WISE Words - HIV/AIDS Treatment Information and Advocacy for Wormen

Information, Inspiration and Advocacy for People Living with HIV/AIDS

Women and HIV

Discussion Paper

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Women and HIV

By 1997, women accounted for almost 20% of all diagnosed AIDS cases in the United States and more than 50% worldwide. The U.S. numbers may underrepresent the real percentage since many women are not tested for HIV unless they become pregnant or ill. Over the past several years, the clinician and researcher perception of individuals "at risk" for HIV infection has begun to change to include women. However, this change in thinking is a slow one and research specific to and inclusive of women with HIV is just starting in many arenas. Fortunately, there are many similarities in the treatment and care of both men and women, and many of the recent advances in our understanding of HIV and the disease process apply equally well to both.

A common rumor that many HIV-positive women have heard is that women with AIDS die faster than men. This is simply not true. What is true is that, in general, people with HIV who do not access services and lack competent medical care die faster than people who take an active role in their health care and work with a doctor or health care provider experienced in managing HIV disease. In fact, in the study that originally showed this difference, women appeared to die faster until the researchers went back and figured out who had access to health care and other services. Those (men and women) who had health care and support services were less likely to become ill or die, primarily because they knew their HIV status earlier and were able to prevent illness rather than treat it. Unfortunately, many women find out about their HIV status later in the disease process than men and thus miss the opportunity to take many of these preventative health measures. The good news here is that, biologically, women are not at greater risk for progressing to AIDS or dying. Women can and should have the same chance to survive and thrive as men living with HIV and AIDS.

The goal of this discussion paper is to provide readers with some of the known health-related issues uniquely affecting women living with HIV disease. There are many topics common to both men and women that will be mentioned but not covered here, primarily because these are addressed in other Project Inform materials. To help sort out the general distress and confusion which often accompanies a new HIV diagnosis, Project Inform provides a Discussion Paper called *Day One*. *Day One* **helps readers understand the basics of HIV disease and what being HIV-positive means, while also introducing topics ranging from antiviral strategies to specific drug information that are later covered in great depth in other Fact Sheets and Discussion Papers. For further information or Fact Sheets on these and other topics, contact the Project Inform Hotline.**

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Living with HIV Disease

As soon as a person receives an HIV diagnosis, he or she is confronted with many choices. Some of the most complicated decisions center on HIV treatments. The world of

treatments for HIV is a big one, and it is getting bigger every day. It can be so intimidating many people choose not to approach it until they become ill. But treatments are tools, not enemies, in this battle. In the long run, it is important to be informed about the various treatment options because this kind of knowledge gives you the power to decide for yourself how and when you will begin treatment. As long as you are aware that not using therapy today may reduce the ability to rebuild the immune system tomorrow, that can be an informed and empowered decision. There is no one absolutely `right' way to treat HIV, only the way that is right for you.

One of the biggest hurdles for a person with HIV can be changing his or her mentality about treatment. In our society, taking treatments is something that is done when one is ill or has bothersome symptoms. HIV disease calls for a different medical response, however. People in the early stages of HIV disease often have few if any obvious symptoms, but their immune systems are nonetheless suffering a gradual decline. Up to a point, the immune system suffers in silence, giving no sign of its distress. Eventually, however, the damage becomes serious and dangerous infections begin to break through our immune defenses. Some of the damage to the immune system may be beyond repair, at least today. Most researchers believe the best way to treat HIV disease is to take action early enough to prevent serious immune system damage, and thus prevent the risk of secondary, or "opportunistic", infections and severe damage to the immune system itself. Initiating therapy to slow or halt this damage is one important step you can take to prevent or delay progression of HIV-disease (getting sick). For the most part, this means getting on a treatment program before, not after, serious symptoms occur.

In addition to preventing damage to the immune system, acting directly to prevent or treat opportunistic infections (OIs) is also important. Preventative medications are available for some of the most common OIs.

Some information suggests that there are gender differences in rates of certain infections associated with HIV disease. Gynecologic manifestations are clearly unique to women. Compared to men, women may experience more frequent candidiasis (vaginal, esophageal, and oral thrush or yeast infections), herpes infections and types of cytomegalovirus (CMV) disease.

