

Human papilloma virus and cancer of the cervix: A challenge facing Nepal

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Carcinoma of the cervix is a major cause of morbidity and mortality in Nepal, as in other countries within South Asia and developing countries worldwide where some suggest it causes 34% of all cancers in women¹. A recent report suggested that it was the commonest cancer seen in the women of Nepal².

The existence of clinically detectable pre-invasive lesions opens the possibility of screening programmes and although controversial, it is possible that a comprehensive programme can prove effective in reducing deaths from cervical cancer³. Cervical screening has been investigated⁴ and is underway in Nepal though hampered by the lack of a cohesive health care system and general poor awareness amongst patients.

Research has demonstrated a causative role for specific subtypes (16, 18) of the Human Papilloma Virus (HPV) in the formation of precancerous lesions (cervical intraepithelial neoplasia) and subsequent progression to invasive cancer and the mechanisms of this transformation are understood at the molecular level⁵. This goes some way to explaining the observation that epidemiologically, cancer of the cervix is a sexually transmitted disease. The ongoing development of vaccines against HPV subtypes is beginning to yield promising results^{6,7,8} and it seems likely will prove effective in dramatically reducing the incidence of cervical cancer. However this raises a number of issues that will influence public health provision for Nepal.

Firstly is the issue of if, as seems likely, cancer of the cervix in Nepal is HPV related, which subtypes are responsible? Accurate data is essential in determining which of the potential vaccines would be effective. If HPV is the cause then a more detailed study into the sexual habits of the population is clearly overdue. If cancer of the cervix is not HPV related then what are the causative factors and in the absence of an imminent preventative vaccine there is an urgent need for a comprehensive public education and screening programme.

Assuming HPV is the causative agent then who should be vaccinated and when, and importantly how will this be funded. Recent moves are underway for the international funding of vaccine programmes⁹. As the latency of infection and incubation period may be up to 20 years then some form of screening will be required until a successful vaccination programme takes effect.

As the goal of effective vaccines to prevent a common cancer grows nearer there are many questions that need answering before an effective programme can be commenced¹⁰. Investigation of the disease with respect to HPV causality within the context of Nepal is vital in order to make informed decisions affecting the public health of the nation.

References

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