What Saudi women don’t know is killing them

Dozens of types of human papillomaviruses (HPVs) have been identified. While low-risk HPVs cause skin and genital warts, high-risk HPVs can lead to cancers of the cervix, vulva, vagina, penis, oropharynx, and anus. Recent studies have reprted that HPVs play a role in approximately 70% of all cervical cancer cases. Little is known about the prevalence of HPV and the survival of infected patients in Saudi Arabia because an unsubstantiated assumption of a low prevalence of HPV in this conservative country has limited their HPV research. Therefore, our review sought to shed light on the true prevalence of HPV and on the current HPV research being conducted in Saudi Arabia.

Abnormal cervical cells can be detected with a Pap test, and most laboratories worldwide perform this test as a primary screen. The presence of an HPV infection is detected using DNA- and RNA-based assays. DNA-based assays are best for HPV detection and typing in the early stages of infection, but once the disease progresses, RNA-based assays are more accurate. However, compared with HPV DNA-based assays, both direct and indirect detection of viral gene transcripts are more specific for detecting clinically relevant infections. The use of this approach has already established that high-risk types HPV-16 and HPV-18 account for over 70% of all invasive cervical cancers.

The prevalence of HPV infection in Saudi Arabia is controversial. Some researchers claim that the rate of HPV infection in Saudi Arabia is the lowest in the world, while others show an alarmingly high percentage, with approximately 10% to 43% of participating Saudi women testing positive. We determined that these discrepancies may be attributable to the use of different detection techniques. In contrast to this controversy, the results of two separate studies were in line with worldwide findings, showing that 89% and 95% of Saudi women with cervical cancer tested positive for HPV, with high-risk HPV-16 and HPV-18 being the most common genotypes.

Although cervical cancer can be prevented and some women survive the disease, most Saudi women are unaware that they have cervical cancer until signs of advanced stages appear. These women must then undergo extensive treatments and have lower survival rates. How can cancer reach advance stages without the knowledge of these women? The answer may be a combination of a lack of implementing the Pap screening in the primary care clinics and a lack of awareness about the necessity of annual Pap smear and HPV testing. One study we examined analyzed 1023 self-administered questionnaires answered by women in the western region of Saudi Arabia. The study determined that 37% of the participating women had never heard of a Pap test, 95% did not have regular Pap tests, and most had never had a Pap test. Most participants (84.6%) did not know what HPV was. Another recent study conducted at three hospitals in Saudi Arabia showed that only 32.2% (101/314) of the participating women knew about HPV. Unfortunately, reports also indicate that Saudi healthcare professionals lack awareness of HPV infection, screening, and vaccination.

We concluded that current estimates for the prevalence of HPV in Saudi Arabia are derived from

hospital-based studies. Thus, the true prevalence of HPV in Saudi Arabia cannot be estimated until a national study examines Saudi women in all 13 provinces. We also found that awareness programs are critically needed to educate the public about the importance of Pap testing and available vaccinations for the prevention of cervical cancer.

Publication

Current studies on human papillomavirus in Saudi Arabia.
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