Table 1 lists the most prevalent OIs by gender. The information is from a large community-based trial programs database from 1990-1994. The table lists the major infections that occurred in the six months prior to death of 1,883 people living with AIDS, including 253 women. Although this information is dated, it illustrates some of the differences in infections between men and women.

Table 1

Top 5 OIs in Women	Top 5 OIs in Men

1. Bacterial pneumonia	1. PCP
2. PCP	2. MAC
3. Candidiasis	3. CMV
4. Wasting	4. Wasting
5. MAC	5. Bacterial pneumonia

All of the gender differences and the reasons they happen are not known. In addition to physical differences between men and women, there are psychosocial and lifestyle issues that may impact disease rates. For example, it may be that a large percentage of HIV-positive women in this database have a history of injection drug use, which has been associated with a higher incidence of bacterial pneumonia, shown in the Table. Although these statistics such are interesting, it is important to know they can only serve as sources to help guide your decisionmaking. They cannot tell you what infections you are at risk for. The more you know, the better able you will be to decide which therapies to use and when. Preventing OIs should not take a back seat to anti-HIV treatment. Planning your treatment strategy should include consideration of potential risks for OIs and preventative measures that can be taken. Project Inform hotline volunteers can help you through some issues to consider as you formulate ideas around your own strategy for managing HIV-disease, including prevention of OIs.

It is important to feel comfortable with a treatment strategy. If a clinician does not explain his or her thoughts in an understandable way, it is your responsibility to ask questions. (See *Building a Doctor Patient Relationship*, available from the PI Hotline.) At a time when you are expected to alter your lifestyle to commit to a complex, multi-drug regimen, your doctor needs to be clear, comprehensive and forthright with the rationale and reasoning behind any therapy recommendations. In the end, it's your decision and you should make sure you have all the information you want. It is also important to participate in building a long-term treatment strategy that you feel comfortable with and empowered by.

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Why Drugs May Work Differently in Men and Women

There are several possible reasons why a drug may work differently in a woman than in a man. The issue of gender differences in medicine is not unique to HIV. Overall, the data that have been presented on gender analysis have identified differences in toxicity, side effects and blood levels of drug, but not differences in effectiveness of therapy. Perhaps the most striking study illustrating this thus far is a delavirdine (Rescriptor) + AZT study in which 19% (or 139) of the volunteers were women. In this study, the level of drug which accumulated in the blood of women volunteers was 1.8 times higher than the

amount observed in men, even though both were taking exactly the same doses. Interestingly, this did not make a difference in the effectiveness of the drug. It is still unclear what caused this difference, however effects of hormone levels on drug metabolism (break down) has been one suggestion. This at least suggests that women may absorb drugs differently than men in some cases and that drug companies should be careful to watch for this effect.

In addition to higher blood levels of drug, some studies have reported increased or varied side effects associated with other anti-HIV drug use in women. A study looking at ritonavir (Norvir®), a protease inhibitor, showed that women experienced more nausea, vomiting and malaise (depression, fatigue, etc) than men. It's not that these side effects were unique to women, but rather they experienced them generally more than men. This may also be due to a metabolism problem caused by hormone levels, amount of drug or some other unknown variable.

Another obvious difference between men and women is their average weight. Some drugs work best when the dose given is partially determined by the weight of the person. It is unclear, for example, whether a 120-pound woman should be assigned to receive the same dose of potent anti-HIV drugs as a 240-pound man. Yet, this is exactly what happens. Little research has been done to determine the optimum dosing in women, or even in men of different weights.

Unfortunately, far too little is known about gender differences and their causes. For women making treatment decisions now, it is important to gather information about therapies. Discuss all therapies being used in a regimen, including complementary therapies (e.g. herbs and vitamins), with a clinician to make certain that there are no serious drug interactions or reasons not to consider a specific therapy. Be sure to monitor and report to your clinician any symptoms, body changes or side effects that you may experience. There may be steps, such as dose modification or treatments for symptoms, which may help with problems you are experiencing. Studies are being designed and as more women participate in clinical trials, more of these puzzling issues will be explored.

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Hormonal Issues

The use of hormone replacement therapies in both men and women for issues such as symptom management and weight maintenance have become common, even though there is little data from studies to guide such decisions. Hormones are chemical substances that the body secretes to help regulate metabolism, activity/energy level, reproductive capability and sex drive. There are many types of hormones. Estrogens and progesterone are the female sex hormones most commonly referred to. Testosterone is the most commonly discussed male sex hormone. All of these hormones are present in everyone, however, just at different levels based on gender.

