HIV Optimism: Fact or Fiction?
Jonathan Elford, PhD, Graham Bolding, MSc, and Lorraine Sherr, PhD

What do Rodgers and Hammerstein, Oscar Wilde, and Winston Churchill have in common? They all waxed lyrical about optimism. In South Pacific, the optimist is "cock-eyed," "immature and incurably green." According to Sir Robert Chiltern in Wilde's An Ideal Husband, optimism is a "fashionable religion." For the great British statesman, there did not seem to be much use being anything but optimistic. Optimism seems to represent everything from a fantasy, to a cult, to a reason for living. But what about optimism's impact on health and in particular HIV?

Optimism has been shown to have important health benefits. It can speed up recovery from surgery and may reduce the risk of developing Alzheimer's disease in later life. Recently a new form of optimism has joined the lexicon: HIV optimism, that is, optimism that has arisen in the light of new drug therapies for HIV. However, far from promoting health, there has been concern that HIV optimism may actually increase the risk of HIV transmission. Several studies among gay men have suggested that HIV optimism may create complacency about the severity of HIV disease, leading to a decrease in safer sexual practice. But a review of the evidence suggests that HIV optimism is not widespread among gay men. And while optimism may encourage a small minority to engage in unsafe sex, it does not explain the recent increase in high-risk sexual behavior.

HIV Optimism Emerges

A turning point in HIV treatment came at the 11th International Conference on AIDS in 1996. Delegates attending the conference in Vancouver heard for the first time about the power of triple combination treatment, particularly about the use of protease inhibitors in these regimens. Subsequent clinical trials and observational studies have confirmed that these new therapies substantially reduce viral load and dramatically improve disease prognosis. Indeed, they have reduced the HIV-related death rate by a factor of five or more. Before Vancouver, HIV antiviral treatment had achieved only moderate success. In fact there was debate as to whether treatment had any impact at all. Fear of AIDS as an incurable, life-threatening disease may have acted as a check on risky sexual behavior among gay men. With the availability of highly effective treatments, there was concern that the fear of AIDS might dissipate, leading to a decrease in safer sex: remove the fear, remove the restraint.

The first empirical data regarding HIV optimism emerged in 1997. In San Francisco, 54 HIV-negative gay men were interviewed towards the end of 1996 and the beginning of 1997. A quarter of the men said they were less concerned about becoming HIV-positive because of the new treatments for HIV, 13 percent were more willing to take a chance of getting infected when having sex, and 17 percent said they were less likely to get infected from someone who was on these new treatments than from someone who was not. The authors concluded that for most participants, new treatments had reduced neither their level of concern about becoming infected with HIV nor their perception of the risk of infection. However, they commented that "the degree to which changes in thinking will become more widespread with advances in treatment is unknown."

Four years later, the answer to this question is clearer, and somewhat surprisingly, there has not been a substantial change in attitude. Despite the sustained reduction in HIV-related morbidity and mortality since 1996, despite the increasingly evident benefits of the new drug therapies, there has not been a corresponding increase in


**Editorial: Optimism’s Dead–Hope Isn’t**

Robert Marks, Editor

When we asked Jonathan Elford, Graham Bolding, and Lorraine Sherr to write for *FOCUS*, we wanted an article that would look at the ways HIV treatment optimism might be harnessed as a prevention tool rather than a force to undermine prevention efforts. We knew that the bulk of the published literature concluded that a small but significant number of people were influenced by the success of combination antiviral treatment to engage in unprotected sex. Since people had gotten the message of treatment optimism—albeit twisting it into a justification for risky behaviors—we wondered whether cunning prevention program planners might be able to creatively use optimism, often an affirmative force in human psychology, to actually encourage safer behavior.

