## Victor De Gruttola

## And William Bennett

## AIDS Facts Can't Wait

So far, the American public has received its AIDS education from the media—which has proved a thin reed as this epidemic of undetermined, but probably enormous, potential has flooded our attention. The New York Times saw fit to print a front-page item on herpes in Lippizaner horses months before the first AIDS story crept onto page one-and at a time when there were already more than 500 diagnosed cases of AIDS in New York City. A year ago, Discover magazine ran a cover story reassuring an eager world that transmission of the virus through the "rugged vagina" was so unlikely as to make women virtually AIDSproof (this in the face of clear knowledge that women were at risk from vaginal exposure). Thanks to the surgeon general and the National Academy of Sciences, we may soon see a government program of education.

"Education" will be a misnomer, of course.

The object of such a program will be behavior modification—a somewhat different concept. No doubt techniques to change behavior will nave to rely on simple and marketable messages. "Coke Is It" makes millions of dollars. Why not try "Condoms Are It" and perhaps

save thousands of lives?

Indeed, why not? It is plausible, even probable, that widespread use of condoms would reduce the incidence of infection with the AIDS virus, HIV. Still, the use of barrier protection may well leave a level of risk that some people, if fully informed, might find unacceptably high. We do not know how to solve this dilemma but are reluctant to see the content of AIDS education left at the level of propaganda for the "rugged condom."

The bliss of ignorance is all too temporary. A public that is ill-informed about AIDS runs two grave risks: 1) that it will in good faith make behavioral errors that have capital consequences and 2) that it will make too modest demands on the scientists and institutions responsible for learning about AIDS and dis-

seminating the information.

Here we list seven errors of inference that continually appear in discussions of AIDS—errors that can have consequences far more deadly than gluttony or sloth if not, under the

present circumstances, lust.

1. The error of unwarranted confidence. The usefulness of information about AIDS depends on its reliability, about which the reader often has to guess. We should not have the same degree of confidence in the number of cases reported to the Center for Disease Control, which can be stated with certainty, and estimates of prevalence of HIV infection. which rely on results from surveys and are consequently imprecise.

The error of inferring absence from invisibility. Some forms of transmission may be exceedingly difficult to document. For example, even if deep kissing can transmit HIV, it may be impossible to find cases of AIDS in whom this was the only sexual exposure to an

infected partner.

3. The error of covert assumptions. Epidemics are historical phenomena. They are born, they thrive and, like old soldiers, they either fade away or become part of the landscape. Ignoring this dynamic nature can result in underestimation of risk: people who do lots of things with lots of partners get a head start in the statistics; they don't necessarily get a monopoly.

4. The error of ignoring the confounders. AIDS is associated with homosexuality, promiscuity, anal intercourse, living in New York or California and with other individual characteristics, but these characteristics are associated with each other. It isn't currently possible to untangle the independent contribution made

by each of them.

5. The error of projecting from ratios. To date, homosexual contact is believed to be responsible for almost 20 times more cases of AIDS than heterosexual contact; among cases attributed to heterosexual contact, there are five times more women than men. It is tempting but invalid to make inferences about the future course of the epidemic from these ratios.

6. The error of biased comparisons. The high prevalence of HIV in gay men at clinics for sexually transmitted diseases is often compared with the very low prevalence among heterosexual blood donors, but the two groups differ in many ways besides sexual preference.

7. The error of jumbling one's stereotypes. This is both the most transparent and the most pernicious of fallacies. Most pernicious when fear of contagion, even if irrational, is treated as an appropriated basis for policy. Most transparent when it's done with images-as on a television documentary that cuts from interviewing a patient disfigured by Kaposi's Sarcoma (apparently the result of sexual contact with an intravenous drug user) to scenes from a singles bar.

The question of the year has been: Will HIV spread to the "general population"? This is really a poorly stated mix of two questions: What are the characteristics of a population that can sustain an epidemic of HIV? And who, besides gay men and IV drug users, shares these characteristics? These questions will not be answered soon, and the public fears will undoubtedly mount as the incidence of AIDS continues to rise in all categories of people at risk. Press coverage seems to vacillate between scare tactics and bland assurances that only promiscuous homosexuals and IV drug users are at significant risk,

Without a high quality of information on the AIDS epidemic, there is really no choice between extremes of panic and complaisance. Urgent as behavior modification clearly is, education should remain a distinct and equally important goal.

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