Social Engineers Confront AIDS

Manipulating compulsive and poorly understood human behaviors is a tricky business; to make matters worse, the social engineers admit they are not sure what they are doing

PERHAPS THE MOST IMPORTANT experiment ever conducted in AIDS research is now under way. But instead of taking place in the laboratory, this experiment is being run in bedrooms and bars. And its investigators are not scientists in white coats but social workers bearing latex condoms and little bottles of household bleach.

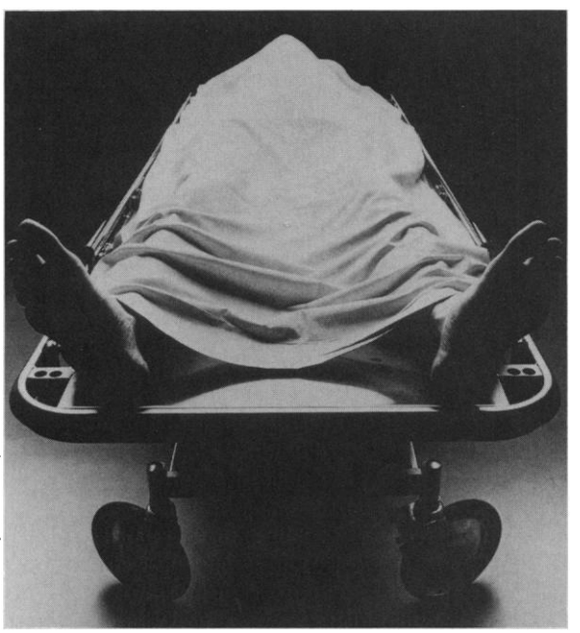
The objective of this experiment is to change the course of the AIDS epidemic by changing human behavior. Toward this end, the federal government will spend $480 million this year, trying to educate the public about AIDS and to prevent the spread of the AIDS virus among those at greatest risk.

By any reckoning, the obstacles confronting this grand experiment in disease prevention are formidable. This would be true even if the social engineers knew what they were doing, which most freely concede they do not. The entire enterprise is running almost blind into some of the most powerful but poorly understood behaviors there are: those at work in private worlds of drug addiction and sexual longing.

For how do you encourage an addict to clean his needle with bleach when he is out searching for heroin with street brand names such as "Overdose" and "Suicide"? How do you convince a committed swinger that he can no longer enjoy the company of many partners, and that every single time he engages in sex, he must wear a condom?

"We're talking about changing some of the most compulsive of human behaviors, and we're asking people to make these crucial decisions over and over again at the exact moment when they're most vulnerable, which is to say right when they're about to have sex or right when they're about to stick a needle in their arm," says Marshall Becker of the University of Michigan School of Public Health.

Yet remarkable changes in behavior are being reported from some quarters, particularly in cities where there are large, well-organized gay communities that have been ravaged by the AIDS epidemic. The proportion of homosexual men in San Francisco, for example, engaging in anal intercourse without condoms has plummeted. Even intravenous drug addicts, once thought to be oblivious to health messages, are adopting the ritual of rinsing out their paraphernalia with disinfectant to avoid passing contaminated blood among peers. Reports Wayne Wiebel of the University of Illinois: "We now have shooting galleries where they enforce the use of bleach."



Dallas County Health Department

The fear factor. *Posters like this were judged most effective in delivering the message about the use of condoms. But fear fades, and too much can lead to a process of denial.*

But manipulating society is a tricky business. For instance, though some addicts have stopped swapping dirty needles, they are not very enthusiastic about wearing condoms, says George Beschner of the National Institute on Drug Abuse, one of several federal agencies supporting large pilot programs aimed at slowing transmission of the AIDS virus among persons at greatest risk, namely drug addicts, prostitutes, street youth, homosexuals, bisexuals, and the sexual partners of all of the above.