We knew that this assignment would require Elford and his co-authors to think beyond the obvious. What we did not anticipate was that their review of the literature, combined with their own research, would lead to an entirely different conclusion: while there is a relationship between HIV treatment optimism and unsafe behavior, there is no clear evidence that optimism is the causal factor that encourages risk. HIV treatment optimism, which has received a huge amount of attention in the prevention world, appears to explain at best, only a small portion of the recent increases in HIV-related risk and in the number of new HIV infections.

It’s hard for me to let go of HIV optimism, even in the face of this compelling analysis, and I imagine that this may be true for others. But this is a great example of the value not only of research, but also of the kind of meta-analysis that Elford and his co-authors apply. Some researchers will dispute their conclusion, but its value is indisputable: it forces us all to rethink an assumption that in the past three years has become gospel.

When the data show a rise in new infections, it is easy to despair, to perceive only the failure of prevention. We forget that prevention efforts in the 1980s and 1990s were and still are effective. For the vast majority of people, basic information on HIV risk, the fostering of safety as a community norm, and ongoing reminders that HIV continues to be a danger are enough to sustain behavior change. But for people for whom risk reduction has always been difficult, younger people who have not experienced the epidemic at its worst or have not integrated safer sex messages into their lives, and men who have sex with men in communities of color that have only recently joined the prevention effort, innovative prevention strategies may be the only way to effect change.

An approach that has received increasing attention over the past three years is targeting prevention interventions at people with HIV. In this context, as Les Pappas says in this issue of *FOCUS*, altruism may be a tool, a shift away from the concept of self-responsibility that dominated prevention theory since the early 1980s when “universal precautions” seemed the only way to protect against transmission. The good news is that Pappas’s experience suggests that people do, in fact, see their self-interest reflected in their responsibility for others.

Looking at the underlying motivations for risk and safety—at concepts like optimism and altruism—is the kind of exploration that is central to innovative HIV prevention. The analysis of Elford and his co-authors is the kind of creative, research-based critique of prevention theory that is crucial to effective prevention. Both are necessary and both inspire hope.

**References**


HIV optimism during that time. In all the surveys conducted around the world since 1996, only a minority of participants, usually 10 percent to 20 percent, report that new treatments have reduced their level of concern about HIV or their perception of the risk of infection.

For example, in a study of nearly 400 gay men interviewed in the midwestern United States in 1997, only 13 percent felt that the threat of AIDS was less serious than in the past. Among nearly 800 gay men interviewed in London in 1998, only 19 percent said they believed new therapies made people with HIV less infectious, while 30 percent said they were less worried about HIV infection since treatments had improved. A 1999 study found that only a minority of the 1,300 Sydney gay men interviewed were classified as optimistic using a 12-item optimism scale. Most men disagreed or disagreed strongly with the items on the scale. Among 5,000 French gay men surveyed in 2000, only 16 percent thought that HIV was a less serious threat than it used to be because of new treatments, while a mere 2 percent agreed with the statement “people with undetectable viral load do not need to worry so much about infecting others with HIV.” Finally, an international collaboration that surveyed more than 4,000 gay men in Vancouver, London, Sydney, and Melbourne in the year 2000 also found...
The often-made assumption that optimism is driving the increase in high-risk sexual behavior draws attention away from more relevant factors.

that only a minority of men were optimistic in the light of new drug therapies.6

The results of all of these studies pose an interesting paradox. Despite the dramatic advances in treatments since 1996, there has not been a corresponding increase in the proportion of gay men whom we would call optimistic. It is possible that research instruments have not been able to completely capture HIV optimism. But, this is unlikely for two reasons. First, different countries have used a variety of measures and all have come up with strikingly similar findings. Second, synthesizing all the measures from around the world into a multi-item scale also revealed that only a minority of gay men were optimistic.4

