.*

Most of women lived within the capital area (78%), only 18.5% had high-school education, (57.4%) and had no revenue or earned less than 50\$ USD per month. Furthermore, patients were more often married (58.1%) and had not a higher material condition (2.2%) in material situation (table 1).

In accordance with the latter, having no financial autonomy was also as noted (77.7%). Finally, patients who planned to have a child in the next year were less (5.5%) and having a regular intercourse sex with partner without a condom is very low (9.5%). (Table 1).

## DISCUSSION

Although the result of the study indicate that most of the sample had no knowledge about microbicide. The overwhelming majority of women who identified themselves as having knowledge about HIV/AIDS could not discriminate between accurate and inaccurate description of the effects of microbicide. Of particular note is the belief on the part of one women who believed that microbicide would prevent HIV transmission (table3)(figure1). The women in this study who were not knowledgeable about microbicide indicate that they never heard about microbicide (table2). Of particular information interest are the sources of information about microbicide identified by women in this study. Many women had learned about microbicide from a single source, and that source is frequently a health professional (table4). Magazines, television talk shows were not quoted. In addition, this study also found that a disproportionate higher number of women who were not knowledgeable about HIV transmission (table5).

Adherence to condom is a complex human behaviour. Many variables have been described in association with this behaviour mostly in Northern settings, and can be

**Table 1.** Demographic characteristics of sample characteristics

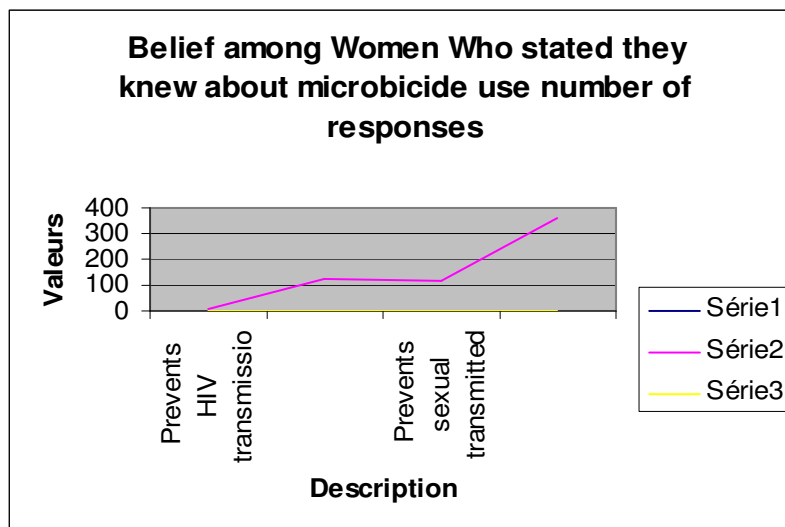
<b>Age</b>	<b>N</b>	<b>%</b>
< ou = 30	120	20
31-35	210	35
36-40	200	34
41-49	50	8,3
> ou = 50	20	3,3
Moyenne	120	20,12
<b>Place of residence</b>		
Urban	468	78
Rural	132	22
<b>Religion</b>		
Christian	45	7,5
Muslim	555	92,5
<b>Education</b>		
University	12	2
Secondary	99	16,5
Elementary	459	76,5
Not educated	30	5
<b>Occupation</b>		
With salary	101	16,8
Unemployed	422	70,3
Housewife	73	12,9
<b>Marital status</b>		
Married	349	58,1
Single	111	18,5
Divorced	140	23,4
<b>Financial situation</b>		
Yes	134	22,3
No	466	77,7
<b>Revenus (\$ US)</b>		
< 50	146	24,3
50-70	13	2,1
70-90	21	3,5
90-150	31	5,1
> ou = 150	46	7,6
No Revenue	343	57,4
<b>Material Situation</b>		
Low	97	16,1
Middle	490	81,7
High	13	2,2

