USE OF PROPHYLACTICS

Latex materials, such as condoms and latex dams, are prophylactics used to protect against HIV infection during sexual activity. Condoms are used for vaginal, anal and oral sex, and also protect against other sexually transmitted diseases (STDs) and pregnancy. Latex dams were designed for uses not related to sex, but have been adopted for oral sex performed on women and oral-anal sex on men or women. Spermicides are chemicals that inactivate sperm to prevent pregnancy, and have been used in combination with condoms for HIV prevention.

RESEARCH UPDATE

Since the beginning of the AIDS epidemic, condoms have been considered effective barriers to prevent HIV infection during anal, vaginal and oral sex. Researchers have studied both the effectiveness of condoms and the adoption of condom use to sexual behaviors. In addition to preventing transmission of HIV, condoms have been shown in laboratory tests to prevent transmission of a number of other STDs, including chlamydia trachomatis, herpes simplex virus, cytomegalovirus and papillomavirus.

Laboratory studies have shown that HIV cannot pass through a properly made latex condom.1 However, other studies have found that condoms are susceptible to breakage because of improper manufacture or use. Standard tests of condoms include airburst and water leakage tests and simulated sexual intercourse.

One study in which 30 condoms were subjected to simulated intercourse found no leakage of HIV.2

Another study showed that four of 31 brands sampled leaked HIV when tested by a device that simulated intercourse. The four brands were also among those performing most poorly in a separate series of airburst and water leakage tests. In these tests, 0.66% of all brands failed either test.3

The eight highest-scoring, or best-performing, brands in the study did not leak HIV when subjected to simulated intercourse. Alphabetically, the best-performing brands were:

- Durex NuForm
- Gold Circle
- Gold Circle Coin
- Mentor
- Pleaser
- Ramses Non-Lubricated
- Ramses Sensitol
- Sheik Elite

Alphabetically, the five lowest scoring condoms in the airburst and water leakage tests were: Contracept Plus, LifeStyles Conture, LifeStyles Nuda, Trojan Naturalube Ribbed and Trojan Ribbed. Researchers cautioned that their findings had limited use because of inconsistencies in the study.

In a separate study, airburst tests performed by Consumers Union found that 32 of 40 brands of latex condoms had projected maximum failure rates of 1.5% or less. The five best-performing brands in this study were, in alphabetical order:

- Gold Circle Coin
- LifeStyles Extra Strength
- Ramses Non-Lubricated Reservoir End
- Saxon Wet Lubricated
- Sheik Non-Lubricated Reservoir End

Two condoms had a projected maximum failure rate of more than 10%. These were LifeStyles Extra Strength with Nonoxynol-9 and LifeStyles Nuda Plus.4

Condom User Studies

Studies of condom users have demonstrated varying degrees of condom effectiveness. One study tracked infection among antibody negative sexual partners of people with AIDS. Of 10 couples who regularly used condoms, one partner became infected after a median of two years, while among 14 couples who did not use condoms, 12 partners became infected.5
In a British study of 97 men who used condoms during anal sex in the previous year, 31% reported at least one incident of condom breakage, and one in 27 condoms used for anal sex had broken.6

Factors That Lead to Breakage

Many human factors, such as storage, handling and usage can lead to condom breakage. Condoms stored in areas with temperatures above 85 degrees, or below 40 degrees, or in exceptionally bright areas are far more susceptible to breakage. In addition, as they age, condoms may deteriorate. Condom packages are generally stamped with either their manufacture date or an expiration date, and most condoms have a shelf life of two years.

Several studies have showed that oil-based lubricants, such as vegetable-based cooking oil, mineral and baby oils, Nivea hand cream and Vaseline Intensive Care, can cause condoms to break within one minute after they are applied.7 The following water-based products are often recommended:

- H-R Lubricating Jelly
- Gynol II
- K-Y Jelly
- Duragel
- Today Personal Lubricant

Most condoms are lubricated to improve penetration during vaginal or anal sex. Non-lubricated condoms are also available, and are generally preferred for oral sex with men. Animal or natural skin condoms are less effective at preventing passage of HIV.8

Anecdotal evidence suggests a high percentage of condom breakage is attributable to incorrect use. Many individuals, even regular condom users, continue to be unaware of proper techniques to apply condoms. Instruction in condom use may be inadequate for many people. One study of 25 condom brands showed that half offered instructions in Spanish, while English instructions were considered too complex for most Latinos in the United States.9

Barriers for Women

Condoms for use by women during vaginal sex are not currently available, but variations of a "female" condom, or vaginal pouch, are being studied.

