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# Undetectable Equals Untransmittable: Building Hope and Ending HIV Stigma

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Image



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#### What Is 'Undetectable Equals Untransmittable'?

When a person living with HIV is actively taking HIV drugs and their viral load stays at undetectable levels (< 200 copies/mL), that person cannot transmit HIV to a sexual partner who is HIV-negative. HIV community members, advocates, and experts often talk about this groundbreaking news using the phrase "Undetectable Equals Untransmittable," or "U=U."

#### Click above to view or download this fact sheet as a PDF slide presentation

#### **HIV Treatment as Prevention**

HIV treatment as prevention, or TasP, is the foundation of U=U. TasP refers to ways in which we can use HIV treatment regimens to lower the risk of transmitting HIV. For people living with HIV, taking HIV drugs can reduce the amount of virus in their blood (viral load), thus making their blood, vaginal fluids, and semen (cum) much less likely to transmit HIV to others. Taking HIV drugs also helps people living with HIV feel better because it keeps their viral load low. A low viral load means a healthier immune system, which in turn prevents the person from progressing to AIDS.

The first great discovery in TasP came in the 1990s, when research showed that <u>pregnant people living</u> <u>with HIV</u> who took the early HIV drug Retrovir (also called zidovudine, ZDV, or AZT) greatly reduced their risk of transmitting HIV to their babies. According to the U.S. Centers for Disease Control and Prevention (CDC), nowadays, if a person takes HIV drugs while pregnant and has an undetectable viral load, the chances of transmission to their baby can be less than one in 100.

# When a person living with HIV is actively taking HIV drugs and their viral load stays at undetectable levels, that person cannot transmit HIV to a sexual partner who is HIV-negative.

TasP also increases the possibility that mixed-status couples (couples in which one partner is living with HIV and the other is HIV-negative, also known as serodiscordant or serodifferent couples) who want to have children can safely <u>conceive their babies</u> "the old-fashioned way": through sex without <u>condoms</u> or other barriers. The HIV-negative partner also has the option of taking an HIV medication to prevent him or her from acquiring HIV. This prevention method is called <u>pre-exposure prophylaxis, or PrEP</u>.

In 2011, a study called HPTN 052 showed that TasP was effective, but this information was not well known beyond well-informed HIV advocates and expert care providers.

In early 2016, a health equity program called <u>Prevention Access Campaign</u> (PAC) launched the "U=U" campaign, uniting a global community of HIV advocates, activists, researchers, and community partners to share the fact that people living with HIV who are on effective HIV drugs do not transmit HIV when

they have sex. In 2017, the US Centers for Disease Control and Prevention officially supported the scientific facts that led to the U=U campaign.

"We are getting married, we are enjoying intimate relationships ... you are not a danger to anyone. ... That has become my new normal."

- Asha Molock (from the Prevention Access Campaign video above, which features several members of The Well Project's online community)

# How HIV Treatment Makes U=U

With any virus, the likelihood of transmitting it depends on the amount of virus in your body. HIV drugs prevent the virus from reproducing (making copies of itself). When a combination of HIV drugs (your drug regimen) is working, the viral load usually goes down quickly after starting the drugs.

If HIV is not able to reproduce, it will not infect new cells in your body and your viral load remains low. With a low viral load, you are more likely to have a healthy <u>immune system</u>. The lower your viral load, the less likely you are to transmit HIV to others.

HIV drugs cannot cure HIV. Even when your viral load is undetectable, there are still 'resting' or latent HIV cells in areas of your body such as your gastrointestinal tract (GI tract, or gut), brain, or bone marrow; these are called 'reservoirs.' But having an undetectable viral load means there is barely a trace of virus to be found in body fluids that transmit HIV: your blood, vaginal fluids, or semen. (There are some other considerations when it comes to breast milk, <u>which we discuss below</u>.)

### The Research Behind U=U

Even before the groundbreaking results of the HPTN 052 study were released, a group of HIV care providers in Switzerland produced a paper aimed at other doctors in their country.

#### The "Swiss Statement"

In the 2008 "Swiss Consensus Statement," these experts agreed, based on new data and what they were documenting among their patients, that an HIV-positive person who had had an undetectable viral load for at least six months and continues to take HIV drugs had a negligible risk of transmitting HIV (risk is so small or unimportant that it is not worth considering).

#### **HPTN 052**

HPTN 052 was a large study involving more than 1,000 mostly heterosexual, mixed-status couples. Very few cases of HIV transmission occurred during the study. These happened when the partner living with HIV had a detectable viral load, because their HIV drugs had either not yet started working properly or had stopped working.

#### PARTNER

The PARTNER study looked at the risk of HIV transmission in heterosexual and gay mixed-status couples in which the partner living with HIV took HIV treatment and had an undetectable viral load. The 2016 results showed that after **58,000 instances of sex** among 1,166 couples who were **not using condoms**, there were **zero cases of HIV acquisition** within the couples: none from anal or vaginal sex; or to women; or to people living with other <u>sexually transmitted infections</u> (STIs).