Because hormones regulate many bodily functions, it makes sense that HIV disease, among other things, affects them and vice versa. For example, in men with advanced HIV-disease, testosterone levels are frequently deficient and replacement therapy is used to increase energy levels and libido (sex drive), manage depression and promote weight maintenance and gain. In women, reports of abnormal menstrual cycles, weight loss, gynecological infections, headaches and fatigue are also common and may be related to decreased estrogen levels.

In addition to general health issues affected by hormone levels, for women there are the added gynecological manifestations, menstrual cycle, and pregnancy issues that are clearly tied to hormone activity. Unfortunately, most of the conversations about hormone use and function focus on the use of hormone therapy as birth control. However, for many women living with HIV, pregnancy issues may play little or no part in their decision to use hormone therapy. Hormone replacement therapy (HRT) is used to regulate menstrual flow, to manage menopause or pre-menstrual syndrome (PMS) or to stabilize or reverse body composition changes. These applications, as well as the impact of HIV and the therapies used to treat it, have not been well studied thus far.

The occurrence and frequency of abnormal menstrual cycles and premature menopause in HIV-positive women have long been debated. Studies comparing menstrual cycle issues in HIV-positive and HIV-negative women have often produced conflicting results. Many doctors view abnormal menstrual cycles as a mere inconvenience rather than a serious medical condition and thus don't address them aggressively. However, one recent study reported that the use of HRT in HIV-positive post-menopausal women was correlated with longer survival. If this survival benefit is confirmed in other studies, hormone regulation may have much broader implications than previously assumed on the health and well being of women living with HIV disease.

Aside from the gynecologic implications of hormone levels, there are many unanswered questions about the relationship between hormone levels and the immune system, drug metabolism and body composition. Little is known about how hormone therapies commonly used by women interact with the many anti-HIV regimens currently being used. The few studies of oral contraceptives that have been done have only looked at how HIV medications affect the levels of contraceptives needed to prevent pregnancy or how the contraceptive affects the HIV medication blood levels. For instance, one of the protease inhibitors, nelfinavir (Viracept®), decreases the levels of ethinyl-estradiol (the most commonly used birth control pill) by 50%. Most doctors recommend that women trying to prevent pregnancy, therefore, increase their dose. However, many important questions have not been answered. For instance, is there a difference between naturally occurring estrogens and synthetic estrogens (like the birth control pill)? Will taking a drug like nelfinavir that decreases synthetic hormone levels also impact natural hormone levels? If yes, then what is the impact? And what, if any, are the risks of increasing the intake of these synthetic substances, even though the amount of estrogen in the system is being normalized?

Not only are there questions about birth control and hormone replacement therapy levels,

but also the reverse. Which anti-HIV drugs are metabolized differently because of the use of hormone therapies? Since many of these questions remain unanswered, how do you decide to use hormone replacement therapy or hormonal contraceptives? Look for information at your local AIDS service organization or clinic (see Resource List, below). Talk with your doctor or health care provider. If you are experiencing abnormal periods (unusually heavy, light, irregular, or painful), or if you need additional contraceptive coverage, you may want to consider hormonal contraceptives. If you are menopausal or post-menopausal, you may want to consider estrogen replacement therapy. If you are experiencing body composition changes (weight loss, gain, or redistribution), fatigue, depression, decreased sex drive, or energy loss, then you may want to discuss checking your estrogen levels with your clinician to make sure you are not becoming menopausal prematurely. Be aware estrogen levels go up and down in a monthly cycle, so to get an accurate picture you will probably need to get at least 3 measurements (week 0,2,4). These are taken with a simple blood draw. Unfortunately, even if you get a normal measurement, it may not tell you whether or not to use estrogen replacement. An isolated set of numbers may not reflect what is "normal" for you. Some researchers suggest that rather than checking estrogen levels, clinicians should look at markers of pituitary function. Pituitary hormones, FSH (follicular stimulating hormone) and LH (luteinizing hormone), stimulate progesterone and estrogen.

There have been anecdotal reports that despite 'normal' estrogen levels on laboratory reports, some women have symptoms, including fatigue, improve after initiating hormone therapy. The problem with this is that the use of estrogen replacement therapy has been linked to an increase risk of breast and uterine cancers. On the other hand, estrogen replacement for post-menopausal women has been linked to a decrease risk of heart disease and osteoporosis (a degeneration of the disks in the spinal column that causes older women to be slumped over).