Latex dams are available for oral sex with women and oral-anal sex for women or men. Because these products, which resemble a flat condom, were designed for dental procedures, and not sexual activity, latex dams have met with low levels of acceptance. In addition, they have been unpopular because their thickness reduces their sensitivity.

Plastic food wrap has been used during oral sex with women and in oral-anal sex with women and men. Some individuals have created flat rectangular pieces of latex by cutting unlubricated condoms with scissors. Plastic wrap and condoms that have been “cut down” have not been studied for their effectiveness at inhibiting HIV or remaining impermeable during oral sex. Also, while diaphragms and contraceptive sponges may be effective at preventing some STDs, there is no proof they can prevent HIV transmission.

Mixed Levels of Acceptance

Condom use is still not prevalent within most communities. Studies show that as many as 60% of injection drug users have never used a condom, and as few as 18% report frequent use.10 Low rates of regular use are also found among

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### Condom Use During Sex

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>All clients surveyed</td>
<td>39%</td>
</tr>
<tr>
<td>Homosexuals</td>
<td>61%</td>
</tr>
<tr>
<td>Injection drug users</td>
<td>21%</td>
</tr>
<tr>
<td>First time tested</td>
<td>33%</td>
</tr>
<tr>
<td>Tested more than once</td>
<td>53%</td>
</tr>
</tbody>
</table>

*survey of 857 individuals seeking an antibody test at Alternative Test Sites in 1988-1989*

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- 31% reported at least one incident of condom breakage, and one in 27 condoms used for anal sex had broken.
- Many human factors, such as storage, handling and usage can lead to condom breakage.
- Condoms stored in areas with temperatures above 85 degrees, or below 40 degrees, or in exceptionally bright areas are far more susceptible to breakage.
- As they age, condoms may deteriorate.
- Condom packages are generally stamped with either their manufacture date or an expiration date, and most condoms have a shelf life of two years.
- Several studies have showed that oil-based lubricants, such as vegetable-based cooking oil, mineral and baby oils, Nivea hand cream and Vaseline Intensive Care, can cause condoms to break within one minute after they are applied.
- The following water-based products are often recommended:
  - H-R Lubricating Jelly
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- Most condoms are lubricated to improve penetration during vaginal or anal sex. Non-lubricated condoms are also available, and are generally preferred for oral sex with men. Animal or natural skin condoms are less effective at preventing passage of HIV.
- Anecdotal evidence suggests a high percentage of condom breakage is attributable to incorrect use.
heterosexual men and women and young people. In a survey of individuals being tested through the Alternative Test Site program in California, 39% of all participants said they used a condom the last time they had intercourse, while 61% of gay men engaging in anal sex reported using condoms during their most recent intercourse. 11

Individuals cite various reasons for not using condoms, including complaints that condoms are difficult to put on, are too much bother and are uncomfortable. In a survey of injection drug users, most stated that having one regular sexual partner was a “good” reason to avoid using condoms. 10 Condom use for oral sex is even less popular, with individuals citing an unpleasant feel and taste of having a condom in the mouth.

**Spermicides**

Spermicides inactivate sperm to prevent pregnancy. Nonoxynol-

### A Related Issue: Condoms Used by Women

While condoms have been available for men for many years, condoms that can be worn by women are not currently available.

Research to develop a “female condom” has continued for several years, and at least one type of condom has undergone human tests. The condom, the Reality brand vaginal pouch, is a soft polyurethane sheath with two flexible rings like those of a diaphragm. The ring at the closed end is inserted into the vagina and is anchored under the pubic bone. The ring at the open end lies outside and protects the labia and the base of the penis.