It seems that altering deeply ingrained behaviors is not like flipping a switch. Some individuals are recalcitrant, a few will never change, many do not even believe that they are at risk, and others need a lot of help, says Thomas Coates of the University of California at San Francisco.

Researchers know that humans are capable of dramatic behavior modifications. But the scientists are not really sure why. Nor are they in agreement about how to speed up the process. Many complain that they know precious little about the very behaviors they are charged with manipulating. For instance, public health officers have recently been amazed at how many people are shooting up cocaine, says Beschner. Similar eye-openers are surely in store as we learn more about the sexual practices of the nation.

Martin Fishbein of the University of Illinois at Champaign stresses that until social scientists understand the determinants of risky behaviors, they will continue to stumble around in the dark. For example, if researchers discover that alcohol frequently causes people to ignore their best intentions and have sex without a condom, intervention programs could target bars; emphasis could be placed on ensuring that vending machines carry condoms and that posters remind people to avoid risky sex. Says Fishbein: "The more you understand a behavior the better you can design the intervention."

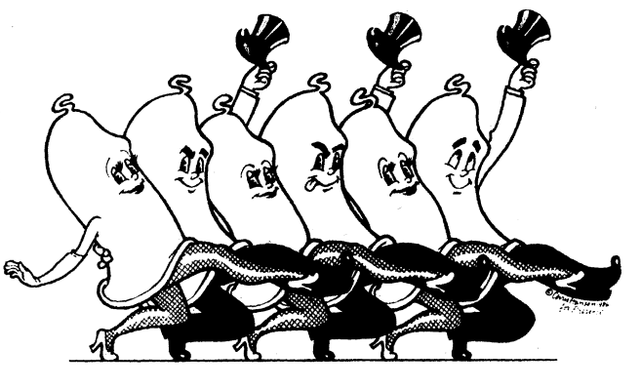
Yet in the absence of unifying theories and standard-issue models, the current crop of AIDS prevention programs are seat-of-the-pants constructions at best, built upon the idea that it is better to do something—anything—than nothing at all.

"It would be nice to say that we have a well-evaluated, easy-to-use, canned intervention program that we could just hand out. But we don't. That would be a lie," says Kevin O'Reilly of the Centers for Disease Control in Atlanta.

If the prevention programs are a bit of a jumble, there are nevertheless some general principles at work. In order to change a

behavior, the experts say, people must first recognize the fact that they are at risk; then they must be told how best to navigate around the danger. A smoker, for example, must understand and believe that not only is smoking bad for health in general, but it is bad for his own health.

They must then believe in their own ability to change and in the value of new and improved conduct. A smoker must be convinced that even after 20 years and two packs a day, quitting now is still going to do him some good. He must also believe that he can quit, and that acupuncture, or brainwashing, or pure gumption will help him through the pangs of withdrawal.



Condom Resource Center, Oakland, CA

Lost in the chorus *of AIDS messages, posters like this may do little to change behavior.*

Finally, the new behaviors must become the "normative" ones in the community, so that they are constantly reinforced. In other words, banishing smokers to the social equivalent of Siberia seems to speed up their decision to quit. In the business of behavior change, researchers say that these community norms are the most important thing of all. As one AIDS prevention researcher put it: "When movie stars all wear condoms, our job will be done."

Unfortunately, there are many pitfalls along the way. For starters, most experts agree that knowledge has little, if anything, to do with behavior change. "One of the big problems is that information doesn't do much," says Nathan Maccoby of the Stanford Center for Research in Disease Prevention. Yet many AIDS workers still seem hell bent on zealous pamphleteering.

For instance, the government recently mailed its long-awaited AIDS brochure to every household in the land, but the mailing had nothing to do with altering high-risk pursuits, says Paula Van Ness of the National AIDS Network in Washington. In fact, the government decided not to do a post-mailing survey to assess behavior change because they assumed none would result.

