CLINICAL BURDEN AND HEALTH-RELATED QUALITY OF LIFE IN CERVICAL CANCER ACROSS FIVE HIGH-BURDEN ASIA-PACIFIC COUNTRIES: A TARGETED LITERATURE REVIEW

EPH30
Acceptance Code

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ISPOR Asia Pacific Summit 2026 | Bangkok, Thailand

1 BACKGROUND

- Cervical cancer remains an important public-health problem despite being largely preventable through HPV vaccination, screening, and timely treatment.
- substantial share of the lobal burden occurs in Asia, where countries differ in population size, screening policy, registry infrastructure, and access to care.
- Country-level patterns are heterogeneous: absolute cases and deaths, age-standardized incidence, temporal trends, survival, and survivorship needs vary across settings
- The burden extends beyond clinical outcomes. Cervical cancer and its treatment can affect physical, psychological, social, sexual, and functional well-being

2 OBJECTIVE

To synthesize country-specific evidence on clinical burden and HRQoL among women with cervical cancer in India, China, Indonesia, Japan, and South Korea.

3 METHODS

Design: Targeted literature review covering studies published from January 2010 through April 2026.
Sources: PubMed, Embase and Google Scholar
Search terms: cervical cancer; incidence, mortality, prevalence, survival; EQ-5D, EQ-5D-5L, EQ-VAS, EORTC QLQ-C30, and QLQ-CX24.
Eligibility: Cervical-cancer-specific clinical burden or HRQoL outcome from at least one target country.
Population and geography: Women with cervical cancer in India, China, Indonesia, Japan, and South Korea.
Study selection and extraction: Records were screened against predefined criteria; clinical burden, survival, disease stage, treatment context, instrument, and HRQoL outcomes were extracted.
Quality assessment and synthesis: Study quality was assessed using standard risk-of-bias tools; evidence was synthesized descriptively because of heterogeneity in source year, design, stage, setting, instrument, and valuation method.

32	5	3	2010-2026
Included studies	Countries	Databases	Search window

EVIDENCE INTERPRETATION

- Clinical burden estimates were retained as source-specific values to avoid inappropriate pooling across different country systems and calendar periods.
- HRQoL findings were interpreted by instrument, population, disease stage, treatment context, and valuation approach.
- Observed patient utilities were distinguished from hypothesized health-state valuations.

KEY FINDING **Cross-country visuals summarize the evidence landscape and should not be interpreted as standardized country rankings.**

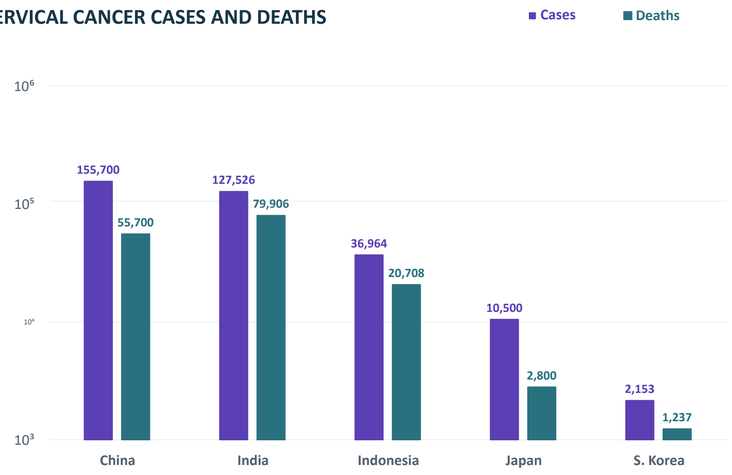
HEOR / HTA RELEVANCE

- Integrate clinical burden and HRQoL evidence in screening, vaccination, treatment, and survivorship evaluations.
- Match model utilities to country, disease stage, treatment context, instrument, and valuation method.
- Use pooled utilities as contextual evidence, not universally transferable inputs.
- Prioritize longitudinal, stage-specific, and treatment-specific HRQoL evidence.