Made of a thin plastic, the vaginal pouch is being developed by Wisconsin Pharmacal, a pharmaceutical company in Jackson, Wis. The firm stated that the device is effective and has met with acceptance during clinical trials that have included 1,500 women using it on 28,000 occasions. 13

In one survey of trial subjects, more than 80% of the female participants reported they would use or recommend the pouch. Men participating in the trials said they preferred it to a male condom. The company stated that laboratory studies have found the device to be an effective barrier against HIV, and that trial users have found it to be less disruptive than other barrier methods.

However, at least one individual, a sex therapist who used the device, said the product was not easy or comfortable to use and it became dislocated during intercourse, thereby reducing or eliminating its effectiveness. 14

Wisconsin Pharmacal expects to seek federal approval by the end of 1991 to market the vaginal pouch. Other firms are developing similar types of vaginal pouches.

### A Related Issue: Popular Types of Condoms

Individuals have a variety of preferences for the types of condoms they use. The SkinLess Skin Crown brand was judged the favorite by one group of California college students based on criteria such as appearance, "sensualness," taste and sense of security. Saxon Ultra-Thin was rated second in the survey of 234 students who were given seven condom brands to use. A condom with a bluish color scored high in appearance, while an orange-colored condom was ranked poorly for its appearance. 15

In an informal survey from a distribution campaign targeting gay men, the Rough Rider condom brand was rated most popular. Rough Rider condoms appeared to receive high ratings because the condoms, which are ribbed on the shaft, are thicker and are considered more durable than many others. A campaign spokesman stated that the condoms were accepted because the Rough Rider name connotes durability, which appeals to gay men.

Many people prefer “ultra-thin” or “ultra-transparent” condoms, which they believe produce more heightened sensitivity than thicker condoms. Thinner condoms are generally not considered to be less durable. Oversized condoms, such as Magnum and Maxx brands, are useful for many individuals who complain that other condoms are too tight. In addition, some people prefer condoms that glow in the dark, or those that are flavored.

Other products enhance condoms. ForPlay Sensual Succulents are water-based flavorings, in strawberry, cinnamon and other flavors, that are placed on condoms to improve taste.
9 is perhaps the most popular spermicide and is applied by manufacturers to many condoms and contraceptive sponges. It is also found in lubricants.

Studies have found that spermicides may be effective at inactivating HIV and that condoms lubricated with spermicides, such as nonoxynol-9, may be more effective than those without spermicide in preventing HIV transmission. In a small study in which condoms containing nonoxynol-9 were deliberately ruptured, HIV was inactivated. While spermicides work to destroy HIV, using spermicides alone may not prevent HIV infection, and is highly risky. Spermicides are a chemical barrier, but not a physical barrier.

When used with condoms, spermicides can reduce the risk of infection against herpes simplex virus, hepatitis B and chlamydia. Direct application of spermicides to vaginal areas appears to increase the effectiveness of spermicides at preventing disease without reducing condom strength.

In 1990, researchers reported that some spermicides, such as nonoxynol-9, can produce harmful vaginal and genital infections. In a study of 24 female prostitutes who used condoms lubricated with nonoxynol-9, nine stated that condoms lubricated with nonoxynol-9 had caused vaginal irritation. Of 17 of the women who had used these condoms during oral sex with men, five stated they experienced side effects, such as numbness and soreness in the mouth, stomach cramps and breathing difficulty. Further tests are needed to determine toxicity.

In another recent study, spermicides appeared to increase the risk of urinary tract infection among women. Of 104 women, those who used nonoxynol-9 with a diaphragm or condom had sharply increased levels of infection-causing bacteria the morning after sex, and these levels remained elevated 24 hours later.

Many health professionals state that research findings on the harmful effects of spermicides are limited to a few cases, and it is therefore unwarranted to recommend that individuals avoid using products with spermicides. Instead, it is generally recommended that individuals be alert to allergic reactions such as vaginal or genital inflammation or irritation. In addition, individuals should discuss their use of products containing spermicides with their physicians during routine exams.

