Cancer Intelligence for Action

From Evidence to Equitable Cancer Control

28-30 Sept. 2026, | Kuching, Sarawak, Malaysia

Preface:

The 13th General Assembly and Scientific Conference of the Asian Pacific Organization for Cancer Prevention (APOCP), held in Kuching, Sarawak, Malaysia, from 28 to 30 September 2026, celebrates 25 years of APOCP and marks an important moment for cancer control in the Asia-Pacific region. Under the theme "Cancer Intelligence for Action: Data, Equity, and the Next 25 Years of Cancer Control in Asia-Pacific," the meeting asks how our growing knowledge about cancer can be translated into practical, equitable and sustainable action.

The abstracts in this book show both the progress achieved and the gaps that remain. They span epidemiology, prevention, early detection, treatment, survivorship, supportive and palliative care, health-system strengthening, economics, legislation and policy. Many go beyond measuring cancer burden to examine how services work in practice. They ask who takes part in screening, where delays arise between diagnosis and treatment, what cancer costs households, and how geography, socioeconomic circumstances, disability and health-system structures shape access.

Cervical cancer prevention features prominently, with studies ranging from vaccination and self-sampling to screening uptake and follow-up. Breast cancer detection and outreach are also well represented. Studies on financial toxicity, return to work, patient navigation and underserved populations reflect a broader view of what cancer control involves. Artificial intelligence, genomics and precision oncology appear alongside community-based and resource-adapted approaches. Together they are a reminder that innovation matters only when it is affordable, well governed and equitably accessible.

Cancer control cannot be advanced by science alone, nor by any single institution or profession. APOCP 2026 brings together researchers, clinicians, policymakers, advocates, people affected by cancer, civil society and partners, each of whom sees a different part of the problem. We hope these three days will be a beginning rather than a one-off event, starting collaborations, ideas and commitments that continue long after Kuching.

As the meeting unfolds, we invite you to ask: What should we start? What should we stop? What already works and should be scaled? And what can each of us take home and turn into something tangible for the people we serve? The impact of APOCP 2026 will be measured not only by the science presented here, but by what follows in hospitals, universities, governments, organisations and communities across Asia and the Pacific.

Hosting this meeting in Sarawak is especially meaningful. Sarawak is a land of great diversity, where many people live in rural and remote communities separated by considerable distances. That experience reminds us that progress in cancer control must ultimately be judged by whether it reaches those who need it most. We have more knowledge and better tools than ever before. Our responsibility now is to turn them into action.

Our heartfelt thanks go to the APOCP leadership, organising committees, partners, sponsors, volunteers and everyone who has worked tirelessly to bring this meeting to life.

Prof. Nirmala Bhoo-Pathy, MD PhD
President of APOCP & Organising Chair

Dr. Melissa Lim Siaw Han, PhD
Local Organising Chair APOCP 2026

Scientific Report on the Meeting

The 120 substantive abstracts presented at APOCP 2026 offer a broad snapshot of contemporary cancer-control research across the Asia-Pacific region. Rather than concentrating on laboratory and therapeutic research, the collection is strongly orientated towards **prevention, implementation, access, equity and health-system performance.** Screening and Early Detection is the largest category, followed by Cancer burden/Inequities/Priority setting; the Human Experience of Cancer; Health Systems and Universal Health Coverage; and Policy and Capacity Building. The distribution closely reflects the conference's objectives of converting cancer intelligence into practical action.

Prevention, HPV and early detection

Cervical cancer is the most consistent theme. Taken together, the studies trace almost the entire prevention pathway, from screening knowledge, HPV vaccination and genotype distribution, through HPV testing, self-sampling and laboratory reliability, to digital population management, post-screening management and outreach to underserved communities. In Kuala Lumpur, investigators are validating instruments to measure women's knowledge, attitudes and beliefs about HPV screening and self-sampling. Contributions from China report on HPV vaccine awareness and uptake in low-resource areas, five years of digital population management and risk-stratified triage in rural districts, self-sampling as a last-mile strategy in two rural counties, and the cervical cancer prevention model developed in Shenzhen. A study from rural Mysore, India, examines why awareness alone has not closed gaps in cervical screening uptake. The common lesson is that a screening programme's success depends as much on laboratory test quality and delivery design as on community participation.