KEY FINDING **Country-specific primary utility evidence should be prioritized whenever available.**

4 RESULTS | CLINICAL BURDEN

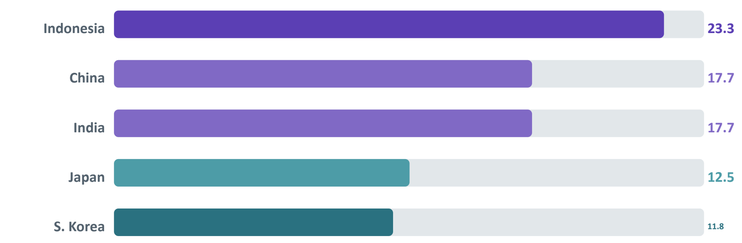
CERVICAL CANCER CASES AND DEATHS



KEY FINDINGS
- China reported the highest number of incident cervical cancer cases (155,700), while India reported the highest number of deaths (79,906) despite a lower case count than China.
- Together, China and India accounted for approximately 85% of all reported cases and deaths across the included countries, highlighting their disproportionate contribution to the regional disease burden.
- Indonesia also exhibited a meaningful burden with nearly 37,000 cases and more than 20,000 deaths, whereas Japan and South Korea reported comparatively lower absolute numbers

4 RESULTS | INCIDENCE & TRENDS

INCIDENCE ASR PER 100,000

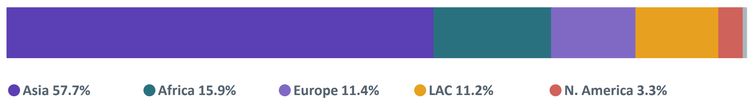


KEY FINDING
- Marked variation in incidence rates was observed across countries. Indonesia reported the highest age-standardized incidence rate (ASR) at 23.3 per 100,000 women, whereas South Korea reported the lowest rate (11.8 per 100,000).
- Although China and India demonstrated similar incidence estimates (17.7 per 100,000), temporal analyses revealed contrasting epidemiological patterns. Cervical cancer incidence increased in China between 1990 and 2021, while South Korea experienced substantial declines in both incidence and mortality, potentially reflecting the impact of long-standing screening and prevention initiatives.
- These findings suggest differing stages of disease control and prevention across the region

4 RESULTS | SURVIVAL & PREVALENCE

62.34%	57.7%
Pooled 5-year survival	Asia share of global 5-year prevalence
95% CI: 58.10-66.59	1.11M of 1.92M prevalent cases

GLOBAL 5-YEAR PREVALENCE BY CONTINENT



KEY FINDING
- Despite improvements in diagnosis and treatment, cervical cancer continues to impose a significant survivorship burden.
- The pooled 5-year survival estimate across Asian studies was 62.34%, indicating that approximately one-third of patients may not survive beyond five years after diagnosis.
- In addition, Asia accounted for 57.7% of the global 5-year prevalent cervical cancer population, corresponding to more than one million women living with a previous diagnosis.
- These findings underscore not only the need for mortality reduction strategies but also the importance of long-term follow-up, survivorship care, and management of treatment-related consequences

4 RESULTS | CLINICAL STORY

Substantial burden
- High absolute case and death counts

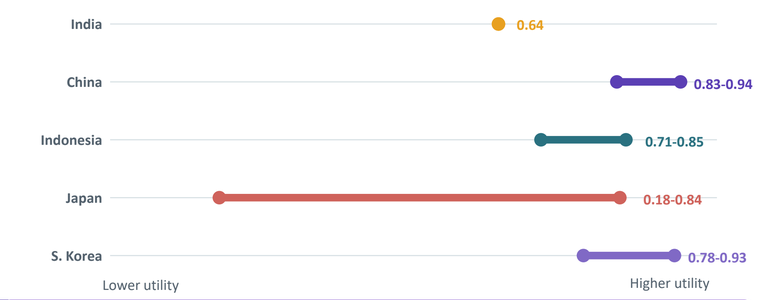
Heterogeneous pattern
- Different ASRs and trajectories

