

**Editorial**

## **Eliminating Cervical Cancer in Asia-Pacific: From HPV Policy to Real-World Oncology Practice**

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Cervical cancer elimination is increasingly framed as a public health success story in the making, yet the clinical reality in Asia-Pacific tells a more sobering story. Globally, there were an estimated 660,000 new cervical cancer cases and 350,000 deaths in 2022, with the highest incidence and mortality in regions such as South-East Asia.<sup>1,2</sup> In 2020 alone, the WHO South-East Asia Region accounted for about 200,000 new cases (32% of the global burden) and 100,000 deaths (34% of global deaths), while the Western Pacific Region contributed a further 145,700 cases and 74,900 deaths.<sup>3</sup>

The WHO Global Strategy defines elimination as reaching <4 cases per 100,000 women-years and sets the 90–70–90 targets for 2030: 90% of girls fully vaccinated by age 15, 70% of women screened with a high-performance test at 35 and 45 years, and 90% of women with pre-cancer or cancer appropriately treated.<sup>4,5</sup> Yet current coverage falls far short. A recent systematic review of global HPV vaccination reported that, among countries with data, the weighted average first-dose coverage in girls aged 9–14 years in 2023 was 61.6%, and full-course coverage only 47.6%; just 15 countries (11%) had achieved ≥90% first-dose coverage.<sup>6</sup> An integrative review focused on Asia-Pacific found that while most high-income settings (e.g. Australia, Japan, Singapore, Korea) have incorporated HPV vaccine into their national immunisation programmes, several middle-income countries still lack universal access or have only very recent introductions.<sup>7</sup>

The most pressing “current issue” is not the absence of policies, but the persistent late-stage presentation and treatment gaps that we see in clinics every day. A meta-analysis of 20+ studies reported that nearly 70% of cervical cancer patients in Asia present at a late stage (FIGO IIB–IV).<sup>8</sup> Country-level data mirror this: in Indonesian series, 76.7% of women presented with stage IIB or higher, and in another hospital-based cohort, stage IIIB alone accounted for 45.4% of cases.<sup>9</sup> Unsurprisingly, prognosis is poor for those with metastatic disease; a recent Asia-Pacific survey of oncologists reported a 5-year survival of only 17.6% for patients with stage IVB (metastatic) cervical cancer.<sup>10</sup> These are not abstract statistics; they describe the women who arrive at our clinics with hydronephrosis, fistulas, intractable pain, and profound anaemia.

Treatment capacity constraints compound this late-stage burden. Concurrent chemoradiation with brachytherapy remains the standard of care for locally advanced disease, yet brachytherapy is chronically under-resourced. A 2025 analysis estimated a global deficit of 1,372 brachytherapy (BT) machines for cervical cancer in low- and middle-income countries, with the largest gap in Asia-Pacific (904 BT machines).<sup>11</sup> Another regional study found that 70% of Asian countries have fewer than one brachytherapy unit per 100 cervical cancer cases, highlighting the structural nature of under-treatment.<sup>12</sup>

At the same time, vaccination and screening landscapes are evolving quickly in the region. Several Asia-Pacific countries (e.g. Indonesia in 2023, Pakistan in 2025) have recently launched or scaled up school-based HPV vaccination, framed explicitly as steps toward elimination by 2030.<sup>13</sup> Emerging evidence that a single dose of HPV vaccine can provide 97% protection against oncogenic HPV types offers a major opportunity to simplify delivery logistics and reduce costs, especially relevant for overstretched health systems in Asia-Pacific.<sup>14</sup> However, these promising developments will not translate into fewer advanced cancers in our radiotherapy suites unless they are tightly coupled with organised HPV-based screening and timely treatment.

Oncology practice in Asia-Pacific can make HPV policy clinically meaningful by weaving prevention, early detection, and treatment into a single, coherent care pathway. First, prevention and treatment need

to be systematically linked. This means that HPV vaccination and screening histories should be routinely documented in oncology charts and cancer registries, so clinicians and policymakers can clearly see how preventive coverage relates to stage at diagnosis over time.<sup>15</sup> In the clinic, every encounter becomes an opportunity: not only with patients themselves, but also with mothers, daughters, and caregivers who accompany them. These visits can serve as “teachable moments” to provide HPV education and refer eligible women and girls for vaccination and screening.

At the same time, oncologists must actively support the scale-up of high-performance screening and self-collection strategies. With roughly 70% of women in the region still presenting at a late stage, oncologists are well placed to advocate for primary HPV testing as the standard screening approach, backed by clear, streamlined referral pathways that minimise the interval from a positive result to definitive treatment.<sup>16</sup> Hospital-based clinics can take the lead in piloting self-collected HPV sampling for under-screened populations, such as women in rural areas, older women who have never been screened, or cancer survivors, while generating local data on feasibility, positivity rates, and loss to follow-up that can guide wider implementation.<sup>16</sup>

For women who already have cervical cancer, the priority shifts to ensuring timely, guideline-concordant chemoradiation and brachytherapy. In centres with radiotherapy capacity, internal audits should routinely measure how many eligible patients actually complete external beam radiotherapy plus brachytherapy within recommended time frames, such as eight weeks.<sup>17</sup> These real-world metrics can highlight bottlenecks in care delivery. At the national and regional levels, oncology societies can use the documented deficit of 904 brachytherapy machines in Asia-Pacific as a powerful, concrete advocacy figure when negotiating investment in radiotherapy infrastructure, turning abstract calls for capacity-building into specific, measurable targets.

Finally, generating and using robust local data is essential for influencing financing and policy. Regular reporting of stage distribution at diagnosis, time-to-treatment, and treatment completion rates from cancer centres across the region can provide a much-needed reality check against optimistic national coverage statistics.<sup>18</sup> When brought into discussions on universal health coverage and social protection, these data can help make the case that cervical cancer care must be adequately funded, rather than treated as optional or tertiary. In this way, HPV policy is translated into tangible clinical impact, ensuring that the promise of elimination is reflected not only in strategic plans, but in the day-to-day experiences and outcomes of women in oncology clinics throughout Asia-Pacific.<sup>19</sup>

In summary, Asia-Pacific sits at the epicentre of the global cervical cancer burden, contributing hundreds of thousands of new cases and nearly 175,000 deaths each year. While HPV vaccination and elimination roadmaps are expanding, 70% of women in the region still present with advanced disease, and major gaps in radiotherapy and brachytherapy capacity persist. Bridging the divide between policy and practice will require oncologists to embrace prevention as part of their clinical mandate, and policymakers to see radiotherapy and palliative care as indispensable pillars of elimination. If Asia-Pacific can align HPV policy with the lived realities of oncology practice then the vision of cervical cancer elimination will move from declaration to deliverable within our professional lifetimes.

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