Even after the results of these studies were published in mid-2016, confusion and misinformation still dominated conversations about these new developments, and word did not reach many people living with HIV.

#### **Community and Medical Experts Agree**

In 2016, the U=U campaign released the first-ever global consensus statement confirming the science behind U=U. Since its release, many organizations around the world — including advocacy groups, service organizations, and departments of health— as well as numerous individual HIV experts have endorsed the U=U message.

# Sharing the message of U=U is part of a strategy to break down HIV stigma, provide hope, improve the lives of people living with HIV, and move closer to ending HIV as a worldwide epidemic.

The Well Project proudly endorsed the consensus statement in April 2017, and we encourage our community partners to consider doing the same. Other groups that have endorsed the statement include:

- Positive Women's Network USA the largest national advocacy network by and for women living with HIV
- HIVE a hub of positive sexual and reproductive health (USA)
- TransLatin@ Coalition advocating for the needs of Latinx people of transgender experience (USA)
- Southern AIDS Coalition working to end the HIV epidemic in the US South (USA)
- African and Black Diaspora Global Network on HIV/AIDS (Canada)
- TheBody.com large Web-based HIV news, information, and support resource (USA)
- Desmond Tutu HIV Foundation (South Africa)
- INA M?ori, Indigenous & South Pacific HIV/AIDS Foundation (New Zealand)
- NAM aidsmap a trusted source of HIV clinical information (United Kingdom)
- National Alliance of State and Territorial AIDS Directors (NASTAD) (USA)

Partners pledge to share the information in ways that work for communities they represent or work with. Sharing the message of U=U is part of a strategy to break down <u>HIV stigma</u>, provide hope, improve the lives of people living with HIV, and move closer to ending HIV as a worldwide epidemic.

## Why Didn't I Know About This?

**U=U:** In this episode of A Girl Like Me LIVE, Ci Ci talks with The Well Project CAB member and advocate Katie Willingham about what U=U means to them and sharing the message with others in the community, including providers.

View other episodes in the A Girl Like Me LIVE series

For many, the fact that an undetectable viral load also acts as a barrier to HIV transmission has been a difficult message to accept.

There are many reasons why some providers of HIV information (AIDS service organizations, health care providers, public health departments, HIV media outlets, etc.) have not communicated U=U to people living with HIV and the general public.

First, shifts in attitudes, beliefs, and behaviors take time. HIV advocates, activists, and providers have spent several decades desperately trying to <u>stop the spread of HIV</u>. Condom use was held up as the only sure way to do that. Condom use was often encouraged through campaigns and activities based on fear of contact with the virus. For many, the fact that an undetectable viral load also acts as a barrier to HIV transmission has been a difficult message to accept.

Also, while U=U means that people living with HIV do not pose a risk to their intimate partners in terms of HIV transmission while they remain on medications and with an undetectable viral load, there is the matter of <u>other STIs</u>, as well as unwanted pregnancies. Condoms prevent these other conditions, while HIV treatment as prevention does not.

Further, it's important to note that people living with or most vulnerable to acquiring HIV are often also people whose sexuality already carries a great deal of stigma and judgment: <u>transgender people</u>, women of color, <u>older women</u>, <u>young women</u>, people living in poverty. Recognizing the U=U message may be a powerful tool to help overcome stigma and judgment. Studies have shown that many women living with HIV were not told about U=U by their health care providers, and that people living with HIV often overestimate the chances of transmitting the virus to their partners.

The U=U campaign founder himself said it best, in a blog entry celebrating the work of women living with HIV in U=U advocacy:

"Our work to reduce core HIV stigma by ensuring access to accurate and meaningful information about risk of transmission is essential, but there's so much more to be done. Rewiring the thirty-five years of fear of HIV and people with HIV is nothing compared to dismantling centuries of patriarchy and oppression of women, particularly those who face intersectional stigma and discrimination." Bruce Richman, from "Women Living with HIV Are Leading the Way"

### Important U=U Issues for Women

#### **Relationship Power Dynamics**

# U=U has huge implications for HIV stigma; however, it does not erase generations of unequal treatment and violence against women.

Many studies show that the uneven power dynamics between women and men in some intimate relationships are part of the reason why the HIV epidemic continues to flourish among women globally.

U=U has huge implications for HIV stigma; however, it does not erase generations of unequal treatment and violence against women. Studies show that women often cannot demand that their partners use <u>condoms</u> because of uneven power dynamics and even fear of <u>violence</u>. Women may also not be able to ask about their partners' treatment status or viral load for similar reasons — or partners may not honor a woman's request to use condoms or other barriers, using what they claim to be their undetectable viral load as a reason.

More research and insight are needed into the many ways that partner power dynamics may affect U=U for women. In the meantime, access to prevention methods that women themselves control, such as PrEP and, eventually, <u>microbicides</u>, should stay high on the research priority list.