Overall, it is important to recognize the role hormones play in our everyday health and well-being. If hormone replacement therapy will reduce symptoms and improve quality of life without adding long-term risks or side effects, it is probably a viable choice. Discussing all your symptoms and body changes with your clinician may be one way to help identify appropriate therapy options for you. Remember, in most cases, it is easier to prevent illness or degeneration than to treat it.

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Gynecologic Concerns and Tests

Gynecologic complications are the most commonly reported condition of women living with HIV disease and AIDS. Complications range from chronic, recurrent yeast infections to abnormal menstrual cycles (periods) to vaginal warts (caused by the human papillomavirus, also called HPV), abnormal results of GYN exams and cervical cancer. Fortunately, many of these can be detected through regular monitoring with pap smears. A pap smear is a test a clinician performs using a cotton swab (like a long Q-tip). During the exam, the clinician inserts this swab and lightly rubs it on your cervix to pick up a sampling of the cells there. Cells are then looked at under a microscope for any abnormalities. A smear that does not show any abnormal cells (which indicate infection or disease of some kind) is called "normal". A pap smear showing any abnormal cells is called "abnormal". An abnormal pap smear tells you something is unusual and then describes the abnormality with one of the following terms listed in **Table 2.**

Table 2: Abnormal Pap Smear Terms

Term	Definition
Atypia	These cells show minimal changes. May be "atypical" due to the presence of a vaginal infection, the use of oral contraceptives or because the person doing the Pap smear may have not handled the cells properly.
Dysplasia	Means "abnormal development". Dysplasia is a pre-cancerous condition. Dysplasia is described by using CIN 1-3 and CIS to represent the extent of the problem.
SIL	SIL stands for Squamous Intraepithelial Lesions. SIL is another way to describe dysplasia by identifying lesions in the thin cellular layers of the vaginal tract. Again, SIL suggests a pre-cancerous condition.
CIN 1	CIN stands for Cervical Intraepithelial Neoplasia. CIN means abnormal growth or tumor in the tissue covering or surrounding the cervix. CIN 1 means that one-third of the sample has dysplasia or pre-cancer.
CIN 2	CIN 2 means 2/3 of the sample has dysplasia.
CIN 3	CIN 3 means that the entire sample shows cells with dysplasia.
CIS	CIS stands for Carcinoma-In-Situ. On a Pap smear, this report means the same thing as CIN 3, the entire sample shows dysplasia. However, the sample shows no sign of invasive cancer.

HIV-positive women should have a pap smear performed every six months as long as the results continue to be normal. However, if there is an abnormal pap smear history, the frequency should be increased to once every three months. Once results become normal again, and remain so for three consecutive visits, the frequency can be extended back to once every six months. Abnormal pap smears should be followed by a colposcopy and biopsy to assess the condition. A colposcopy is a clinician's exam done with a lighted microscope to magnify your cervix and take a closer look at any abnormal cells. A biopsy is a small sample cut (in this case, your cervix) to either remove the abnormality or to exam in it for a more thorough diagnosis.

Although it takes consistent effort, it is incredibly important to monitor and treat any infections that may occur. Many women only go to the doctor when something is wrong, but results from one study show that more than 50% of those women who felt nothing was wrong and had no symptoms actually had some type of vaginal tract infection when examined. This means that regular exams are crucial, even when you're feeling well. Both pap smears and colposcopies, as well as breast exams, are designed to pick up early, pre-cancerous activity. Infections such as HPV or genital warts typically don't hurt, so many women do not know they are there. Unfortunately, HPV is sexually transmitted and is believed to be a pre-cancerous condition. If you are diagnosed with HPV, you should be treated and monitored with more frequent pap smears (at least every 3 months).

Other sexually transmitted diseases (STDs) such as herpes, trichomonas, chlamydia, syphilis and gonorrhea are twice as common in women living with HIV than in HIV-negative women. Unfortunately, the symptoms of many of these infections are the same or similar. This makes routine monitoring and treatment of conditions extremely important when any unusual GYN symptoms are present. Every additional infection the body must fight provides an opportunity for the growth of HIV, and some evidence suggests that secondary infections in the genital area make it easier to spread HIV from one person to the next. This includes sexual partners as well as transmission of HIV from mother-to-infant during labor. This is another reason safer sex is so important. Condom use helps prevent the spread of STD's, including HIV.

