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Testimony of:

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House Government Reform Committee

Subcommittee on Criminal Justice, Drug Policy and Human Resources

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Good morning, Mr. Chairman, members of the committee. My name is Jonathan Zenilman. I am Professor of Medicine at The Johns Hopkins University School of Medicine, and Chief of the Infectious Diseases Service at the Johns Hopkins Bayview Medical Center. My area of research and clinical expertise for the past 18 years is in sexually transmitted infections. I am also the President of the American STD Association, which represents 450 academic and public health researchers in the area of sexually transmitted infections. I am also a practicing physician, and take care of patients with reproductive tract infections at the Baltimore City Health Department and in my own academic practice at Bayview Medical Center.

More important, I am the proud father of three teenagers, one of whom, Aliza Zenilman, is with us this morning. I thank Congressmen Cummings, Souder, and the Committee for extending their warm welcome to her today.

I address this committee as a private individual, a physician, who counsels patients and their partners about HPV and other sexually transmitted infections; as a public health practitioner; and as a father who gives patients the advice that I give my own children.

We are hearing today that HPV infection is almost always asymptomatic, and is extremely common. In adolescents and young adults alone there are an estimated 9-10 million persons with chronic infections and 4.6 million *new* cases per year.

Some strains of HPV are associated with the development of cervical cancer. HPV strains are classified by number. Strains 16, 18, 31, 45 and about a dozen others are associated with cervical cancer-and are often called "high-risk types". Recent studies we have performed in a Hopkins suburban clinic Baltimore, the proportion of women infected with high risk types of HPV is 14%, and it is higher

in persons of color, in persons with HIV or those at risk for other reproductive tract infections. In fact, extrapolating from the National and local data, I would estimate that at least 1 in 6 adults in this hearing room are presently infected with HPV, and 75-80% of persons will have been exposed and infected at some time during their life. New data also suggests, that nearly 90% of persons infected spontaneously clear (or self-cure) the virus.

Cervical cancer is the most important adverse outcome of HPV infection. Let me emphasize that Pap smears are actually a screening test for a cancer that is caused by a sexually transmitted viral infection. Since it takes an average of 10 years or more for cancer to develop, the Pap smear screening program, in combination with recently implemented additional testing for the virus itself, is extremely effective in preventing cancer. The implementation of Pap smear screening has been a resounding public health victory, as evidenced by a continual decrease in cervical cancer rates. The current most effective means of preventing cervical cancer is to ensure that American women have universal access to Pap smear screening and to the subsequent treatment of identified cervical abnormalities.

Last year, researchers published results from a large clinical trial demonstrating that a vaccine was highly effective in preventing infection with HPV-16, one of the major viruses that cause cervical cancer. Trials are currently underway testing the vaccine against the viruses many subtypes. Based on these very promising data, we expect that a vaccine would be available for distribution to the general public in about 5 years.

In terms of primary prevention of HPV and other sexually transmitted infections, we try to give our adolescents and young adults a moral compass that will help them in making informed decisions regarding their sexual health. A British colleague of mine once said, "the most effective contraceptive is ambition," which requires us as a nation to provide an environment of educational and economic opportunity, as well as positive recreational outlets for our young people".

Effective prevention of risky sexual behavior and their consequences, teenage pregnancy and sexually transmitted infections, requires 2 critical components:

- Accurate, science-based information on reproductive health and prevention of infection and pregnancy.
- A social, peer and family environment that promotes responsible decision-making, allowing teens to make an informed choice.

Despite progress in the past few years, the average age of first intercourse for American teenagers is still a bit under 16, which means that half of American teenagers are initiating sexual intercourse while still at a very young age. This is the group at highest risk for sexually transmitted infections. Over 90% of Americans have had sexual intercourse by the time they are 25.

Delaying sexual intercourse is a public health message that I and all reproductive health professionals support -- in tandem with counseling on responsible sexual behavior. An abstinence-only approach which excludes safer sex messages, and includes messages that emphasize intercourse only within the context of marriage is therefore clearly out of touch with the realities and practices of the vast majority of Americans. We are performing a disservice by focusing only on an abstinence-only approach.

In order to reduce the burden of STDs, a clear, two-pronged approach is required, and supported by over 60 years of public health experience and research. First, abstinence is the best way to protect against human papillomavirus (HPV) and other sexually transmitted diseases. The second is that when you become sexually active, use effective contraception and condoms.

Condoms are highly effective in preventing sexually transmitted infections, including genital herpes and HIV infection. In the latter case, condom use is lifesaving. In communities where condom use has been universally adopted and supported, dramatic and striking decreases in overall STD and HIV infection rates have been observed.

Current proposals to provide questionable warning labels and to undermine public confidence in condoms will not reduce the number of persons engaging in risky sexual behavior, and they will clearly not reduce the prevalence of HPV nor of other sexually transmitted infections.

Much has been made of the recent NIH report on condom efficacy. That report noted that "the scientific evidence currently available is not sufficient to recommend condoms as a primary prevention strategy for the prevention of genital HPV infection." However, this statement has been widely misinterpreted. It does not say that condoms are ineffective, and in fact, there are promising data to suggest that they are.

The same report noted that there is evidence that condom use may actually reduce the risk of cervical cancer. Possible explanations for the protective effect of condoms against cancer may be that condom use reduces the quantity of HPV transmitted and the likelihood of re-exposure to HPV, as well as exposure to a co-factor for cervical cancer, such as chlamydia or genital herpes, which have been identified as potential co-factors for cervical cancer development.

As a parent, I want public policies that are reality-based and provide the resources necessary for my children, along with my patients to protect themselves. I want them to have access to medically accurate sexuality education. I want to see support for research efforts to develop and make vaccines and other prevention interventions.

Unfortunately, the debate on human sexuality, sexual behavior and sexually transmitted infections is all too often framed in an absolutist, stark context, in which only simplistic solutions are framed to address inherently complex behavioral and social questions. This is not a new phenomenon.

More than 60 years ago, Dr. Thomas Turner was a Colonel in the US Army during World War II, and was in charge of the venereal disease control effort for 14 million servicemen and women. He was to serve as the Dean of The Johns Hopkins University School of Medicine in the 1950s and 1960s, and died in 2002 at the age of 100. I had the privilege of getting to know Dr. Turner in the late years of his life.

During World War II, Dr. Turner and the Army were faced with the same dilemma we now seem faced with as the nation develops policies and practices designed to prevent and control STDs. As only he could, he described the difficulty in providing expedient and simplistic approaches in almost poetic terms.

I quote:

...If a soldier remained continent he would not acquire venereal disease; many did remain continent, but no one in his right mind would expect this of a high percentage of men in their most vigorous and disorganized years....

.....The first paradox, therefore, was preaching continence as an official doctrine while simultaneously providing instructions and facilities for prevention of disease during and after sexual intercourse. We were repeatedly impaled on the horns of this dilemma. Some worthy folk urged a firm stand on a high moral plane; others accused us of crass hypocrisy....

Dr. Turner held steadfast in pursuing a pragmatic solution, and I implore you to follow Dr Turner's lead in approaching today's STD problem.

Thank you for allowing me to testify today.