#### Breastfeeding

Breast milk is one of the body fluids that can transmit HIV. The risk does decrease if you are on HIV drugs and your viral load is undetectable, though there may still be some risk. More research is needed into the ways in which HIV treatment affects breastfeeding.

If you live in a place without refrigeration or where safe water is not available, the risk to your baby of life-threatening conditions from formula feeding with unsafe water — as well as the benefits of breastfeeding to the baby's immune system — may outweigh the risk of HIV transmission. In such resource-limited areas of the world, women living with HIV are encouraged to breastfeed for these reasons, and the research on breastfeeding and HIV from these areas shows that the risk of HIV transmission through breastfeeding can be as low as less than 1 percent.

In the U.S. and other high-resource countries where water is safe and formula is widely available, breastfeeding is not recommended for women living with HIV. However, not everyone in such countries has access to safe water and affordable formula. Experts on HIV and women's health are divided as to whether or not breastfeeding should continue to be discouraged in the era of U=U.

Some providers worry that even a very low risk may be too high to take when it affects a child's health (as opposed to adults making a choice to take a risk that affects only them). Others suggest that women be given all available information to make their own informed decision and that they be supported to continue taking their HIV treatment, whatever choice they make. For more information on this topic, please read our fact sheet on <u>infant feeding options for parents living with HIV</u>.

#### **HIV Criminalization**

Many countries and U.S. states have laws that make it a crime for a person living with HIV to do things (for instance, sexual activity to which both partners agree) that would not be crimes if they were not living with HIV. Not only do these laws build HIV stigma and discrimination into the legal system, they also do not take into account the realities of living with HIV in the era of U=U. The fact of U=U has not yet changed the status of these laws. For more information, please see our fact sheet on how HIV criminalization affects women.

In fighting these stigmatizing laws, it is important to share the information that both the risk and harm of HIV transmission have dropped dramatically since the early days of the epidemic. However, it is also important not to stigmatize or criminalize those who, for whatever reason, may have detectable viral loads. Women, especially, may have a harder time getting their viral loads to undetectable, for reasons including:

- Being more likely to be diagnosed later in life than men
- Prioritizing the health of others over their own
- Higher rates of violence, poverty, and the instability that comes with these <u>social determinants</u> <u>of health</u>, which can make it hard to be consistent with medication

Criminalizing people based on HIV status is harmful to public health and is never appropriate, no matter what the person's viral load is.

## The Bottom Line: Bringing Hope to People Living with HIV

Increasing awareness that having an undetectable viral load means that people living with HIV who remain on medications will not transmit the virus can have a dramatic impact on public and personal views of HIV. We have the tools to end the epidemic, keep people living with HIV healthy and unable to transmit the virus (U=U), and keep HIV-negative people negative through PrEP and post-exposure prophylaxis (PEP).

# The science that is currently available strongly supports U=U. That alone is a reason to make sure that all people living with HIV, or vulnerable to acquiring HIV, have access to this information.

The epidemic continues because people are living with HIV without knowing it because they have never been <u>tested</u>. HIV stigma is the biggest barrier to ending the HIV epidemic, so it is important to break down that stigma wherever possible by providing access to information, community support, and advocacy — all of which build hope.

U=U has the potential to address all kinds of HIV stigma — including institutional stigma occurring in healthcare settings, workplaces, and broadly across society; interpersonal (between people) stigma that can be so damaging among family and friends; and internalized stigma (negative beliefs about HIV held by people living with HIV themselves), which many people don't even realize they have.

While researchers must continue to examine the promise and impact of treatment as prevention, the science that is currently available strongly supports U=U. That alone is a reason to make sure that all people living with HIV, or vulnerable to acquiring HIV, have access to this information so that they can make the most informed decisions possible about their own sexual health and lives.

## **Additional Resources**

Select the links below for additional materials.

- Consensus Statement on HIV "Treatment as Prevention" in Criminal Law Reform (Ce...
- <u>#PWNCares2</u>: <u>Undetectable = Untransmittable (includes video)</u> (Positive Women's N...
- Understanding U=U for Women Living with HIV (ICASO; PDF)
- Sex 58,000 Times With Undetectable Partners = Zero HIV Transmission: Learn More...
- Understanding Undetectable Equals Untransmittable (POZ)
- No Shame With HIV (video; in French and English, with subtitles) (All for a Hea...
- Securing the Future of Women-Centered Care (Positive Women's Network USA)
- U=U and the Overly Broad Criminalization of HIV Nondisclosure (CATIE)
- We Need to Talk About the Downside of U=U (TheBody.com)
- <u>What Does Undetectable = Untransmittable (U=U) Mean? (aidsmap)</u>
- <u>HIV Undetectable=Untransmittable (U=U), or Treatment as Prevention (US National...</u>
- <u>U=U: Ending Stigma and Empowering People Living With HIV (Harvard Medical Schoo...</u>
- The Science is Clear: with HIV, Undetectable Equals Untransmittable (US Nationa...
- Evidence of HIV Treatment and Viral Suppression in Preventing the Sexual Transm...



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