

Editorial

The Role of Social Obstetrics and Gynecology in the Coverage of Cervical Cancer Screening in the Era of Health Transformation in Indonesia

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Cervical cancer remains a major concern in Indonesia, with statistics from the 2021 Indonesian Health Profile showing that it ranks second only to breast cancer in terms of incidence, with 36,633 cases (17.2% of all cancers in women). Furthermore, it has a significant mortality rate, with 21,003 deaths (19.1% of all cancer-related deaths). When compared to the incidence of cervical cancer in 2008, there is a twofold increase.

According to GLOBOCAN 2020 data, Indonesia continues to have a substantially higher incidence of cervical cancer (24.4 per 100,000 population) than other emerging nations such as Malaysia and India. The incidence of cervical cancer in Indonesia is still very high, even when compared to wealthy nations like Singapore, which is Indonesia's neighbour.

The contributing factor to this high incidence rate is the low screening coverage. Until 2021, only about 6.83% of women aged 30-50 years underwent cervical cancer screening with the VIA method. In 2023, the screening coverage in Indonesia is 7.02%, with the target for cervical cancer screening coverage in 2023 being 70%.

Without fast and effective action, these cervical cancer rates will continue to rise, causing a significant socio-economic burden and a decrease in the quality of individual life. Social Security Agency of Health (*BPJS Kesehatan*) notes that cervical cancer is ranked second in catastrophic illness, with costs amounting to around Rp 3.5 trillion for 2.5 million cases in 2020. Approximately 70% of cancer patients arrive at an advanced stage, incurring high treatment costs, and this situation certainly burdens the Social Security Fund of Indonesia.

In the midst of these challenges, Indonesia's efforts to accelerate the improvement of cervical cancer prevention are related to the transformation of the healthcare system, which includes five pillars of healthcare transformation: primary care transformation, referral service, healthcare financing system, healthcare workforce, and healthcare technology. These five pillars can support two strategies for cervical cancer prevention, namely primary prevention through HPV vaccination and secondary prevention through early detection of cervical cancer.

The development of innovative screening methods and prevention approaches has become essential in addressing the challenge of screening coverage to make it more effective, affordable, and easily accessible. The cervical cancer screening methods used in Indonesia include VIA, Pap smear, and HPV DNA testing, as well as HPV DNA testing and VIA (co-testing).

VIA remains the preferred screening method due to its affordability compared to HPV DNA testing and Pap smear. However, the challenge is that, in addition to training healthcare personnel, a comprehensive referral process needs to be established for positive results if they cannot be managed at the primary healthcare facilities.

Another screening method is HPV DNA testing, which has a very high sensitivity, ranging from 80-95%. It is more effective in detecting precancerous lesions and can be performed by untrained healthcare personnel, self-sampling, or collected from urine samples. Some studies suggest that the concordance between samples taken by healthcare professionals and those taken by patients themselves is not significantly different, ranging from 80-95%. Currently, research has been conducted in various countries, including Indonesia, to develop HPV DNA testing using urine samples to make the screening process more accessible. Some of these studies reported that the sensitivity of HPV DNA testing from urine samples ranges from 63.9% to 87.5%. In addition to its high sensitivity, both self-administered HPV DNA testing and urine-based testing can accommodate unscreened patients due to factors like embarrassment, lack of time, and transportation obstacles that hinder screening.

Despite having many advantages, the implementation of HPV DNA testing in Indonesia still faces the challenge of high costs. However, there are now locally produced HPV DNA tests available at a lower and more affordable price, which was originally priced at Rp 600.000-800.000 but has now been reduced to Rp 148.850. Therefore, the estimated costs incurred when using the screening method multiplied by the number of women of reproductive age who are required to be screened with HPV DNA testing amounts to Rp. 4.422.641.281.650.

Considering that cervical cancer has wide-ranging health and socio-economic impacts on women in Indonesia, it is necessary to have more stringent regulations requiring women to undergo routine screenings. The Role of Social Obstetrics and Gynecology has the potential to support cervical cancer screening coverage and help reduce the extensive impact of this disease by developing evidence-based strategies. Efforts to improve cervical cancer prevention should be continuously promoted by various stakeholders. Likewise, the subsequent management of all these screening methods requires referral services with fast and integrated access and coordination between screening centres and healthcare facilities. Collaboration between the Central and Regional Governments, Hospitals, Community Health Centres, Professional Organizations, and the community is essential for the realization of better health and quality of life for Indonesian Women.

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