Below you will find the Common Gynecologic Infections Chart. This chart has some of the most common infections, symptoms and treatments listed to help you identify possible problems and solutions. It is not meant to take the place of a clinician or an exam. Please use it to help understand what's out there and what you may be experiencing, but always follow up with your health care provider.

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Common Gynecologic Infections

Gynecologic (GYN) manifestations are the most commonly reported condition of women living with HIV disease and AIDS. Many of the problems HIV-positive women experience also affect women who are not living with HIV. However, these conditions usually occur more frequently, are more serious and more difficult to treat in a women with a compromised immune system. It is very important that GYN infections be diagnosed, monitored and treated under the guidance of a health care provider.

All infections, including GYN infections, are generally caused by pathogens (disease causing elements). The type of pathogen is an important piece of information. It helps to guide treatment decisions and identify potential complications of that infection. There are four types of infections discussed on the GYN Chart: viral, bacterial, protozoal and fungal. Although there are treatments that can clear symptoms and suppress a virus, there are no cures for viral infections. For example, if you have an herpes outbreak, there are no guarantees that you will not have another or even several more in the future. The treatment merely brings the virus under control and diminishes symptoms, but doesn't make the virus go away. This is different from other types of infections. Bacterial, protozoal and fungal infections can all be cleared from the body, if there is an effective treatment (not all infections have effective treatments). This does not mean that these infections are any less serious. All of these infections can cause serious problems if left untreated.

The *Common Gynecologic Infections in Women with HIV Chart* **is meant to serve as a tool for you to learn more about possible infections, symptoms and treatments so that you can have informed dialogue with your doctor. It does not cover all possible infections, but provides basic information on common ones. The most common sexually transmitted diseases, chlamydia, gonorrhea and syphilis, which can have GYN manifestations, are not included. Many GYN infections may also be systemic diseases (throughout the body, not just in the vaginal tract). Even those listed in the Chart may have such effects.**

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Pregnancy

For many women, learning of their HIV diagnosis can carry with it the devastating assumption that they can, or will, never have children. Many others receive their diagnosis while pregnant. Over the last several years much has been learned about pregnancy and HIV. Currently, in the United States, about 25% of pregnant women

living with HIV who do not use anti-HIV therapies transmit HIV to their infants. That number is considerably smaller (8% or less) for women who do use some type of anti-HIV therapy during pregnancy. In many cities around the U.S., aggressive prenatal care has brought that number even lower. In San Francisco for two years running, not a single child born to an HIV+ woman being cared for through BAPAC (a special program delivering care to HIV+ pregnant women) has been infected with HIV. Although AZT is the most commonly used and the only approved therapy for preventing transmission from mother-to-child, this is largely because it is the only one that has been tested. There are now several other therapies being researched and in common use.

Federal Guidelines for anti-HIV therapy use during pregnancy state that no pregnant woman who seeks it should be denied optimal therapy for her HIV infection. Optimal therapy is characterized as triple combination therapy including at least one potent anti-HIV drug, such as a potent protease inhibitor. All pregnant women should benefit from informed counseling of the potential risks and benefits of using an optimal and potent anti-HIV regimen during pregnancy and then be allowed to make their own decision. Not choosing optimal therapy could possibly limit the mother's options for future therapy. Unfortunately, little is known about the long-term effects of these compounds on the child.

The effects of pregnancy and motherhood on the immune system over the long-term are not entirely known. The vast majority of research in this field has been done in terms of risk to the infant rather than the mother. However, several studies have shown that pregnancy does not speed HIV disease progression. In many cases, a pregnant woman will experience a drop in her CD4+ (T-cell) count while pregnant that returns to her pre-pregnancy level after birth. The new guidelines specifically detail a pregnant woman's right to choose an optimal and potent anti-HIV regimen for her own well-being, as well as her baby's. Perhaps much of the burden here is in external perceptions of a woman's choice to give birth.

Due to so many unanswered questions, any HIV-positive woman who is pregnant or considering pregnancy should seek the care of a clinician with experience and/or knowledge of the latest breakthroughs in HIV research. This insures the best possible prenatal care and the best possible outcome for both mother and child. Please see the resource listing below for additional information and support resources.