References


9. Singer M, Flores C, Davison L, et al. SIDA:

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**How to Use a Condom**

1. Hold tip of condom and unroll.
2. Use only water-based lubricants on condoms. Oil-based lubrications make condoms break.
3. After ejaculation, hold base of condom and pull out of anus or vagina. Never reuse a condom.

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Graphic reprinted with permission from the San Francisco AIDS Foundation.
A Related Issue: Condom Complaints, and Responses

The following are frequent complaints from antibody test clients regarding condoms, with responses from counselors. The responses are general and brief, and should be evaluated and possibly adapted for specific counseling situations.

• "Sex should be fun, but condoms are no fun."
  Response: “First I ask which condoms they use. Maybe the type of condoms they’re using aren’t “fun,” or aren’t appropriate, but another type might be. They may do better with a larger condom, or a colored condom, or a ribbed or studded one. I encourage clients to go on a fun shopping exposition for condoms. Through this, they can start to see condoms as something other than an interruption in sex. They can “play” with condoms during sex, or just for fun in some other setting, to increase their association of condoms with their fantasies.”

• "Condoms interrupt sex."
  Response: “When clients say condoms interrupt sex or present an unnatural element in sex, I encourage them to put condoms on as they start foreplay, and definitely before any insertive activity. This way, they have a great time getting each other excited, ensuring the condom wearer has an erection and seeing that sex isn’t interrupted. Clients can think of the time condoms go on not as an interruption, but as a time for heightened erotica.”

• "Condoms always break or slip off."
  Response: “In many cases, clients aren’t correctly applying condoms. I discuss details of condom use, and I demonstrate lubricant use so that clients don’t use too much or too little. I remind clients to hold on to the base of the condom when they take it off. Clients also may want to use a more durable condom or use two condoms at a time.”

• "I’m tired of having to deal with condoms."
  Response: “When clients state this, it often means they are concerned, and want help exploring the issue and their feelings. It also may reflect deeper issues regarding grief, depression or hopelessness. I ask a client if he or she has made a decision regarding condom use. I learn what, if anything, has changed for this client if there was an earlier time he or she was willing to use a condom. We can go back to the original reasons for using condoms, and may find that the fears are the same, that nothing has changed, and that enthusiasm has been lost. If it is a deeper issue, I can ask the client to give more thought to this, and I offer a referral for a support group or other counseling.”

IMPLICATIONS FOR COUNSELING

HIV antibody test clients should always receive basic prevention information, including how to use condoms and other prophylactics, and the reasons these measures are important.

Counselors should begin by determining clients’ level of knowledge about condoms. Some clients may not know that sexual behaviors put them at risk for infection, or they may not believe condoms are effective. Counselors can use this opportunity to provide correct information and dispel myths about prophylactics.

Counselors should discuss clients’ experiences with condoms or other prophylactics and their ability to correctly use them. They should explain that condoms have a low rate of breakage when applied correctly, and a much higher rate when used incorrectly. [Please see graphic on page 4 for proper application methods.] For some individuals, an explanation of how to apply condoms may not be effective; a step-by-step demonstration with condoms and a finger or a dildo, a rubber replica of a penis, may be useful.

After a demonstration, counselors should assess individuals’ commitment to prophylactic use by asking clients how frequently,
if ever, they use such measures.

Resistance

Many individuals resist using condoms because they view them as negative, unpleasant and bothersome. Some adults may associate condoms with the naivete of adolescent sexuality, and as inappropriate for adults. To improve clients' perceptions and increase acceptance of condoms and other prophylactics, counselors should strive to make them appear as an erotic, natural and positive part of mature, adult sex. A person's imagination can determine whether condoms are erotic.

Many clients are unable to talk about prophylactics with their partners. Individuals may be embarrassed, they may lack assertiveness, and heterosexual women especially may be in suppressed roles within relationships. Often, individuals believe they cannot communicate the need to use condoms even when they are aware of their risks. For clients who have problems discussing condoms with partners, counselors should attempt to learn the reasons for this. Sometimes, even the client may not know the reason.

