



Cervical Cancer

Current Status of Cervical Cancer Prevention and Screening in Myanmar

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In Myanmar, the cervical cancer burden is still noticeably high, and it is still a leading cause of cancer-related deaths among Myanmar women. According to the GLOBOCAN 2020,¹ age-standardized incidence of cervical cancer in Myanmar was 22.6/100,000 women, whereas it was 14.5/100,000 for mortality. It was said to be the first most common female cancer.

However, according to executive report of Yangon PBCR,² age-standardized incidence was 19.5/100,000 in 2018 for Yangon region. Naypyidaw PBCR report of 5 consecutive years from 2013 to 2017 stated that age-standardized rate (ASR) was 14.1/100,000, and it is the eighth leading cause of cancer death in both sexes combined and the fourth in female.³ According to hospital statistics, cervical cancer is the second most common female cancer after breast cancer.⁴

Myanmar was selected as one of the countries for United Nations Global Joint Program (UNGJP) for cervical cancer prevention and control since 2017. With the technical assistance of UNGJP, Myanmar tries to improve all the three pillars of cervical cancer prevention, that is, primary, secondary, and tertiary preventions, as well as development of palliative care centers and population-based cancer registries.

As for primary prevention, human papillomavirus (HPV) vaccination was first introduced in Expanded Programme of Immunization (EPI) program as 13th new vaccine for 9-year-old girls as a single age cohort since 2020. First dose of HPV vaccine was planned to be introduced in 2020 with both school-based and community-based strategies.

For secondary prevention, guidelines for screening and treatment of cervical precancer in public health care facilities were published and launched in 2018. In this guideline, hybrid approach based on both HPV DNA and visual inspection with acetic acid (VIA) testing is adopted. Since 70% of the eligible population resides in the rural areas, VIA testing is not feasible to apply for those regions with limited human resource. HPV DNA testing with self-collected samples is planned to be used in rural areas. In urban and suburban areas where there are enough health care personnels who can perform VIA testing, the primary screening test would be with VIA. HPV testing is aimed to be used for the whole country when enough resources are available. In community setting, screening age is 30 to 49 years, while in hospital setting, up to 65 years are screened mainly with cytology and HPV tests if it is readily available.

Treatment of the screen-positive women is mainly by the ablative method for both VIA and HPV testing in community settings. Thermal coagulation is the preferred ablative treatment after visual assessment test (VAT) in HPV-based screening. Here, ablation of the whole transformation zone even without obvious lesion after VAT is also offered after thorough counseling for those women from remote areas who prefer less frequent visits. Precancerous lesions which are not eligible for ablative treatment or suspicious of cancer are referred to tertiary care centers where colposcopy and large loop excision of the transformation zone (LEETZ) procedure surgery as well as laboratory facilities are available.

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The National Cervical Cancer Prevention and Control Program has been implemented since 2019, and it aims to provide cervical cancer screening services at the primary health care level, training of the health care workers, and awareness raising activities. The Ministry of Health and Sports has been working to increase access to cervical cancer screening services in Myanmar, with a particular focus on women in remote and underserved areas.

Implementation of the screening program was planned to start in 2020 in Northern and Southern Shan State and Yangon Division in a total of 16 townships using hybrid approach. Development of the operational plan, training module in Myanmar language, cost analysis, HPV test kits purchase, etc. were began in 2019. Master Mentor Trainings were started in the beginning of 2020. However, owing to coronavirus disease 2019 pandemic, the plan could not be carried out.

Whatsoever, in 2020, more than 90% of 9-year-old girls got their first dose of HPV vaccine in a community setting since schools were closed during the pandemic even though it was planned as school-based immunization. According to Myanmar human papillomavirus and related cancers fact sheet by The Catalan Institute of Oncology Information Center (ICO)/International Agency for Research on Cancer (IARC) Information Centre on HPV and Cancer (2021),⁵ the vaccination coverage was estimated to be 99% for both first and second doses.

Due to the pandemic, national screening program for the initially planned townships could not be put into operation. Instead, in late 2021 and beginning of 2022, 9 out of 17 states and regions had the screening carried out as a pilot project. There, only HPV-based screening with careHPV test is used which is suitable for mass testing while also being cost effective.

Screening clinic of Yangon Central Women's Hospital started to use careHPV test since 2017 with 11.32% positive rate in 2019.⁶ Positive rate is a bit higher than general population due to the fact that the data included those of symptomatic women. The studies by Shwe et al in 2018 and 2021^{7,8} reported that positive rates in general population were 5.5 and 4.6%, respectively.

Until recently, screening in private sector was not widely applied here in Myanmar. Myanmar Medical Association will collaborate on cervical cancer screening by organizing awareness raising activities as well as training of general practitioners (GPs) for screening and treatment methods. Previously, it was only performed by obstetricians and gynecology in private settings, but now GPs are also being included in the screening process. Training for GPs mainly focuses on VIA and visual inspection with Lugol's iodine testing. This is because a lot of the patients who visit GPs cannot afford expensive tests and so in order to be screened cost effectively, these tests become the priority. The sample collection for cytology and HPV test training are also given to GPs. In addition, the GPs who are dedicated will also be trained on ablative treatment procedures. The private sector screening is now currently being carried out mainly in Yangon Division.

There are many nongovernmental organizations and international nongovernmental organizations performing screening and treatment of cervical precancer in various

regions of Myanmar mainly using VIA as the primary screening test followed by ablative treatment. Most of them use see and treat single-visit approach since they cover hard to reach areas.

HPV DNA testing with self-sampling is also offered for those women who wish to do so, and, there is an ongoing study for self-sampling in Yangon Central Women's Hospital. Although the study has not been completed yet, the available results to date are quite promising and seem to be applicable to women in rural areas.

There have been a lot of challenges in secondary prevention. Fragmented screening services with different screening and treatment methods make monitoring and data collection difficult along with limited number of workforce in community levels. Robust quality assurance and quality control systems are also mandatory to develop.

To sum up, there has been a considerable progress in cervical cancer prevention in Myanmar within these years. However, there remain some challenges that must be overcome. It is important that continued efforts are made to increase access to screening and follow-up treatment in Myanmar to reduce the burden of cervical cancer in the country.

Conflict of Interest

None declared.

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