In order for the information contained in all these brochures to begin working, the threat of AIDS must be perceived as real, immediate, close to home. The problem is that people deny risk. This is true not only for AIDS but for other threats as well.

"People are very creative when it comes to reasons why their own risk is not high," says Neil Weinstein of Rutgers University, who recently asked people to compare their own risks to those of others. The hazards he asked about were many and varied: everything from heart attacks to gum disease to muggings. Invariably, Weinstein found that people across the board believe their own risk is below average. Says Weinstein: "We all think we're less vulnerable than the other guy."

This kind of wishful thinking has marked the AIDS epidemic from its earliest days. At first, gay men thought that only homosexuals living life in the "fast lane" would succumb to the syndrome. Similarly, minorities have often viewed AIDS as a disease that selects for gay, white, middle-class males, not heterosexual blacks or Hispanics. Public health officers working the streets still hear addicts maintain that they cannot get AIDS because they are not homosexuals. The matter is further confused by the fact that many men who have sex with men don't consider themselves "homosexual."

Social scientists note that this "optimistic bias" can be shattered when a hazard comes close to home. Researchers find that breast cancer, for example, becomes real when it strikes a relative. Similarly, when a friend or lover succumbs to AIDS, the syndrome gets attention. "Unfortunately, something must break into a person's own life before he'll do anything about it," says Howard Leventhal of Rutgers University.

The real trick, say public health workers, is to get people's attention focused on behavior modification before rates of infection and disease become such that AIDS is nearly impossible to ignore. But there is a great deal of debate about exactly how to do this.

Fear may help. Fen Rhodes of California State University at Long Beach, for example, showed local folks various posters and asked them which one would be most effective in getting their community to use condoms. The posters contained a range of images, from "high fear" to "low fear," from a chorus line of cartoon condoms to a dead person. Which was believed most effective? "The overwhelming choice was the dead guy," says Rhodes. The worst was the dancing rubbers.

With fear in mind, posters feature empty baby carriages or young men disfigured with the lesions of Kaposi's sarcoma or the slogan that shouts: "Nobody's Safe from AIDS." Yet the problem with fear is that it is like a drug: it does not last for long. Fear fades. Too little fear may fail to motivate, while too much creates denial or "freezing," says Leventhal.

Most experts agree that if fear is going to be used to motivate people, it is essential that they be offered a solution. "Much more important than scaring people is giving them the tools they need to change," says William McGuire of Yale University.

In the current prevention programs, "skills training" is all the rage. Addicts are taught how to clean their needles with bleach. Gay men gather to assume various roles and to negotiate sex with condoms. They sponsor "home parties" to discuss risky behavior and safer sex.

Yet the most important factor in achieving behavior change may lie not with public health workers showing a relatively small number of homosexuals and addicts how to put on a condom, but with society as a whole. "If we think about changing behavior one by one, the epidemic will be over before we're through. You've got to change community norms and standards," says Larry Bye, founder of the Stop AIDS project in San Francisco. In other words, it has to become socially unacceptable for an addict to pass a colleague a dirty needle, or become abnormal for two strangers to have sex without a condom, says Bye.

In the beginning, a certain amount of brainwashing may have to take place. In Seattle, for example, a large public health campaign used billboards, buttons, and posters to tell gay men that three out of four of their peers were engaging in safer sex.

"Of course, we had no idea that was true," says Robert Wood of the Seattle-King County Health Department, "but we wanted to change the normative beliefs of the community. We wanted them to believe that everyone was working to reduce their risks."

Bye believes that if a certain percentage of a population—say 10 to 20%—adopts an innovation such as wearing condoms, the behavior will inexorably diffuse throughout the community to become the norm. But it is nearly impossible to know exactly what drives people to change their behavior.

"I don't think anybody has any sense of whether or not these interventions work," says Wood. Yet as long as public health workers see evidence of change, or at least a willingness to modify risky behavior, Wood and his colleagues think it would be folly not to try. ■ **WILLIAM BOOTH**