Optimism and Sexual Risk

Despite the low levels of treatment-related optimism around the world, the relationship between optimism, where it exists, and sexual behavior remains important. Have advances in treatment influenced risky sexual behavior? Researchers attempting to answer this question have faced a considerable methodological challenge. Most investigators have conducted cross-sectional surveys to examine the association between HIV optimism and high-risk sexual behavior. While cross-sectional surveys provide a snapshot of behavior and its determinants at a community level, they cannot establish cause and effect. Consequently, when researchers have found an association between optimism and risky sexual behavior, they have been unable to establish whether optimism triggered the risky behavior or whether optimism was an after-the-fact rationalization. Some men may have justified their high-risk behavior to themselves at least, by subsequently invoking the efficacy of the new treatments, but this does not mean that an optimistic attitude actually provoked them to have unsafe sex in the first place.

Studies among gay men in the United States, Europe, and Australia have found a positive association between optimism and high-risk sexual behavior (defined as unprotected anal intercourse with a casual partner or with a person of unknown or discordant HIV status). Optimistic men were, in fact, more likely to report high-risk sexual behavior than men who were not optimistic.3 Or, conversely, men who reported high-risk sexual behavior had higher optimism scores than those who did not report such behavior.4 In a U.K. study, optimistic men were twice as likely to report high-risk sexual behavior than other men.3 However, the international collaborative study revealed variability between cities in the association between optimism and both HIV status and risk behavior.6 This throws into sharp focus the heterogeneity of response around the world.

While these studies could not establish a causal relationship between optimism and high-risk behavior, it seems likely that for some gay men, at least, optimism triggered unprotected sex. What then is the contribution of HIV optimism to the total sexual risk occurring at a community level? Epidemiological methods allow us to estimate the fraction of the total population risk that is attributable to a specific factor, in this case HIV optimism. The attributable risk is a function of both the proportion of the population who is optimistic and the excess risk reported by this group. Let us say that 25 percent of gay men are optimistic—a generous but reasonable estimate based on the published literature—and that optimistic men are twice as likely to report high-risk sexual behavior than other men. The attributable risk fraction works out to be 20 percent; in a given year, up to one-in-five high-risk sexual encounters among gay men could be triggered by HIV optimism. The remaining 80 percent would not be.

If the assumptions are made more stringent—for example, 20 percent rather than 25 percent of the men are optimistic and they are one-and-a-half times rather than twice as likely to report high-risk sex—then the attributable risk fraction falls to 10 percent. In other words, even where a causal association exists, the contribution of HIV optimism to high-risk sexual behavior at a community level remains modest. Using a mathematical model, researchers have shown that for HIV to become endemic among gay men in the United States, there would have to be a doubling of sexual risk at a community level. Consequently, an attributable risk fraction of 10 percent is, by itself, unlikely to have a major impact on community risk.

Finally, one of the shortcomings of HIV optimism research is that the focus has been almost exclusively on gay men. Researchers in San Francisco examined the


Innovative Prevention

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Increase in Risky Sexual Behavior

The percentage of gay men reporting high-risk sexual behavior has increased in Europe, North America, and Australia since the introduction of triple combination treatment. However, it appears that HIV optimism cannot be implicated as the primary factor in this increase. First of all, if HIV optimism were driving the annual increase in high-risk sex, there would be a corresponding increase in the percentage of optimistic gay men from one year to the next—in the same way that an increase in the proportion of the population who smoked cigarettes accompanied, and explained, the increase in smoking-related diseases in the 1960s and 1970s. But the year-to-year increase in high-risk sexual behavior among gay men has not been matched by an increase in the proportion of gay men who are optimistic. On the contrary, optimism has remained remarkably stable since 1997.