Conclusion

Informing yourself is the first step in getting some control over HIV in your life. The more you know, the better able you are to make informed choices about living with HIV disease. There are increasing numbers of women-specific services and support groups on local and national levels. Below you will find a listing of some resources to help you with various types of information and referral to programs. This paper should have helped outline some issues you should consider when making treatment decisions. To talk to someone about your questions or request more information, call the Project Inform Hotline.

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Indinavir in Women

reprinted from PI Perspective #24, April 1998

Little is known about the effects of hormones on the metabolism, potential effectiveness or side effects of drugs in women. A small study looking at the effects of the menstrual cycle on indinavir (Crixivan®) levels in the blood found dramatic differences in time to peak level and time to optimal therapeutic levels based on the various phases of the menstrual cycle over the course of a month. While the amount of indinavir in the blood appeared to change throughout the hormone cycle, it still remained broadly within the ranges observed in earlier studies that primarily included men. These monthly fluctuations need to be further studied to determine their implications on the durability of the regimen, resistance, dosing and possible long-term toxicity. Fortunately, there are several other studies looking at the use of antiretroviral therapy specifically in women, either in development or enrolling, that may have the opportunity to address these questions.

AZT and Mother to Child Transmission

reprinted from PI Perspective #24, April 1998

The reduction in HIV transmission from mother-to-infant with the use of anti-HIV drugs has been a remarkable success story. However, it has not been a reality for many nations where the complexity of the therapy regimen, along with poor access to the necessary drugs, inadequate prenatal care, wide scale malnutrition and the potential for transmission through necessary breast feeding, has blocked the ability to share in this major advance.

Results from a new study in Thailand show the success of a simplified regimen of AZT which reduced by 51% the mother-to-child transmission among women who are not breast feeding (from 18.6% without AZT to 9.2% with AZT). In this study, women were given 300 mg. AZT twice a day orally starting approximately 26 weeks after conception through birth. Unlike the standard US regimen, the babies were not given AZT after birth, nor were the mothers given AZT intravenously during labor. This greatly

simplified regimen offers a more viable possibility for women in developing countries, even if it is slightly less efficacious (the US regimen produced a 66% drop in transmission, versus 51% for the simplified regimen.) This simplified AZT regimen will be less costly, potentially allowing many developing nations to implement a useful campaign to reduce mother-to-child transmission of HIV. Further research will need to be done to determine the effectiveness for women who are breast feeding and whether still simpler regimens might be found for women who do not access care until delivery.

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Resource List

Project Inform provides an extensive Resource Directory, including national treatment publications, hotlines, web sites and treatment education programs. Call the Hotline for more information! The following are national resources. For local and regional resources, contact your local AIDS service organization.

Women's Programs/Newsletters

Women Alive (213)965-1564 or (800)554-4876, 1566 Burnside Avenue, Los Angeles, CA 90019. Women Alive publishes a quarterly newsletter and is active in policy and treatment issues affecting women living with HIV.

WORLD (Women Organized to Respond to Life-threatening Diseases) (510)658-6930, Post Office Box 11535, Oakland, CA 94611. WORLD publishes a monthly newsletter for women with HIV and has a peer advocate program, a treatment training program called HIV University and several retreats a year for HIV positive women.

Project WISE/WISE WORDS (800)822-7422, 205 13th Street, Suite 2001, San Francisco, CA 94103. WISE WORDS is a monthly treatment newsletter geared to women published by Project Inform, in addition to PI Perspective, a treatment journal. Other services include an advocacy program, town meetings, a treatment hotline and a web-site.

Teens

Bay Area Young Positives (415)487-1616, 518 Waller Street, San Francisco, CA 94117. Bay Positives is a national organization by and for youths living with HIV disease.

Pediatrics

Pediatric AIDS Foundation Trials Hotline (310)395-9051, 1311 Colorado Avenue, Santa Monica, CA 90404. The Pediatric AIDS Foundation advocates on behalf of and funds pediatric research in AIDS. This trial hotline gives listings of studies and provides information for children with HIV/AIDS.

Special Programs for Families

Families' and Children's AIDS Network (312)655-7360, 721 North LaSalle Street, #311, Chicago, IL 60610. Families and Children's AIDS Network provides family support programs, information, and special programs for children.

