

Prevalence of carcinogenic human papilloma virus infection and burden of cervical cancer attributable to it in the district of Gampaha

MD (Community Medicine) - 2009

D 2167

The present study was designed with the objective of determining the prevalence of carcinogenic Human Papilloma virus (HPV) infection and its determinants among ever married women between 20-59 years of age in the district of Gampaha. It also aimed to estimate the proportion of cervical cancer attributable to HPV infection and to estimate the unit cost incurred by the government in screening for early detection of cervical cancer and the precancerous stages. The study consisted of three components; a community based descriptive cross sectional study, a hospital based case control study and a clinic based cost estimation study. A total of 2000 study subjects were selected using a multistage stratified cluster sampling technique for the community based descriptive cross sectional study. Hundred clusters comprising 20 subjects in each were selected by probability proportionate to size of the population in "Grama Niladhari" (GN) divisions. Eligible women within the cluster were recruited according to population proportions of ever married women in each ten year age category. Information on socio demographic, SOCIO economic, reproductive health and sexual health related factors relevant to HPV infection was collected using an interviewer administered questionnaire. Cervical swab specimens for HPV DNA detection and Papanicolaou specimens for detection of cervical cytology were collected from all study participants. The study revealed that the overall prevalence of cervico vaginal HPV infection among clinically normal women was 3.3 percent (95 percent CI 3.15 - 3.44). HPV prevalence among cytologically normal women was 3.1 percent (95 percent CI ,2.96-3.24) and the prevalence of highly carcinogenic genotypes 16 and 18 was 1.2 percent (95 percent CI 1.15-1.25). A case control study was carried out among 40 newly diagnosed cervical cancer patients originated from the district of Gampaha and presenting to the Cancer Institute, Maharagama. Four controls per case were randomly selected from the same G area as the participant matched within the 10 year age groups. The selected controls were examined to ascertain their cervical cancer status. None of the selected controls had abnormal cervical cytology.