Secondly, if the increase in high-risk sex were due solely to HIV optimism, as has been suggested, the rise would be preponderantly, if not exclusively, among gay men who are optimistic. Among those who do not share this optimism, there would be little, if any, increase in risk. Once again the smoking analogy is useful. The increase in lung cancer in the 1960s and 1970s was seen only in cigarette smokers. Among non-smokers there was no increase, confirming the etiological significance of cigarette smoking for lung cancer. Since the majority of HIV optimism studies have been cross-sectional, they have not been able to examine separately changes in sexual risk behavior over time between optimistic and non-optimistic men. However, a study of gay men in London was able to do just this: it found that the increase in high-risk sexual behavior between 1998 and 2000 was equal in men who were optimistic and those who were not (the majority). The increase in high-risk sexual behavior over time was statistically independent of HIV optimism.

Conclusion

For most gay men, improvements in treatments for HIV have not reduced their concerns about becoming infected nor their perceptions of risk. While it remains unclear what does account for the recent increase in high-risk sexual behavior—and future research should focus on this question—there is little evidence that HIV optimism alone, or perhaps at all, is a factor. It follows that HIV prevention programs built around the concept of treatment optimism are unlikely to have a major impact at a population level. Indeed, the often-made assumption that optimism is driving the increase in high-risk sexual behavior draws attention away from other factors.

On the other hand, it is likely that treatment optimism does account for some risk among a small minority of people. Identifying those individuals during one-on-one sessions may prove to be a useful addition to prevention counseling. It is important to note, however, that there is no evidence that challenging optimism will have an effect on subsequent behavior. By focusing only on optimism, counseling can easily overlook other behavioral factors, which may be more important, a caution that applies at the community level as well as the individual level.

Clearinghouse: Innovative Prevention

References


Is Altruism a Motivating Force in HIV Prevention?
Les Pappas, MPA

Are people motivated to protect others from HIV infection or is it “everyone for themselves?” The ultimate answer to this question depends on your worldview. I happen to believe that people are basically good, and that most of us try not to cause harm to others. But are people altruistic when it comes to HIV prevention? The answer is a resounding yes; at least some people in some situations are or can be motivated by altruism.

Altruism versus Self-Protection
Altruism is defined as the “unselfish concern for the welfare of others.” But it seems that self-interest runs through all of our actions. Even when people act unselfishly, they are probably motivated by the good feelings they get from doing something for someone else, or perhaps by the guilt they anticipate feeling if they were not to do that something. Truly random acts of kindness seem few and far between.

It may also be that unselfishness and generosity are directly related to the object of a person’s actions. Some people will do anything for people who are important in their lives: parents for their children, and lovers for their partners. People seem much less concerned about those who are outside their circle of family and friends. This may be an important factor when it comes to sexual or drug-using partners. An anonymous sexual encounter would likely engender less mutual concern than one between two people developing a relationship through a series of dates. Likewise, people in committed relationships would likely be more invested in the welfare of their partners than two people who are simply dating.

Over the years, HIV prevention has focused on the concept of self-protection. In the early days of the epidemic, prevention campaigns stressed that in the absence of a test for HIV, individuals should assume that all their partners were HIV-positive and that they should take “universal precautions” to protect themselves in every situation. While this remains a viable approach, many people make more informed decisions about risk based on a potential partner’s confirmed or perceived serostatus.

Disclosing and discussing HIV status has become a primary means of HIV prevention. In fact, seroconcordant coupling is the most significant prevention phenomenon today. It is common for HIV-positive people to seek out other HIV-positive people and for HIV-negatives to seek out other HIV-negatives. Of course, there are problems with this strategy. Sometimes people are wrong about their status because they have seroconverted since their last test. In other cases, people simply lie. As universal precaution has waned as a prevention approach, altruism, in this context, a willingness to sacrifice immediate self-gratification for the well-being of a potential partner, becomes crucial.

HIV Stops with Me
In recent years, HIV prevention campaigns have sought to influence community norms so that people consider the

Two spokesmodel applicants felt so strongly about disclosing to potential partners that they had gotten tattoos announcing their serostatus.


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See also references cited in articles in this issue.
HIV STOPS WITH ME is built around “real” people (“spokesmodels”) who are HIV-positive. The goal of the campaign is to inspire and support those who are HIV-positive to provide leadership in ending the epidemic. The spokesmodels share their commitment to not pass the virus on to anyone else.

