

Cervical Cancer Prevention in Pakistan

World Health Organization (WHO) has predicted that by 2030, almost half a million women will die of cervical cancer, and over 98% of these deaths are expected to occur in developing countries such as Pakistan.

This preventable disease is the third largest cancer killer of women after breast and oral cavity, in Pakistan.¹ Most women die in the prime of life, when they are bringing up children, with devastating consequences to their family.

Prevention is possible, but these preventive measures remain largely inaccessible to the majority of women who need them the most.

Preventive measures include: reduction in the number of sexual partners, safe sex practice, regular Pap smears / Visual inspection with Acetic acid (VIA), HPV vaccination and cessation of smoking tobacco.²

Despite the proven link between the Human Papillomavirus (HPV) and cervical cancer, HPV vaccines are not yet widely available and screening rates remain low in Pakistan. Government or professional organizational guidelines haven't been issued. In the absence of organized screening, opportunistic screening occurs, mostly in private practice, missing out on most of the under-privileged women who are at increased risk of cervical cancer. Early marriage is another risk factor prevalent in Pakistan. According to the latest Pakistan Demographic Health survey, women marry at a median age of 19.5, and 8% of teenage women are

pregnant with their first child or are already mothers having their first birth at a median age of 22.2 years.³ Polygamy is legal in Pakistan, with 4% women & 3% men in a polygamous relationship.³ Extra-marital sex (heterosexual & homosexual) and prostitution are also prevalent, though not openly discussed or acknowledged. Smoking cigarettes, Shisha and chewing tobacco in "pan" (betel leaf) is also rampant, adding to the risk factors for cancer development.

It makes sense for Pakistan to follow the example of developed countries, and neighboring Muslim countries (e.g. UAE, Saudi Arabia), with comprehensive vaccination, screening and early treatment. This would significantly reduce morbidity & mortality of Pakistani women.

In a small pilot study from Karachi, Raza et al found HPV 16 & 18 in 24% of HPV+ve women in the general population. In women with invasive cervical cancer (total 91), 88% were HPV 16 and 18 positive, 75.8% had HPV 16, 6.6% had HPV 18, while 4.4% were positive for HPV 45.⁴

Pakistan should adopt the WHO guidelines⁵ for Primary prevention with HPV Vaccination

And start organized Pap smear screening campaign throughout the country.

WHO recommends that routine HPV vaccination should be included in National Immunization Programs, because:

- Cervical Cancer /or other HPV-related diseases constitute a public health priority
- Vaccine introduction is programmatically feasible

- Sustainable financing can be secured

Vaccines should be introduced as part of a coordinated strategy that includes:

- Education about reducing behaviours that increase the risk of acquiring HPV

Cervical screening

- Diagnosis/treatment of precancerous lesions and early treatment of cancer cervix

Vaccinating older adolescent females or young women is only recommended if:

–Significant proportion is likely to be naïve to vaccine HPV types

- Feasible, affordable and cost-effective
- Does not divert resources from vaccinating primary target population or effective cervical cancer screening.

Vaccinating males is not recommended at this time because

- Coverage of >70% young adolescent girls is expected to be more cost-effective than vaccinating both girls and boys.

Professional organizations such as the American College of Obstetricians and Gynecologists, the American Academy of Pediatrics, and the Society for Adolescent Medicine have published similar guidelines.

The Asian Cervical Cancer Prevention Advisory Board (ACCPAB) is advocating the adoption of preventive measures, including HPV vaccination, with a view to protect all women.

ACCPAB recommends HPV vaccination in Asian women, before initiating sexual activity. However sexually active women, including those aged over 25 years, will also benefit from HPV vaccination.

If cervical screening has been performed, screen-negative women should be vaccinated. Women who

are screen-positive should be managed according to local guidelines and vaccination should then be administered. Because women who have an abnormal Pap test may be infected with any of the oncogenic HPV types, they should be informed that the vaccines can only provide protection against the HPV vaccine types not already acquired.⁶

Suggested protocol for Cervical Cancer Prevention in Pakistan

Primary Prevention: HPV Vaccination

Dosage for Bivalent Vaccine:

2 dose regimen: 0 & 6 months for girls 9-14 yrs (in school or just before leaving school)⁷

3 dose regimen: 0, 1 & 6 months, for girls 15 -26 yrs of age, preferably before marriage

Dosage for Quadrivalent Vaccine:

3 dose regimen: 0, 2 & 6 months, for girls 9-14 yrs (in school or just before leaving school).⁷

Either of the two available vaccines may be employed.

Secondary Prevention

Regular Pap Smears or VIA screening should start after 5 yrs of marriage at 5 yearly intervals.

By the age of 35 years at least one Pap Smear or VIA screening should be done

Stop doing Pap smears at 65 years age if previous smears have been normal, and no other risk factors are present.

Lack of awareness and deep-seated stigma associated with cervical cancer pose significant barriers to prevention. We need to play a greater role to create awareness amongst Gynaecologists, Paediatricians, other physicians, women and general public.

Paediatricians should add HPV vaccination to the list of Vaccines to be administered on the Child's

vaccination schedule card. They should further advise those girls (and their mothers) who are not vaccinated early (age 9-14 years), that they must get vaccinated before marriage. Seeking a pre-marital consultation with a gynaecologist or family physician is also to be promoted, so that she gets health and contraceptive advice, and get HPV vaccine as well before marriage.

The Gynaecologist community must play its role in advocacy for prevention and early treatment of this preventable cancer.

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