Article published online: 2020-12-28

Letter to the Editor

Limitations of cytological cervical cancer screening (Papanicolaou test) regarding technical and cultural aspect in rural India

DOI: 10.4103/2278-330X.181646

Dear Editor,

We read and discussed the articles with interest and curiosity. "Expected efficacy of HPV vaccine in prevention of cervix cancer in Thailand.[1]" In the above context, we would like to share our experience regarding technical and cultural limitations of Papanicolaou (Pap) smear test in rural Maharashtra, India. However, adjuvant role of HPV vaccine with Pap test may be helpful in developing countries like India to tackle the menace of cervical cancer.

The Pap test is the only test in our practice settings that has been used in widespread screening programs and has been conclusively shown to reduce the incidence of and mortality from the cervical cancer. Some potential barriers to obtaining a Pap test as per our study were[2] – A general lack of knowledge about the disease, and lack of familiarity with the concept of the preventability of cervical cancer. Limited public health services especially among rural sectors. Lack of family support. Geographical and economic inaccessibility of care after an "abnormal" Pap test interpretation and/or a diagnosis of cervical cancer. Social and cultural stigma associated with reproductive health problems, cancer and a – 'sexually transmitted disease'. Patient's desire to avoid the loss of privacy due to Pap test or with the pelvic examination.

The absence of trained personnel, including the failure to obtain an adequate smear by the clinician, and the incorrect interpretation of the smear by inexperienced person are the potential reasons for failure in cervical cancer screening. Their limited availability makes cytology-based screening, laborious and cumbersome for the pathologist.

In rural India, socio-cultural issues associated with sexuality between a man and woman, in and outside of marriage, remain. Interestingly, the lowest rate of participation is in unmarried and nulliparous women, possibly due to ignorance and fear of social stigma if they had a positive test results. As the parity of women increased, they were somewhat more likely to participate. Socially, this may be related to less inhibition for gynecological examination after a child birth. Poor socioeconomic status itself is a risk factor for the development of cervical neoplasia. In India, these limitations are an amalgam of logistical, financial and socio-cultural issues.

As per our observations from our study, the reasons for failure of cervical cancer screening in rural Maharashtra are multifactorial and to be summarizing as on the behalf of:

- Patients – Not participating in regularly scheduled screening, when asymptomatic. Social and cultural taboo of a sexually transmitted disease
- Clinicians – Not obtaining an adequate smear; improper counseling of patients. Lack of follow-up or inadequate management
- Pathologists – Lack of cytotechnologists. Lack of proficiency and interpretative errors
- Tumor biology – Rapidly developing invasive carcinoma.
- Health care system – Lack of good publicly funded screening programs with outreach to target population.

To summarize,

"Preventable but not prevented" - is the reality of cervical cancer today, at least in developing countries like India.[3] Hence, HPV vaccine may be the adjuvant to Pap test in India to prevent cervical cancer. However, due to limitations such as cost and gender, lack of follow ups further studies should be undertaken to see the feasibility of the vaccination in the future.

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How to cite this article: Nikumbh DB, Nikumbh RD, Kanthikar SN. Limitations of cytological cervical cancer screening (Papanicolaou test) regarding technical and cultural aspect in rural India. South Asian J Cancer 2016;5:79.