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Revolutionizing Cervical Cancer Screening in Asia-Pacific: Embracing a new era in HPV Self-Sampling

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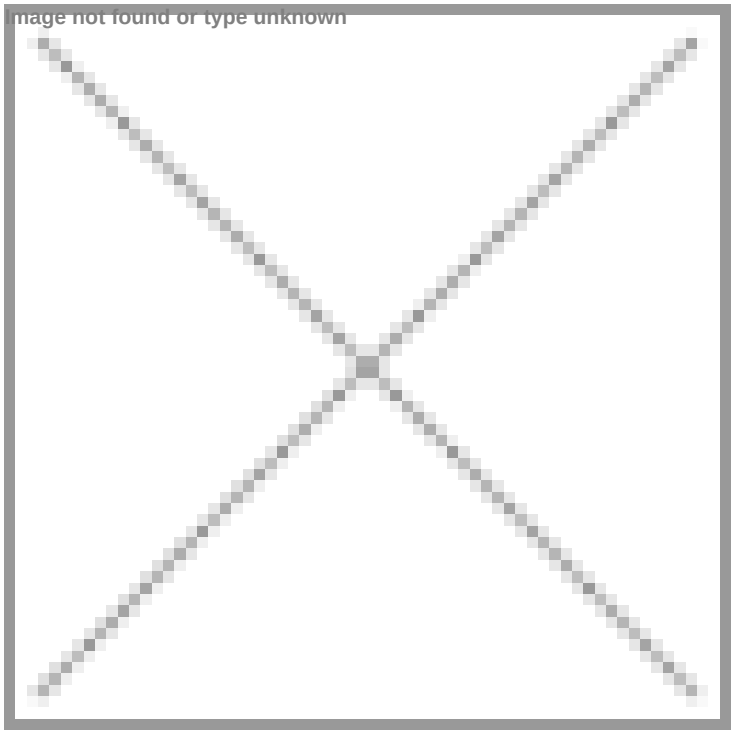
Dr. Ida Ismail-Pratt, President of The Society of Colposcopy & Cervical Pathology Singapore (SCCPS), spotlights the pivotal role of HPV(Human Papillomavirus) self-sampling for addressing barriers to cervical cancer screening and defining the next generation of cervical cancer screening. With SCCPS officially recognizing self-sampling as a valid alternative in its 2025 cervical cancer screening guidelines, innovative approaches are set to expand access to care in Asia-Pacific and beyond. HPV self-sampling represents a pivotal step toward a more inclusive, preventative approach to women's health beyond this generation.



Dr. Ida Ismail-Pratt, President of The Society of Colposcopy & Cervical Pathology Singapore (SCCPS)

Access to screening, treatment, and vaccination remains a critical factor in reducing cervical cancer incidence globally. However, traditional screening models have often failed to reach many women due to barriers such as stigma, cultural sensitivities, discomfort, and time constraints. To address these gaps, innovative approaches like self-collected HPV testing are gaining recognition as vital tools in improving access and outcomes.

The Society of Colposcopy & Cervical Pathology Singapore (SCCPS) has officially recognized HPV self-sampling as a valid alternative in its updated 2025 cervical cancer screening guidelines, equipping healthcare providers with an evidence-based option to support women who might otherwise forgo screening.

In an exclusive interview with Biospectrum Asia, **Dr. Ida Ismail-Pratt, President of SCCPS**, highlighted the transformative potential of HPV self-sampling in women's health. She emphasized that while self-sampling expands access and empowers patients, it also complements the clinician's role by ensuring professional oversight in counselling, test ordering, and follow-up care. This integration of innovation and clinical expertise is paving the way for a more inclusive, prevention-focused approach to cervical cancer screening and beyond.

1. **How do you describe the burden of cervical cancer caused by HPV in the APAC region? How would you suggest combating the challenges?**

Cervical cancer is the 4th most common female cancer worldwide and 60% of incidence and mortality from cervical cancer are in the Asia Pacific.

Cervical cancer remains a significant public health issue in the Asia-Pacific (APAC) region. APAC accounts for 58% of global cervical cancer cases, with ~316,000 new cases and ~158,000 deaths annually (GLOBOCAN 2022).

Persistent infection by high-risk Human Papilloma virus (HPV) is the cause of nearly all (99.7%) of all cervical cancer worldwide. HPV Type 16 and Type 18 are the most prevalent, making up 70% of all cervical cancer diagnosed.

The identification of human papillomavirus (HPV) as the primary cause of cervical cancer - much like the rapid scientific advancements during the COVID-19 pandemic - has enabled groundbreaking innovations that position the elimination of cervical cancer as a feasible public health goal.

Primary prevention through HPV vaccination can effectively avert initial high-risk HPV exposure, while secondary prevention via advanced screening methods allows for the early detection and treatment of preinvasive cervical lesions. Together, these strategies provide a clear pathway to eliminating cervical cancer as a global health threat.