When the client is not able to offer a clear reason for not using condoms or discussing their use, the counselor should ask the client to describe sexual encounters in which condom use might have been discussed, and suggest the time in which a discussion might have been appropriate. This dialogue may help a client better understand challenges he or she faces, and feel better prepared for future discussions.

Counselors can encourage clients to engage in demonstrations at home, alone or with partners, to make prophylactics easier to talk about and use with partners. Counselors can also engage with clients in role-play exercises, such as modeling dialogue between partners before sexual activity, as well as demonstrations in which the client applies a condom to a penis model.

Role plays, in which the counselor plays the client, or a sexual partner or friend of the client, can help the client understand and confront his or her resistance. Clients often resist condoms because they are not familiar with available options. For instance, an individual who complains that condoms are "thick and have a horrible color," may have used only extra-thick condoms. Counselors should make suggestions about specific condom brands. For individuals with few nearby retail outlets for condoms, or no money to buy them, condoms generally can be obtained from family planning and STD clinics, and in some parts of California, merchants offer condoms at cost. Counselors should empathize with the lack of control women may experience, and discuss with heterosexual men their responsibility for their own health as well as for their partner.

Prophylactics for Women

To protect themselves from HIV infection, heterosexual women must rely on prophylactics that they have limited control over and that require the compliance of a male partner. Devices women can use themselves are not yet available. Counselors should empathize with the lack of control women may experience, and discuss with heterosexual men their responsibility for their own health as well as for their partner.

Latex dams, which can be used to protect against infection during oral sex with women or oral-anal sex with women or men, are often not accepted by women because dams are especially thick, and not widely available. Latex dams are sold at dental supply stores, but can sometimes be found at retail stores that sell sexual goods.

Plastic food wrap and condoms that have been "cut down" to a flat size are used for oral sex.
A Case Study

Laura is a 23-year-old woman who has recently started having sex with a man who does not use condoms; some of her previous partners have used condoms. Laura, who has tested antibody negative, does not want to suggest to her partner that he use a condom because she believes he would not accept the idea, and any discussion would be difficult.

Counseling Intervention

The counselor can begin by reviewing basic issues about condom use, such as stressing the importance of condoms, and the risks of infection for heterosexual women. This could include detailing the growing number of heterosexual women with AIDS and those who are infected as a result of unprotected sex, and describing personal counseling experiences to make the risks more vivid.

Laura may believe incorrectly that, as a woman, she is at little risk for infection. She may also believe, incorrectly, that oral contraceptive devices protect her from HIV infection. She needs to know that unless she eliminates unsafe sex, such as vaginal or anal intercourse without a condom, she may be at high risk for infection.

The counselor can seek feedback, such as Laura’s beliefs about her risk for infection. This could produce many outcomes. Below is one that could occur.

Laura may indicate resistance in discussing condom use with her partner. The counselor can then discuss Laura’s risk behaviors and her relationship, and the specific challenges she faces in discussing condoms. For example, Laura’s role in the relationship may be a suppressed one and she may fear violence or abandonment. The counselor can empathize that women are in an unfair position in which they have few options to protect against HIV during sex other than those that require male compliance.

The counselor can discuss concerns that might arise when Laura raises the issue of condom use with her partner. The counselor can be supportive of Laura, prepare her to deal with the possibility of various outcomes, attempt to learn whether she has appropriate skills to change behaviors and support her positive self-regard. The counselor may find it more useful to focus on condom use for contraception rather than disease prevention.

Laura and the counselor can perform role plays in which Laura initiates a discussion of condom use with her partner. And Laura should be encouraged to carry condoms with her.

Other concerns may need attention during the counseling session. For instance, the counselor may need to affirm the idea that condoms can be successfully eroticized in love-making and Laura may also need instruction on using condoms. The counselor can demonstrate condoms on models, such as dildos, and Laura can apply condoms to a model.

If Laura continues to appear unwilling or unable to make a change in her behavior, or if the counselor is not convinced that she will make changes, the counselor can stress the importance of follow-up counseling. The counselor can offer an appropriate referral to a neighborhood or district health center or a community clinic where follow-up counseling is available for developing skills in negotiating and assertiveness. Referrals for peer groups, if available, may be highly effective.

