Prevention Challenges: Reflections on the Roles of 'Fatigue' and 'Disinhibition'

By Susan A. Cohen

Initiating behavior change can be difficult enough. Making the decision to quit smoking, switch to a healthier diet or start an exercise regimen are familiar cases in point. Sustaining behavior change, however, can be even harder. That so many people eventually revert to their old habits is a testament to this fact.

Because adherence over long periods of time to virtually any kind of behavior regimen is difficult for most people, even the most well-intentioned may experience prevention "fatigue," gradually losing the will to keep away from cigarettes, stay on a diet or continue exercising. Prevention fatigue is certainly a factor when it comes to women's ability to use contraceptives correctly and consistently over decades to prevent unintended pregnancy or men's willingness to use a condom "every time" to reduce the risk of transmitting or contracting HIV.

If fatigue were not enough of a challenge when seeking to understand and influence positive health behaviors, the related but separate phenomenon known as "disinhibition"the notion that the perception of reduced risk itself makes risk-taking more attractive—further complicates the picture. Taking an anticholesterol drug, it could be argued, might "disinhibit" an individual at risk of heart disease from eating high-fat foods. Birth control pills and condoms could be seen as "disinhibiting" because they reduce the fear of pregnancy or a sexually transmitted infection (STI) that otherwise might be present when a couple is having sex.

Both prevention fatigue and disinhibition reflect basic aspects of human psychology that factor into all kinds of risk-taking behavior. Where sex and politics meet, however, these immutable facts of life are often cited to justify abandoning risk-reduction interventions in favor of interventions that rest solely on persuading people to avoid risk entirely. Yet, because many people find it difficult to use contraceptives or condoms perfectly over long periods of time, rendering these methods only partially protective against pregnancy and disease, is it reasonable to give up on encouraging their use any more than it would be to stop encouraging people to maintain a healthy diet and exercise? Does the availability of birth control pills and condoms "cause" people to have (more) sex any more than anticholesterol medication causes people to eat (more) cheeseburgers? And even if so, condoms and pills make any more sense—or be any more successful in public health terms—than banning drugs that lower cholesterol to force people to behave "properly"?

Starting and Backsliding

As University of Minnesota psychology professor Alexander Rothman points out, the decision-making process involved in initiating a new behavior—premised as it is on the expectation of the desired health outcome—is relatively straightforward. Maintaining that behavior over time, however, is more complex, involving continual evaluation in the context of forever-changing personal, social and environmental circumstances

and assessing whether continuing the behavior is still "worth it."

Evidence from the early years of the HIV/AIDS pandemic shows how people can dramatically change their sexual behaviors in the face of a crisis. As several analyses have now demonstrated, starting in the late 1980s—when Ugandan president Yoweri Museveni, boldly for that time and place, brought the AIDS scourge into the open as a matter requiring a national response—and continuing through the mid-1990s, Ugandans increased all three of what have come to be known as the "ABC" behaviors: abstinence (or delayed

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initiation of sex), "being faithful" (albeit within the context of a society where polygamy is common and condoned) and condom use. As Harvard University anthropologist Ted Green has noted, "When faced with a lifethreatening danger people can and will modify their behavior, once they are given the right information in the right way."

A proponent of encouraging abstinence and monogamy as the primary defenses against the sexual transmission of HIV, Green argues that the Uganda experience proves that positive changes in A and B behaviors are possible: "Where infection rates exceed 30% and funerals for family and friends are held several times a week, abstinence and faithfulness are attractive alternatives to death." No one disputes that. But it is also true that

both in Uganda and elsewhere, fear of AIDS has proved to be a powerful motivator for condom use as well. Indeed, essentially the same conditions that Green links to the abrupt behavior changes among Ugandans spurred sharp increases during the same time period in condom use, along with decreases in casual sex, among gay men in San Francisco and other major cities in the United States.

Recently released data from an ongoing longitudinal study being conducted in the Rakai district of Uganda, however, demonstrate that even in the face of sustained levels of HIV, changes in behavior can be difficult to sustain. At the Conference on Retroviruses and Opportunistic Infections (CROI) in Boston in March of this year, Maria Wawer of Columbia University's Mailman School of Public Health and Ron Grav of Johns Hopkins' Bloomberg School of Public Health reported that as early as 1990, A and B behaviors in Rakai had started to level off. Between 1995 and 2002, they found no change in the timing of sexual debut among young women, but found that the age at which young men reported initiating sex declined by about a year (to 16.2 years). Between 1994 and 2003, moreover, Wawer and Grav observed a significant increase in the proportion of young men reporting that they were having sex with two or more nonmarital partners.

Fatigue and Disinhibition

The decline in A and B behaviors in Rakai likely was the result to a considerable extent of prevention fatigue, but it is also probable that disinhibition was at work. Just as extremely high infection and mortality rates in the late 1980s may have "inhibited" people into practicing A and B, the combination of falling HIV prevalence rates by the mid-1990s and fewer people dying likely had a disinhibiting effect, as the per-

ceived risk—and probably at least to some extent the actual risk—associated with casual sex dropped, too. At the same time, the availability of condoms—which could be seen as potentially having an independent disinhibiting effect—proved to be protective. Indeed, Wawer and Gray found that during the same period that A and B behaviors in Rakai slacked off, men in the study area reported a significant increase in condom use generally and consistent condom use specifically.