However, the key challenges to elimination are access to cervical cancer elimination measures. These include low HPV vaccination coverage, limited screening access, stigma and lack of awareness and healthcare inequities.

In the year 2020, the World Health organization, recognizing the increasing burden of this preventable disease launched the WHO cervical cancer elimination strategy, introducing the 90- 70-90 targets by year 2030 for 3 main pillars of cervical cancer elimination -

- 90% of girls are HPV vaccinated by the age of 15 years old.
- 70% of women are screened with a high performance screening test at least twice in their life i.e. 35 and 45 years old.
- 90% of women diagnosed with cervical disease (preinvasive and cervical cancer) should receive treatment.

These targets, achieved by 2030, are predicted to allow all countries to eliminate cervical cancer as a public health problem by the end of the century.

2. Would you be able to share some of the current best practices and policies in the region? How well are the HPV vaccines performing? What is the status of Singapore's HPV vaccination?

Across the Asia-Pacific region, several countries have made commendable progress in cervical cancer prevention through innovative HPV vaccination and screening initiatives.

Best practices:

- Australia leads with one of the highest HPV vaccination rates globally, with over 80% of girls and 77% of boys are vaccinated by age 15. Countries like Indonesia have successfully implemented one-dose, school-based HPV vaccination programmes, leveraging strong community and religious engagement. Malaysia's Program ROSE combines self-sampling with digital follow-up and has demonstrated success in reaching women who previously avoided traditional screening.

- Singapore's HPV vaccination status - In Singapore, HPV vaccination has been offered to girls in Secondary 1 (ages ~12–13) since 2010 and included in the national school-based immunisation programme in 2019. Coverage has been strong, with approximately 90% of eligible girls receiving at least one dose.

3. A study of 300 women in Singapore found that most participants felt self-sampling was easy and likely to increase their participation in screening. What can the National Cervical Cancer Screening Program do to set standards and improve the quality of public health programs?

The study highlights how self-sampling is becoming a more accepted option for cervical cancer screening, especially among women who might avoid traditional Pap tests. These tests are proven to be just as accurate as those done in a clinic when it comes to detecting high-risk HPV. What's reassuring is that self-sampling ensures that healthcare providers still play an important role in guiding women through next steps, including triage and follow-up if needed. It's a more flexible, accessible way to screen, without compromising on care.

In March 2025, Singapore updated its National Cervical Cancer Screening guidelines to include HPV self-sampling as an alternative to conventional clinician-collected sampling. This revision reflects the country's recognition of self-sampling as an evidence-based strategy to improve screening uptake among women. By offering a more accessible and patient-centric approach, this initiative empowers women and also enhances healthcare system efficiency by streamlining screening delivery.

4. What are the potential long-term impacts of widespread HPV self-sampling on women's health outcomes, particularly in terms of prevention and early detection of cervical cancer?

HPV self-sampling addresses several key barriers that hinder traditional screening methods:

Emotional Barriers (e.g., embarrassment, anxiety, pain):

Self-sampling reduces discomfort and privacy concerns, making screening more acceptable to women who are uncomfortable regarding going for pelvic examination for screening.

Logistic Barriers (e.g., time constraints, distance to clinics, long wait times): Self-sampling allows women to collect samples at home, eliminating travel time and reducing the need for multiple clinic visits. This is particularly beneficial in rural and underserved areas. Examples of these are Program Rose (Kuala Lumpur) and Project Suara (Sarawak) in Malaysia in addition to the HPVSIMple project in Singapore.

Knowledge Barriers (e.g., lack of awareness, perceived low risk):

Community-based distribution of self-sampling kits, coupled with education campaigns, can increase awareness and prioritize cervical cancer screening among under screeners. Projects as those mentioned above play a significant role in reducing the barriers to screening uptakes in women in the Asia Pacific.

5. How does the SCCPS's endorsement of HPV self-sampling in the updated 2025 cervical cancer screening guidelines impact healthcare providers and their ability to support women who may forgo traditional screening?

The introduction of HPV self-sampling in the updated 2025 Singapore cervical cancer screening guidelines will hopefully allow better access and support for **healthcare providers (HCPs)** and their ability to support women who may forgo traditional screening.

SCCPS supports this effort.

6. Does focused education, training, and implementation research help bridge the gap in addressing HPV-related diseases in low- and middle-income countries? Especially for HPV, HPV related diseases, and preinvasive cervical diseases.

Focused education, training, and implementation research are powerful tools to combat HPV related diseases in low- and middle-income countries (LMICs). By raising awareness, empowering healthcare workers with practical skills like HPV self-sampling, and tailoring evidence-based solutions to local needs, these strategies boost vaccination, screening, and treatment rates.