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Project Inform **(New Address)**
205 13th Street, #2001
San Francisco, CA 94103

Treatment Hotline:	800-822-7422 (toll-free) or 415-558-9051 (in the San Francisco Bay Area and internationally)
Hotline hours:	Monday—Friday, 9am—5pm and Saturday, 10am—4pm (Pacific Time)
Office Telephone:	415-558-8669
Fax:	415-558-0684
E-mail:	web@projinf.org
WWW:	http://www.ProjectInform.org

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PROJECT inform
Information, Inspiration and Advocacy for People Living With HIV/AIDS

GYN Conditions Chart in Women with HIV/AIDS

Fact Sheet
April, 1999

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Gonorrhea

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Human Papillomavirus (HPV)

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Menstrual Disorders

Herpes Simplex Virus

Molluscum

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Trichomonas (Trich)

Syphilis

Vaginal Candidiasis *(Yeast Infection, Vaginitis)*

Complication	Fungal infection of the vulva and vagina. It is the most common initial manifestation of HIV infection in women and one of the most common complications experienced.
Symptoms	Vulvar itching with a thick vaginal discharge; burning upon urination; redness and white patches at the sites of infection; occurrence of pain during penetrative sexual intercourse.
Diagnosis	Usually first diagnosed by appearance and symptoms. If symptoms do not resolve after initial treatment, lab tests may be performed.
Treatments	Topical creams and suppositories such as clotrimazole (GyneLotrimin®) are available by prescription or over-the-counter. The antifungal fluconazole (Diflucan®) orally, 200mg 3 times a day/every 4 days); ketoconazole (Nizoral®), 400mg a day for 14 days.

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Chlamydia

Complication	A bacterial infection which often affects the cervix and pelvic organs. Most commonly sexually transmitted.
Symptoms	Unusual vaginal discharge and burning when urinating. Later symptoms include lower abdominal pain; pain during penetrative intercourse; bleeding between periods and low-grade fever.
Diagnosis	Laboratory inspection of fluid from an infected site.

Treatments	Antibiotics such as azithromycin, ceftriaxone, or doxycycline* taken orally. *Note: treat sexual partners even if they have no symptoms. Avoid sex until treatment is completed.*

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Gonorrhea

Complication	A bacterial infection that is sexually transmitted.
Symptoms	Pus-like discharge from cervix; lower abdominal pain; fever.
Diagnosis	Culturing fluid from the cervix, vagina or urethra.
Treatments	Penicillin, tetracycline and/or cephalosporin taken orally.

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Pelvic Inflammatory Disease

Complication	Serious, potentially life-threatening spectrum of inflammatory disorders in genital tract of women. Often caused by untreated sexually transmitted infections, particularly chlamydia and gonorrhea.
Symptoms	Chronic, moderate-to-severe pain in the abdomen; irregular menstrual cycles; non-menstrual bleeding; increased vaginal discharge; painful and frequent urination; nausea and fever.
Diagnosis	Usually diagnosed by symptoms and pain on the pelvic exam. Sonogram may be performed and occasionally a surgical diagnosis is required.
Treatments	Combination of antibiotics including clindamycin, gentamicin, cefoxitin or cefoxitin and doxycycline.

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Cervicitis

Complication	Inflammation of the cervix, usually due to sexually transmitted diseases such as chlamydia, gonorrhea, or trichomonas.
Symptoms	May have no symptoms. When present, symptoms may include intermenstrual bleeding; vaginal discharge that increases after menstruation; bleeding after penetrative intercourse; painful urination; low back pain
Diagnosis	Diagnosis can be made upon visual examination of the cervix.
Treatments	Depending on the cause of cervicitis, treatment options include: tetracycline, metronidazole or ceftriaxone taken orally.

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Human Papillomavirus (HPV)

Complication	Viral infection of multiple types that lead to the disruption of the genital cell structures, particularly the cervix. Some HPV types are associated with high risk of cervical cancer or precursor lesions (CIN, SIL).
Symptoms	Symptoms frequently not experienced. Sometimes there are multiple small warts (white spots) on the vagina or around the anus; vaginal discharge or, rarely, pain during penetrative sexual intercourse.
Diagnosis	Can often be diagnosed visually, but diagnosis should be made by biopsy since warts may be associated with cancer or pre-cancer lesions anywhere in the genital tract. Diagnosis can be made by Pap smear, but should follow up with colposcopy.
Treatments	Multiple options to remove viral symptoms include: ● trichloro-acetic acid (strong acid solution); ● electro-cautery (tissue destruction by electric current); and ● imiquimod (Aldara®).

