



## Global Campaign News July 22, 2002

Welcome to the biweekly *Global Campaign News*! The *Global Campaign News* is a forum for international exchange on microbicide activities and information with an aim to build a more informed and integrated movement for microbicide development and other prevention options against HIV and STDs.

We welcome your input and contributions. Correspondence can be addressed to [info@global-campaign.org](mailto:info@global-campaign.org). If you would like to unsubscribe to the Global Campaign News, please reply to this e-mail with the subject line: UNSUBSCRIBE.

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### **WHO Releases Consensus Report on Nonoxynol-9**

On June 28, 2002, WHO released the results of its long-awaited consensus document on the safety and effectiveness of Nonoxynol-9 for pregnancy and disease prevention. The document summarizes the findings of a group of experts convened by WHO and the Contraceptive Research and Development Program (CONRAD) in October 2001, to give guidance about N-9 in the face of conflicting research findings.

The reports main findings are as follows:

1. Despite earlier beliefs to the contrary, spermicides containing N-9 do not provide protection against HIV or bacterial STDs such as gonorrhea and chlamydia. When used frequently in the vagina (more than once a day), N-9 containing products may even increase the risk of HIV infection.
2. Women who are at risk of HIV or have multiple acts of intercourse in a day should be counseled to use a different form of contraception.
3. Spermicides containing N-9 remain a safe contraceptive option for women who use such products who are not at risk of HIV.
4. Under no circumstances, should N-9 containing products be used rectally.

5. There are no data that demonstrate that condoms lubricated with Nonoxynol-9 are any more effective in preventing pregnancy or infection than condoms lubricated with silicone, therefore such condoms should no longer be promoted. The report nonetheless notes that it is better to use a Nonoxynol-9 lubricated condom than no condom at all.

To read the full WHO report, click here: [http://www.who.int/reproductive-health/rtis/N9\\_meeting\\_report.pdf](http://www.who.int/reproductive-health/rtis/N9_meeting_report.pdf)

To learn more about the Nonoxynol-9, check out "What's Up with N-9?" on the Global Campaign web site: [http://www.global-campaign.org/whatsup\\_with\\_n9.htm](http://www.global-campaign.org/whatsup_with_n9.htm)

### **Advocacy Workshop on Prevention Options for Women in Barcelona**

The Global Campaign sponsored a highly successful Skills-Building Workshop at the 14<sup>th</sup> International AIDS Conference in Barcelona, Spain. But one participant left angry. "I'm mad," he said, "Because I have to go home and tell my three teenage daughters that the reason they don't have much choice in how to protect themselves from HIV is that not enough people care about them to have figured something out by now!" Fortunately for the girls, their dad is ready to hit the advocacy road. He's planning to visit policy makers and religious leaders in his hometown to help raise awareness of and access to female condoms and microbicides.

This was only one of the gratifying outcomes of the Global Campaign's Skillsbuilding Workshop at the 14<sup>th</sup> International AIDS Conference in Barcelona. The workshop, "Advocating for Female Condoms and Microbicides: Knowledge, Skills and Strategy" was full to capacity, and at least a third of the participants were men. The group started with one of the biggest barriers to discussing prevention options for women: in order to get over the "awkwardness" of the subject, co-facilitator Anne Philpott from the Female Health Foundation asked everyone to draw a vagina. With that activity weeding out the squeamish (actually, no one left the room!), the group moved on to discuss some of the obstacles to advocating for women-focused prevention options, as well as effective means of confronting those obstacles. For example, when presented with the argument that "no one will use a female condom," an appropriate response is to cite the extensive data showing that in every population studied, a significant number of women and their partners like the female condom and would continue to use it if it were readily available. Workshop participants identified several priority areas for advocacy work. Working together with men to promote couple communication, gender equity, and male involvement in using women-focused prevention methods was highlighted. Discussion also focused on the importance of developing and communicating effective and accurate messages, particularly "hierarchical" or "harm reduction" messages that could apply to partially effective microbicides as well as to reuse of the female condom. The demand for more resources was quite clear, as was the sense that women-focused methods have not received a fair share of priority emphasis in global HIV/AIDS prevention strategies. As far as how to get this demands across, the workshop covered media and electronic communications as well as coalition building as strategies for delivering messages to a

broad audience.