Like fatigue, disinhibition is a significant prevention challenge. But unlike fatigue, it also is seen in many areas of life as having some adaptive and even useful purposes. Wearing a helmet, for example, may empower a bievelist to risk dangerous maneuvers-but it does make biking safer. Riding in a car with seatbelts and airbags does not eliminate the risk associated with highway driving and may "disinhibit" some drivers from speeding, but wearing seatbelts and having airbags also may make a family sufficiently reassured to take a eross-country trip. And controlling cholesterol levels with medication offers no guarantees against heart disease and might even open the door to one's occasionally savoring a cheeseburger, but it also saves lives.

Few have suggested that in cases such as these, the disinhibition "problem" should be solved by discouraging the use of helmets, seat belts or anticholesterol drugs. Indeed, most parents teach their children to ride a bike while encouraging them to wear a helmet, recognizing that doing so reduces but cannot eliminate the risk associated with bike riding. Yet, in the arena of sexual behavior, the same logic often does not seem to apply.

Whether condoms and contraceptives—or helmets, seatbelts and anticholesterol drugs—actually cause large numbers of people to engage in activities they otherwise would not engage in (rather than allowing them to behave as they would anyway with less fear of negative outcomes) is certainly disputable; to be sure, plenty of unsanctioned sex existed in human history long before either condoms or contraceptives were widely available. Moreover, research analyzing the sexual behavior of adolescents in the United States has shown that sex education and the availability of condoms and contraceptives do not lead to earlier initiation of sexual activity, more sex or increases in the number of sexual partners.

Nevertheless, social conservatives insist that condom promotion programs in developing countries inevitably lead to more and riskier sexual behavior. They argue that access to contraceptives has an inherently disinhibiting effect on people, especially young people, "causing" more sex and increasing the risk of HIV and other STIs, as well as unintended pregnancy and abortion. They contend that encouraging young people to delay sex now but to practice safer sex later is confusing. Therefore, they maintain, these risk-reduction approaches are the problem, not part of the solution.

Meanwhile, as the debate continues to rage over the disinhibiting effects of condoms, it is not far-fetched to think that HIV treatment itself could become a target of social conservatives as the next great disinhibitor of "appropriate" sexual behavior. Already, some members of the Ugandan parliamentary committee on HIV/AIDS have suggested halting the widespread availability of antiretroviral drugs (ARVs) in anticipation of further disinhibition. "When these people look better after using these drugs...in due course they go in for unprotected sex," contends Justine Lumumba, a member of the committee. "When AIDS patients look healthier and live longer, they will infect the young generation." Noting Wawer and Grav's finding that men in Rakai were reverting to some

riskier sexual behaviors, she asks, "How are we going to handle this with more people getting infected because of ARVs? I suggest these people should be left to get sick and die to save the young generation."

Facing Reality

Two decades of experience with HIV/AIDS in both Uganda and the United States make plain how difficult it is to help people sustain healthy behaviors, especially when disinhibition interacts with prevention fatigue. And the enormously heartening fact that people with HIV increasingly are living longer and healthier lives due to more effective treatment makes not just fatigue but also disinhibition inescapable realities—unless we are willing to let people die to serve as examples to others that sex can kill.

In her recent New York Review of Books article, "God and the Fight Against AIDS," Helen Epstein aptly describes the challenge. "Sexuality truly does belong to the world of magic and unreason. It is impossible to plan and control it totally. We were made that way," she writes. "But the delirious, illogical nature of

sex makes setting a realistic HIV prevention policy very difficult. Cheerful, sexy condom ads that fail to address the real dangers of AIDS may promote a fatal carelessness; but an exclusive emphasis on abstinence until marriage may well lead to an even more dangerous hysterical recidivism."

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Given that there is almost certainly no one magic bullet, it may be that the only logical policy response at the current time is to strengthen support for the range of prevention-intervention and behavior change strategies. At the same time, it is reasonable to ask whether some behaviors may be easier to sustain over time than others. Wawer and Gray's research from Rakai lend some support to the common sense notion that, at least for many people, especially young, unmarried people,

having sex while taking precautions may be a more realistic option than eschewing sex altogether or even remaining faithful to one partner. As Wawer commented at the CROI meeting in Boston, "Abstinence and monogamy are very good behaviors. On the other hand, the data support that in this setting, the behavior that seems to have been the easiest to increase over time is condom use."

This is by no means to assert that sustaining correct and consistent condom use over very long periods of time is easy, or even possible, for many people. Rather, these observations do point to the fact that no one preventive behavior—especially where, as Epstein puts it, the "universal power of sexuality" is involved—is likely to work for all people or even for any person in all circumstances over a lifetime. Fatigue and disinhibition bedevil all of them. That is a huge part of the prevention challenge. \oplus

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