One of the first signs that showed this campaign might be successful was during the San Francisco auditions of more than 60 people for the seven spokesmodel positions. Applicants spoke of their deep desires to keep their current and future HIV-negative partners free of infection. Some applicants had been infected by men who knew they were HIV-positive, but who had never revealed this information—in some cases even after being together with an applicant for many years. All of the applicants said they wanted to do whatever they could to ensure that nobody else would become HIV-positive: two felt so strongly about disclosing to potential partners that they had gotten tattoos announcing their serostatus.

At its core, HIV STOPS WITH ME is about responsibility and respect. For example, in one of the newspaper ads, Jeffrey says: “I believe in responsibility. I’m responsible to myself for staying healthy. For me that means both physically and spiritually. But it’s not just about me, I also have a responsibility to make sure I don’t contribute to another gay man getting infected.” Through an interactive web site, TV commercials, newspaper ads, and various other materials, all of the spokesmodels talk about what it means to them to protect their partners.

Initial results from an evaluation of this campaign demonstrate that the unselfish idea of protecting your partner has great value for HIV prevention efforts. Eighty-six percent of the HIV-positive respondents agreed with the primary messages of the campaign, which included keeping partners safe, taking responsibility, building community, and being honest. More than 63 percent felt that the campaign had a positive effect on them. One comment seemed to capture the spirit of the overall response: “It’s about the duty of all people who have HIV to inform their partners and to act responsibly. It means that we need to be the last generation of people with HIV/AIDS.”

Conclusion

The response to HIV STOPS WITH ME shows that there is a powerful, largely untapped desire on the part of HIV-positive gay men to protect their partners from infection. It is time for prevention planners and counselors to develop effective ways to appeal to the altruistic impulse in everyone so that the protection of others becomes a more significant factor in the decision to have safe or unsafe sex.
Recent Reports

Altruism versus Personal Responsibility

People living with HIV have rarely been specifically targeted for prevention interventions, partly due to fear of victim-blaming or increased stigmatization, according to a review of the literature on this topic. However, instilling a sense of responsibility for preventing HIV transmission to other people—an altruistic response—can serve as a motivator to lower risk behaviors among people with HIV.

Altruistic motivation refers to behavior that benefits other people without need for social or material reimbursement. There has been no publication on the application of altruism theories to HIV prevention. But the strong focus of traditional HIV prevention strategies on personal responsibility for self-protection may have had a counterproductive effect on encouraging altruistic behavior: if people are taught to be responsible primarily for their own actions, then they may be more likely to assume others are similarly taking responsibility for themselves and less likely to take responsibility for the protection of these others.

One counseling approach to help motivate HIV-positive clients to accept personal responsibility for not infecting others is to simulate potential feelings of regret by encouraging clients to think about how they would feel if they were to infect another person. Another approach is to explore feelings of empathy with HIV-positive clients by asking them to think about how they themselves felt or would feel if they were uninfected and had unprotected sex with someone who did not disclose his or her HIV infection.

Emotional closeness to a person who is HIV-positive was not associated with safer sex.

Emotional Closeness Reduces Unsafe Sex

Emotional closeness to a person who is HIV-positive without an AIDS diagnosis—but not the number of HIV-positive people known by a participant—was associated with reduced unprotected anal sex, according to a Los Angeles study.

Researchers recruited 334 gay men in West Hollywood, California. Forty-eight percent of the study participants were White, 30 percent were Latino, and 22 percent were African American. Most were younger than 30 years old. All were seronegative or of unknown serostatus and had engaged in at least one incident of unprotected anal sex in the previous year.

Participants knew an average of 12 HIV-positive people. They knew more people who had died from HIV disease than people living with HIV. Participants between the ages of 31 and 40–37 percent of the study—knew significantly more people with HIV than did younger participants. The lifetime number of known people with HIV was not associated with unprotected anal sex.