**Table 2.** Summaries of women to each item of a question

<b>Condom use at last sex</b>		
Yes	220	36,7
No	380	63,7
<b>Condom use consistency</b>		
Always	110	18,4
Sometimes	433	72,1
Never	57	9,5
<b>Age of coital debut</b>		
< 12 Years	78	13
> 12 Years	522	87
<b>Planning to have children</b>		
Yes	33	5,5
No	567	52,2
Yes	589	98,2
No	11	1,8
<b>Have Heard about microbicide</b>		
Yes	110	18,4
No	490	81,6
<b>behaviour change due HIV/AIDS</b>		
Yes	566	94,3
No	34	5,7

**Table 3.** Belief among Women who stated they knew about microbicide use number of responses

Prevents HIV Transmission	10	1,7
Prevents pregnancy	120	20
Prevent sexual transmitted disease	112	18,7
do not know	358	59,6



**Figure1.** Belief among Women Who stated they knew about microbicide use number of responses

**Table 4.** Number of sources of information about Microbicide

<b>Number of sources of information about Microbicide</b>		
Number of sources	N	Responses (%)
One	588	98
Two	8	1,5
Three	4	<1

**Table 5.** Knowledge about HIV Transmission

	N	%
Blood transmission	330	55
Mother to Child transmission	168	28
Others (meedles, etc.)	102	17

classified as relating to personal attributes, psychosocial and relational factors, treatment regimen, and institutional resources. In accordance with previous reports from resource limited settings (Mukabutera et al., 2004), socio-economic factors have not significantly been accounted for as barriers to adherence to condom in our study. Three conclusions have emerged from our country-specific regression models. First, social factors such as, having children and a regular partner and being a housewife, do not facilitate adherence to condom. Consistent with these findings, social stability and social support have repeatedly been associated with medication adherence in different settings (Mukabutera et al., 2004). Second, planning to have a child in the next year was negatively associated with adherence; the desire to have a child has been an emerging preoccupation for health care providers in the context of HIV/AIDS. This, finding underscores the importance of informing patients about the benefits of using condom to reduce mother to child transmission. Third, condom use related factors are associated with adherence as it has been observed elsewhere (Tawil, 1991). According to our data, only 18.4% of the participants remained perfectly adherent to condom. Thus, sustaining safe sex will require that efforts be made to maintain adherence to condom not only in HIV- positive women or sex workers but also their partners.

Low rates of condom use have been reported by participants in this study. These may reflect the degree of stigma (Rowe et al., 2005) that is still associated with HIV-disease in these contexts. Furthermore, the preventive behaviour due HIV/AIDS were not associated with condom adherence. The association between these preventive behaviours and adherence to HIV /AIDS. However education to partner is expected to facilitate

adherence to condom (Diamond et al., 2005) as it has been observed in the case of tuberculosis preventive therapy for HIV-positive patients (Rowe et al., 2005). Similarly, we also expected adherence to be associated with increased self-reported condom use as it has been observed in Western settings (Wilson et al., 2002).

In summary, low and declining levels of adherence to condom in these settings underline that scaling up access to condom must be mindful of the need to build in long-term infrastructure to support adherence.

## CONCLUSION

Further research is needed to obtain information and expand the existing knowledge base regarding what men know about the use of not only microbicide but condom as well. This is of particular significance, as treatment for prevention of transmission as standard practice. The women in this study who were not knowledgeable about the use of microbicide indicated that they might consider to receive more information about microbicide. Health care professionals should anticipate the need for accurate information about microbicide. Knowledge about how and where women acquire information can be useful information for women. Health care professional can use these findings when developing educational and counselling interventions that address HIV transmission and reproductive decision making for women. Information offered to women regarding microbicide and HIV transmission must be culturally and linguistically appropriate and may need to be provided over multiple sessions. Misinformation and lack of clear understanding of these issues have the potential to seriously affect the lives of women and their families.

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