The counselor should recognize his or her limitations and do the best work possible within the restricted role of a test counselor. While a counselor’s efforts alone will not produce behavior change in most clients, a counselor can consider his or her contribution as part of a wider system of support for people to engage in safer forms of sex.

While reports have generally indicated that spermicides are helpful in HIV prevention, recent reports about side effects of spermicides may leave counselors and clients unsure what is advisable. Generally, it is suggested that clients be alert to inflammation and allergic reactions to spermicides such as nonoxynol-9.

For a client with concerns, or one who has had an adverse reaction to nonoxynol-9, a counselor should suggest the client discuss the use of spermicides with a physician, or use lubricants and condoms without spermicide or with another type of spermicide. Because nonoxynol-9 may be more likely to produce an allergic reaction in women than in men, counselors should be sensitive to spermicide concerns and allergic reactions presented by women.
TEST YOURSELF

1. Condom breakage, either from product failure or user error, is believed to be a) less than 2%, b) 10% to 15%, c) more than 40%, d) unknown, because estimates have never been made.

2. True or False: In a survey of individuals being tested at anonymous test sites in California during 1989, what percentage reported using a condom during their last intercourse? a) 80%, b) 15%, c) 39%, d) more than 90%.

3. True or False: While the spermicide nonoxynol-9 has proven effective at inhibiting transmission of HIV, at least one study showed that the spermicide can cause vaginal irritation and inflammation.

4. True or False: Spermicides alone are considered highly effective at preventing transmission of HIV.

5. True or False: Condoms in assorted colors and flavors have proven to be far less effective at inhibiting HIV than other condoms.

6. Latex dams are not considered an ideal prophylactic for oral sex with women because a) they were not designed for oral sex with women, b) they are not widely available, c) a prophylactic should ideally be effective for oral, anal or vaginal sex, d) all of the above.

7. True or False: Anecdotal reports from individuals who have distributed condoms indicate that clients' acceptance of condoms is not related to acceptance of the individual distributing the condom.

8. True or False: In a study of injection drug users, many stated that having a regular sex partner was a good reason to not use condoms.

DISCUSSION QUESTIONS

- Responsibility is often left to women to initiate and maintain condom use with partners. In what ways can counselors work with male and female clients to shift this responsibility so it is more equally shared between women and men?
- Many people report having difficulty putting on condoms. In what ways can counselors make their instructions easier to understand? How do counselors know when clients do not understand basic instructions?
- Condoms continue to meet with low levels of acceptance, even after several years in which the need for condoms has been stressed. Why might this be? In what ways can counselors increase clients' acceptance?
- Many individuals are unable to discuss condom use with partners. What can a counselor do to help such a client? How can a counselor be alert to a client who is unwilling to talk to a partner and does not acknowledge this difficulty to a counselor?
- How can counselors balance making clients aware of the risks of unprotected sex and encouraging them to engage in safer sex and condom use?

Answers to "Test Yourself"
1. B. Breakage is believed to be 10% to 15%.
2. C. 39% reported using a condom during their last intercourse.
3. True. A study of 25 women showed that nine participants suffered vaginal irritation and inflammation after using condoms lubricated with nonoxynol-9.
4. False. Spermicides alone are not considered an effective barrier against HIV. They should be used in combination with a prophylactic such as a condom.
5. False. Flavors and colors have not been found to decrease condoms' effectiveness.
6. D. All of the above.
7. False. Individuals appear far more likely to accept condoms when they also accept the person distributing condoms.
8. True. In one study, 74% of subjects stated that having one regular sex partner was a good reason to avoid using condoms.

How to Use PERSPECTIVES:

PERSPECTIVES is designed as an easy-to-read educational resource for antibody test counselors and other health professionals. Each issue presents a relevant topic with a "Research Update" and an "Implications for Counseling" section.

The Research Update reports and analyzes recent research related to the main topic. In Implications for Counseling, the research is applied to the counseling session, and a case study is offered. PERSPECTIVES also includes two sets of questions, one to test yourself on the material presented, and another to discuss with others or consider alone.

Each issue can be filed and referred to as an instant resource in the future.