



Karolinska Institutet

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Prevention of cervical cancer in rural Laos

ACADEMIC DISSERTATION

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ABSTRACT

Background: Cervical cancer has a major impact on the lives of women worldwide, but particularly those in low-income countries. The disease can, however, be prevented by a variety of screening methods aiming to detect pre-cancerous lesions that can be treated. The most common method, cytological screening is expensive and is not available in many low-income countries like Laos. Alternative screening methods have been proposed for these settings.

Aims: The overall objective was to evaluate if it would be possible to introduce a cervical cancer prevention program in Laos.

Methods: Structured interviews regarding knowledge, attitudes and practice relating to cervix cancer and its prevention were carried out among rural women (n=800, study I) and health care providers from provincial to health centres (n=261, study II). Semi-structured interviews were conducted with 12 key policy makers regarding the magnitude of the problems of cervical cancer and preventative strategies (study II). The feasibility, safety and acceptability of a preventative approach to detect the precancerous lesions by using VIA followed by immediate treatment with cryotherapy was evaluated among 1926 rural women (study III). Cervical cells of 1922 women were also collected onto a filter paper medium for further human papillomavirus (HPV) analysis.

Results: Overall, about half of the women seemed to have some knowledge about cervical cancer and risk factors for developing the disease but only very small number of women (5%) knew about screening and its benefits. Risk factors and symptoms related disease was not known among the majority of these women (study I). Only about 5% of the women had ever had a Pap smear. Nearly two thirds of health providers recognized that cervical cancer was the most common cancer in women (68%) and it is preventable (67%). Only 17% were able to correctly identify risk factors associated with cervical cancer. That early cervical cancer can be present without any symptoms was known only by 44% of providers. The key informants all stated that cervical cancer seems to be neglected in the health care system due to competing diseases, and a lack of data regarding the prevalence of the disease. They felt that it is necessary to draw the policy makers' attention to this issue in order to prioritize it within the reproductive health program. Among 1926 women VIA tested, 134 (7%) women were VIA positive and 113 (83%) were eligible for, and accepted, immediate treatment with cryotherapy. There was no report on major complication during or after treatment. Of those who had cryotherapy, 77 women (68%) returned for a one year follow up, and 68 (88%) were now VIA negative. VIA-positive women ineligible for cryotherapy, were referred for further investigation at the provincial hospital. Women stated that they found both VIA and cryotherapy highly acceptable (study III). In the HPV testing study 123 of 1922 women (11%) were found to be HR-HPV positive. There was no difference in distribution of HPV infection between age groups. The study also showed that the filter paper card was feasible and effective for collecting cervical cells for HPV-DNA analysis in this setting.

Conclusions

Our studies showed that there is a lack of awareness and knowledge among women, health care providers and policymakers in Laos regarding cervical cancer and its prevention. Despite of this, women had positive attitudes towards participation in the screening process in our study, using VIA and immediate treatment of appropriate lesions with cryotherapy. This approach proved to be simple and feasible to perform in the rural setting, with no significant complication reported. Among the women in our study 11% were infected with some type of HR-HPV thus making them at risk for developing cervical cancer. If testing for HR-HPV would be an option for a preventative strategy in Laos, our study using the filter paper cards demonstrated that this could be a potential method in the tropical region

Key words: Knowledge, attitudes, practices, women, health care providers, policy makers, VIA, HPV, Laos.

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