

CHAPTER V

DISCUSSION

In Thailand, cervical cancer is the most common malignancy of all female cancers (9). The estimated number of cases was reported to be about 74.9% of gynecological cancers worldwide (10). Although a conventional cervical cytology screening method is routinely used to detect precancerous and cancerous cervical lesion in Thailand and many developing countries; its sensitivity is relatively low comparing to ThinPrep Pap test (11). Recently, liquid based “monolayer” cytology (LBC), combined with human papilloma virus testing, is replacing conventional smear for cervical screening in several countries (including the United states and Switzerland).

Persistent HPV infection with high risk subtypes has been shown to be a strong risk factor for cervical dysplasia and cervical cancer (12). The worldwide prevalence of HR-HPV infection from the study of Clifford GM, et al (10), including 15,613 cytological normal women of 13 areas from 11 countries, ranged from 1.4% to 25.6%. In Thailand, the previously reported prevalence of HR-HPV varied by the location of the study center, by the selected population, and by the detection technique. Bangkok centered studies found the HR-HPV prevalence of 8.2% (9) and 8.7% (13) in general population; of 6.2% (9) and 7.8% (13) in negative cytology women; of 5.7% in women older than 45 years (14); of 9.8% in HIV infected women (15) and of 23.4% in HIV infected pregnant women (16). Songkla centered studies found the HR-HPV prevalence of 3.9 (17) and 4.6% (18) in general screening population; and of 22.9% in sex worker women (18). HR-HPV was found in 9.1% of women from Lampang center. (17) The prevalence of HR-HPV infection in this study that enrolled women from northern Thailand (12.80% of screening cases, and 8.55% of negative cytology cases) was high comparing to the other part of the country.

The previously reported rates of HR-HPV detection in ASC-US cytology varied from 29.1% (19) to 44.4% (20), 51.0% (21), and 53% (22). The present study found high prevalence (51.61%) of HR-HPV in ASC-US cytology from the screening population.

The previously reported interobserver agreement of interpreting ThinPrep cervical cytology specimen varied from substantial $k=0.63$ (23) and weighted $k=0.74$ (24) to almost perfect ($k=0.84$) (25). The ASCUS-LSIL triage study (ALTS) trial demonstrated fair agreement (weighted $k=0.59$) from the monolayer specimen (26). The authors have found substantial agreement (weighted $k=0.62$) from the LiquiPrepTM specimen (4). Interobserver reproducibility of ThinPrep cytology in this study was also substantial (weighted $k=0.76$).

In conclusion, (1) the prevalence of HR-HPV infection in the screening cases of this studied population (Northern Thai) was relatively high, comparing to the studies from the other regions of Thailand. (2) HR-HPV detection was found in the majority of cases with abnormal cervical cytology, including the ASC-US category. And, (3) the interobserver agreement of ThinPrep Pap test was good.

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Abbreviation:

HC2=Hybrid capture 2, HR-HPV=high risk human papillomavirus, ASC-US=atypical squamous cells of undetermined significance, ASC-H=atypical squamous cells cannot exclude HSIL, AGC=atypical glandular cells, LSIL=low grade squamous intraepithelial lesion, HSIL=high grade squamous intraepithelial lesion, SCCA=squamous cell carcinoma