### **News from Barcelona**

#### ***New HIV Microbicide Candidates Show Promise in Preclinical Studies***

*By Deborah Mitchell, BARCELONA, Spain (Reuters Health) July 10, 2002*

Two new compounds are showing promise for use as topical vaginal and anal HIV microbicides, according to presentations delivered here on Wednesday at the XIV International AIDS Conference.

"Any HIV topical microbicide has to be safe--there is very, very little room for toxicity," Dr. Mary Klotman of Mount Sinai School of Medicine in New York told conference attendees.

One such potential compound is "SAMMA," a polymer derived from sulfuric acid treatment of mandelic acid. The agent is not a surfactant and it is not sulfated, making it less likely to damage the vaginal epithelium and flora. SAMMA is also colorless, odorless and inexpensive to produce, important features for a candidate microbicide, she said.

In *in vitro* experiments, Dr. Klotman and her colleagues evaluated the activity and toxicity of SAMMA combined with clinical isolates of HIV and primary cell culture systems including human cervical cells, macrophages and T cells. They also tested SAMMA with cells engineered to express single HIV co-receptors.

In dose ranges of 10 to 100 micrograms per milliliter, SAMMA blocked laboratory-adapted and primary isolates of HIV in primary cells. SAMMA also blocked infection with R5 and X4 HIV isolates.

In addition, SAMMA effectively blocked HIV binding to cells and glycoprotein gp120. Similar effects were observed with herpes simplex virus. No measurable toxicity was seen.

"SAMMA inhibits both laboratory-adapted and primary isolates of HIV," Dr. Klotman concluded. This compound shows little or no cytotoxicity, has an "excellent selectivity index" and merits further evaluation, she added.

In a second study, a topical microbicide containing the nonnucleoside reverse transcriptase inhibitor dapivirine (TMC120) was able to completely inhibit vaginal transmission of HIV in a mouse model.

This the first *in vivo* evidence that an NNRTI is feasible as a HIV microbicide, according to Dr. Simonetta Di Fabio of the Istituto Superiore di Sanita in Rome. Dr. Di Fabio presented her teams' data from a hu-SCID mouse model developed to simulate *in vivo* vaginal transmission of HIV.

After a single vaginal application with 25 mL of a gel containing dapivirine, 21 female mice were challenged with human peripheral blood lymphocytes infected with a laboratory strain of HIV.

Rates of protection were 70% to 80%, Dr. Di Fabio told conference participants. When the gel was adjusted to reduce its viscosity, the rates of protection reached 100%. Because of the marked improvement seen after the gel viscosity was reduced, "the findings suggest that distribution is an important factor," she added.

### ***Diaphragms Might Be Acceptable Means to Protect Against HIV***

*BARCELONA, Spain (Reuters Health) July 9, 2002*

Contraceptive diaphragms should be studied as a potential means for women to protect themselves against AIDS, researchers said at the International AIDS Conference on Tuesday.

Diaphragms might offer protection against HIV, but attempts to study whether this would work "have been stymied by the issue of acceptability," said co-author Dr. Sungai Chipato from the University of Zimbabwe at the International AIDS Conference in Barcelona.

The urgency of the search has been heightened by United Nations figures showing that women make up 58% of people in sub-Saharan Africa who have AIDS or HIV. Young women in the region are now up to six times more likely than young men to be infected with HIV, a report by the UN Population Fund said.

But Western researchers have not considered diaphragms as one of the options, believing that women would not use them, Dr. Chipato said.

She told delegates at the conference that a study of 156 Zimbabwe women whose husbands or partners did not consistently use condoms showed that 98% were in fact willing to use a diaphragm, at least part of the time.

"Now that we know that they are acceptable, diaphragms need to be tested for efficacy in preventing HIV," she said in a statement.

### ***AIDS Infections Up Among Young Women***

*By Emma Ross, BARCELONA, Spain, Associated Press, July 10, 2002*

The AIDS pandemic is increasingly becoming one of young women, experts say. About half of all new infections are in women and among people in their late teens and early 20s, females account for nearly two-thirds of new cases.

Sex between men and women continues to be the main way HIV is spread in the developing world, where the majority of HIV cases are, and it is difficult for women

there to follow prevention recommendations because of their subordinate position in society.