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Cervical Intraepithelial Neoplasia (CIN)

Complication	Dysplasia of the surface layers of the cervical cells. CIN is classified according to degrees of severity (grades I, II or III).
Symptoms	Symptoms frequently not experienced.
Diagnosis	Diagnosis is often made by Pap. Colposcopy plus biopsy is advised if Pap shows any atypical cellular activity (including persistent inflammation).
Treatments	**CIN-I: no therapy needed.** **CIN-II-III:** ● **laser vaporization;** ● **loop electric excision procedure (LEEP);** ● **biopsy; and** ● **cryotherapy (This option may be least desirable; it may mask future problems).**

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Menstrual Disorders

Complication	Often accompany chronic illness. Specific disorders experienced by women with HIV may be exacerbated by weight loss, anemia, HIV medications, street drugs and depression.
Symptoms	Absence or suppression of menstruation (amenorrhea); irregular periods; abnormally heavy or light periods; intermenstrual bleeding; worsening of symptoms associated with PMS.
Diagnosis	It is important to investigate menstrual disorders with a health care provider as such problems can adversely affect the health of a woman with HIV.

Treatments	Current standards of care for HIV-positive women neither approve nor forbid the use of hormonal therapies or birth control for menstrual regulation. Stress management and nutrition may relieve symptoms.

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Herpes Simplex Virus

Complication	Infection caused by herpes virus types II or I. Type II herpes (genital herpes) is transmitted sexually.
Symptoms	Herpes Simplex I commonly produces oral herpes, and is characterized by cold sores or fever blisters on the mouth or eyes. Herpes Simplex II causes painful sores in the genitals and anus; itching and soreness may present before outbreak; painful urination; swollen lymph nodes in groin; muscle aches; fever.
Diagnosis	Can sometimes be diagnosed by visual exam. Some fluid from the sores should be taken to culture (try to grow in a laboratory) to confirm infection. Blood tests can also confirm infection, but not if infection is currently active.
Treatments	**Type I and II:** • **Acyclovir in topical, oral and, in severe cases, IV form. Oral acyclovir, 200mg 5 times a day for 10 days, is the general recommendation.** • **For frequent and severe cases, oral acyclovir may be used at 200 to 400mg two to five times a day.**

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Molluscum

Complication	Viral infection that is transmitted via skin-to-skin contact.
Symptoms	Small dome-shaped, flesh-colored bumps (papules) on face or in the groin or genital skin. May cause itching and rapid spreading.
Diagnosis	Usually diagnosed by visual exam. Early biopsy is recommended for atypical lesions.
Treatments	Multiple removal options include: • topical application of liquid nitrogen; • electro-cautery (tissue destruction by electric current); and • surgical removal.

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Bacterial Vaginosis

Complication	A bacterial infection of the vagina. Can be sexually transmitted.
Symptoms	Odorous, frothy discharge; Inflammation of the vagina.

Diagnosis	Microscopic inspection of vaginal discharge.
Treatments	Metronidazole taken orally *Note: treat female sex partners.*

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Trichomonas (Trich)

Complication	A protozoal infection of the urethra and vagina. Most commonly sexually transmitted.
Symptoms	Excessive and odorous yellow or green vaginal discharge; extreme itching and pain and soreness around the vagina.
Diagnosis	Microscopic inspection of vaginal discharge.
Treatments	Metronidazole taken orally. *Note: treat all sex partners.*

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Syphilis

Complication	A bacterial infection that is usually sexually transmitted.
Symptoms	May remain with no symptoms for years with initial presentation as a chancre (ulcer). If untreated, it progresses through 3 stages: primary (painless ulcers or lesions); secondary (widespread lesions and swollen lymph glands); tertiary (advanced lesions in organs and tissues).
Diagnosis	Primary syphilis is usually diagnosed by microscopic evaluation of an ulcer scraping; secondary syphilis by the appearance of symptoms and blood tests; tertiary syphilis by positive blood tests.
Treatments	Penicillin or ceftriaxone taken orally.

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