Participants between the ages of 31 and...
40 expressed a significantly higher level of emotional closeness to a person with HIV than did younger men. A higher level of emotional closeness to a person who is HIV-positive without an AIDS diagnosis was significantly associated with a lower percentage of unprotected anal sex incidences in the prior 12 months. This association remained even after excluding participants whose “close” person with HIV was a lover or casual sex partner.

Family Support Better than Friend Support

Kimberly JA, Serovich JM. The role of family and friend social support in reducing risk behaviors among HIV-positive gay men. AIDS Education and Prevention. 1999; 11(6): 465–475. (Ohio Department of Mental Health; and Ohio State University, Columbus.)

A study examining HIV-positive gay men’s perceptions of social support and risk behavior found that the degree of perceived family support was associated with a lower intention among participants to behave in risky ways. Family support was more predictive of reduced risk than the availability of friends.

Researchers recruited 142 HIV-positive gay men from a midwestern university’s AIDS clinical trials unit. Participants primarily were White (84 percent) and between the ages of 22 and 69. The sample was evenly divided between partnered (36 percent), single (38 percent), and dating (21 percent) participants.

Researchers examined the effects of different degrees of family support on sexual risk taking. Perceptions of family support were associated significantly with the intention to limit sexual partners, remain monogamous, and abstain from sexual intercourse. Perceived family support, however, was not significantly correlated with inquiring about a partner’s sexual history or using condoms. Actual family support, however, was significantly related to the intention to limit sexual partners, remain monogamous, and abstain from sexual intercourse. Perceived family support—having family available to discuss personal and private feelings—was significantly related to the intention to limit sexual partners, ask about a partner’s sexual history, and be monogamous. The number of family members available to socialize with—another aspect of actual support—was significantly related to the intention to abstain from sex, and having family available for advice was significantly related to intentions to limit the number of sexual partners and be monogamous. Utilizing family support or having family available to provide support was not significantly correlated with actual risk behaviors, possibly because few study participants reported engaging in actual risk-taking behavior.

Risk among HIV-Positive Drug Users


According to a Yale University study, 66 percent of HIV-positive injection drug users entering methadone maintenance reported engaging in HIV-risk behaviors since learning of their serostatus. Drug-related risk behavior was predicted by psychiatric severity and poor risk-reduction skills; sex-related risk behavior was predicted by low motivation and poor risk-reduction skills. However, level of HIV-related knowledge did not predict risk behavior.

Of the 50 participants, 37 were male, and the average age was 42 years. Twenty-six participants were African American, 17 were White, and seven were Hispanic.

Since being informed of their HIV-serostatus, 50 percent of the participants reported engaging in unprotected sex. Sexual risk takers scored significantly higher than others on scales measuring the perception that condoms interfere with sexual pleasure and lower on scales measuring perceived vulnerability to transmitting HIV or becoming reinfected. Since learning of their HIV infection, 58 percent of participants reported sharing drug paraphernalia. These participants were significantly less confident that this behavior increased HIV risk and scored significantly lower on measures of self-efficacy to negotiate safer needle use with others.

Next Month

In February 2001, the U.S. National Institutes of Health released new guidelines for HIV antiviral treatment that recommended that initiating treatment later in the HIV disease process than had been previously advised. In the August issue of FOCUS, Stephen Follansbee, MD, a pioneering HIV infectious disease specialist and the Medical Advisor to FOCUS, discusses the ways in which the HIV roller-coaster affects physicians who care for people with HIV. He explores the psychological as well as the medical challenges that arise when accepted HIV treatment guidelines shift.

Also in the August issue, Dale Brashers, PhD, Assistant Professor in Health Communication at the University of Illinois at Urbana-Champaign, examines strategies people with HIV can use to respond to shifts in treatment guidelines.
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