Survival remains important
- Pooled 5-year survival: 62.34%

Long-term burden
- Large prevalent population in Asia

4 RESULTS | HRQoL

REPORTED EQ-5D / EQ-5D-5L UTILITIES



KEY FINDING
- Substantial variation in health-related quality of life (HRQoL) outcomes was observed across countries and disease states.
- Reported utility values ranged from 0.18 to 0.94, indicating wide differences in perceived health status.
- Lower utilities were generally associated with advanced disease, recurrence, and greater symptom burden, while higher values were reported among patients with earlier-stage disease or more favourable clinical status.
- In Indonesia, pain/discomfort and anxiety/depression were frequently reported, affecting 67.8% and 57.5% of patients, respectively, highlighting the multidimensional burden experienced by women with cervical cancer beyond traditional clinical outcomes

67.8%	57.5%
Pain / discomfort Indonesia	Anxiety / depression Indonesia

4 RESULTS | DISEASE PROGRESSION

SOUTH KOREAN EQ-5D UTILITY

0.93	-0.15 →	0.78
Cervical intraepithelial neoplasia		Recurrent invasive cervical cancer

KEY FINDING
- Evidence from South Korea demonstrated a clear decline in HRQoL with disease progression.
- Utility values decreased from 0.93 among women with cervical intraepithelial neoplasia to 0.78 among those with recurrent invasive cervical cancer, representing a clinically meaningful reduction in health status.
- These findings illustrate the significant impact of recurrence on patient well-being and reinforce the value of interventions that prevent disease progression, maintain remission, and preserve quality of life over time

4 RESULTS | COUNTRY HRQoL SIGNALS

INDIA	EQ-5D-5L utility: 0.64
CHINA	Socioeconomic status and multimodality treatment were reported drivers
INDONESIA	Stage utilities: 0.71- 0.85; frequent pain and anxiety/depression
JAPAN	Health-state valuation, not observed patient utility
S. KOREA	Utility declined from 0.93 to 0.78 with recurrent disease

KEY FINDING
- Country-specific findings highlight differing dimensions of HRQoL burden across the Asia-Pacific region.
- Evidence from India demonstrated reduced overall utility among women with cervical cancer, while Chinese studies identified socioeconomic characteristics and treatment-related factors as important determinants of HRQoL.
- Indonesian studies reported notable symptom burden, particularly pain/discomfort and anxiety/depression.
- Japanese evidence primarily reflected health-state valuation studies rather than patient-reported outcomes, whereas South Korean data consistently demonstrated declining utility with disease recurrence.
- Collectively, these findings suggest that HRQoL outcomes are influenced by clinical, social, and healthcare-system factors and should be considered alongside epidemiological measures when evaluating disease burden

5 LIMITATIONS

- Study designs, populations, disease stages, outcome definitions, and HRQoL instruments were heterogeneous.
- Evidence availability was uneven across the five countries and outcomes.
- Different study periods, data sources, and healthcare settings limited direct cross-country comparability.
- The pooled 5-year survival estimate was contextual evidence from a published Asian meta-analysis.
- Japan utility values reflected hypothesized health-state valuation rather than observed patient utility

6 CONCLUSION

- Cervical cancer imposes a substantial clinical and humanistic burden across Asia-Pacific countries, characterized by heterogeneous epidemiological trends, variable survival outcomes, and a large prevalent population requiring ongoing survivorship care.
- Consistent reductions in HRQoL were observed across disease stages, with greater impairment reported among women with advanced or recurrent disease.
- These findings highlight the importance of integrating country-specific HRQoL evidence with clinical outcomes to inform prevention strategies, treatment decisions, survivorship planning, and health technology assessment, ultimately supporting more patient-centered healthcare policy and resource allocation

The impact of cervical cancer extends beyond survival, with disease progression and recurrence contributing to substantial reductions in health-related quality of life

ABBREVIATIONS

ASR, age-standardized rate; CIN, cervical intraepithelial neoplasia; EQ-5D, EuroQol 5-Dimension; EORTC, European Organisation for Research and Treatment of Cancer; HRQoL, health-related quality of life; HTA, health technology assessment; QALY, quality-adjusted life-year; TLR, targeted literature review

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