“It is women and girls who are overwhelmingly the casualties of this scourge, and it is getting worse,” said Stephen Lewis, the U.N. secretary-general's special envoy on AIDS in Africa. “It is a nightmare.”

Scientists at the 14th International AIDS Conference presented several studies on the female face of HIV and on ways to help women protect themselves without having to rely on men to use condoms.

“We've got to make sure that the money is going proportionately to those who are paying proportionately the greatest price, and at the moment, the greatest price on this planet is being paid by the women and girls of Africa,” Lewis said.

A University of California, San Francisco, study found that in Zimbabwe, rape is common and negotiating for safe sex to prevent HIV infection is almost impossible for many adolescent girls who become involved with older men in return for clothes and school fees.

The phenomenon of intergenerational sex is driving much of the epidemic in southern Africa, where between one-quarter and one-third of older men are HIV positive, said the study's leader, Nancy Padian, director of international programs at UCSF's AIDS Research Institute.

“An intervention to promote economic self-sufficiency is an essential element in any plan to reverse the spread of HIV,” she said.

In some areas, common myths about AIDS - that sex with a virgin cures sexually transmitted infections and that sex with condoms will not release body heat - also work against women, Dr. Suniti Solomon, director of the YRG Center for AIDS Research and Education in Chennai, India, told the conference.

On average, women are becoming infected 10 years earlier than men due to early marriages, rape or being forced into prostitution for economic reasons, said Solomon, whose team documented the first evidence of HIV infection in India. There is an urgent need for HIV prevention methods that do not require the cooperation of the male partner, Solomon said.

**One possibility is microbicides, gels designed to kill HIV. No microbicide has been shown effective yet, but more than 50 candidates are under development.**

Research presented at the AIDS conference included studies that looked at whether female condoms, which are more expensive, can be reused and whether it would be feasible to use diaphragms to prevent HIV infection.

A World Health Organization study found that after 300 female condoms had gone through seven cycles of disinfection, washing with soap and water, drying and relubrication, the condoms met the original manufacturing quality assurance requirements.

However, the study suggested that female condoms should be handled carefully and inspected for damage between uses, because repeated wear increased the likelihood of holes.

Another study found that almost 98 percent of Zimbabwean women who were unable to persuade their partners to regularly use a condom used diaphragms as an alternative. "There is substantial evidence to suggest that protecting the cervix could offer some protection against HIV, but attempts to study physical barriers that protect the cervix such as diaphragms have been stymied," said Dr. Tsungai Chipato, an obstetrics and gynecology professor at the University of Zimbabwe. "Western researchers simply have not believed that women will use them."

The next step is to test whether diaphragms can prevent HIV transmission.

"The likelihood is that it should, because the cervix seems to be a more susceptible HIV target than vaginal tissue, so very likely, if you cover the cervix, you could block out some transmission," said Dr. Helene Gayle, director of AIDS programs at the Bill and Melinda Gates Foundation, who was not involved in the research.

Combining a diaphragm with a microbicide will likely be a strong option, she said. "Given the urgent need for HIV prevention methods that women can use without their partners knowing about or needing to consent to use, the potential of this existing product can no longer languish unexplored," said UCSF's Padian, who led the study. The issue of whether women will have equal access to treatment also needs exploring, Gayle said.

"On top of women's increased vulnerability to infection, when treatment becomes available, is it going to be preferentially given to men? These are the kinds of questions that need to be on the radar screen," she said.

### **HIVTools Website**

The HIVTools Research Group at the London School of Hygiene & Tropical Medicine are pleased to announce the launch of their new HIVTools web-site: [www.hivtools.lshtm.ac.uk](http://www.hivtools.lshtm.ac.uk). The Global Campaign for Microbicides is working closely with the HIVTools Research Group to develop models for estimating the impact of microbicide introduction into resource poor settings.

The HIVTools web-site includes latest downloads for HIVTools/UNAIDS costing guidelines, HIVTools mathematical models for estimating the impact of different HIV

prevention interventions, publications and reports, presentations, links to funders, collaborators and relevant HIV resource lists. Policy and programming applications of the research include national planning and financing, resource allocation and replication, scaling up, intervention monitoring and evaluation, priority-setting, standardization of methodologies, and tools for decision-making.