Breast cancer research covers mammography participation, clinical breast examination, mobile mammography, community-based detection, genetic risk assessment and barriers to screening. A Sarawak study found that only 27.2% of eligible women had ever had a mammogram, with uptake shaped by knowledge, perceived barriers and self-efficacy. A national mobile mammography programme reached almost 10,000 rural women across Malaysia in two years, yet around half of the cancers it detected were already at a late stage. Work from rural Karnataka, India reaches a similar conclusion from the opposite direction: awareness and knowledge alone do not translate into screening behaviour. Delay is not only a patient-level problem. Interviews with 56 health workers in South Africa and Zimbabwe traced diagnostic delays for breast, cervical and colorectal cancer to weak referral and feedback systems, low awareness of clinical guidelines and suboptimal assessments, as well as to patients' financial constraints. Across these settings the recurring gap is the distance between a service being available and people actually completing the pathway.

Equity as a measurable outcome

A defining feature of the collection is that it treats **equity as something to be measured, not merely aspired to**. Geography, income, disability, employment, ethnicity, gender and health-system structure recur as determinants of access and outcome. Work from northern Sarawak combined road routing, air-travel data and cross-border delays to score access across six rural communities, finding scores that ranged from high near Miri to severely limited in Lawas, and radiotherapy access below 0.25 on a 0–1 scale in every community studied. In Odisha, India, a hub-and-spoke model has established six-bed day-care chemotherapy centres in all 30 districts: patients receive their first cycle at the state cancer institute and subsequent cycles closer to home, and the programme is now extending into population-based registration and early detection. A hospital-registry analysis of more than 11,600 cases in Nakhon Phanom Province, Thailand, showed patients shifting from concentration around the provincial capital towards a wider provincial distribution between 2020 and 2024 as access to services improved. These studies show the two steps that equity work requires: first locate where access fails, then redesign services to close the gap.

Survivorship and the human experience

The abstracts make clear that cancer control does not end when treatment ends. Patient-journey mapping in South Africa highlights depersonalised care, the burden of having to advocate for oneself, and the way socioeconomic position, gender, comorbidity and mental health combine to shape each patient's route through care. A national survey of 4,517 Korean survivors found that although 98.3% had health insurance, one in five had experienced catastrophic health expenditure and 41.3% of those employed at diagnosis had experienced a change in employment and 42.3% reported out-of-pocket (OOP) payment. At a tertiary centre in India, 38.7% of adolescent and young-adult survivors reported moderate-to-severe distress, which was associated with rural residence, pain and fatigue. Other contributions address fertility preservation, psychosocial and palliative care, shared decision-making, patient navigation and the time burden of treatment. Taken together, these studies mark a shift from disease-centred towards person-centred cancer control.

Health systems, financing and governance

A second major thread asks whether health systems can turn clinical advances into benefit for whole populations. Studies examine universal health coverage, referral pathways, decentralisation, cancer registries, workforce capacity, emergency preparedness, out-of-pocket and catastrophic expenditure, and financial navigation. A comparison of breast cancer care in Indonesia, Malaysia, Thailand and Singapore found that the main bottleneck sat at a different point in each system: upstream diagnostic capacity in Indonesia, procurement and formulary limits on high-cost treatment in Malaysia, global budget controls and differences between insurance schemes in Thailand, and co-payments for high-cost therapies in Singapore. The authors conclude that the stage at which access breaks tracks health-system design rather than national income, and that expanding coverage relocates barriers rather than removing them. A companion analysis of fiscal transparency across six ASEAN countries identified the Philippines, with its explicit cancer-related budget lines, as the clearest model for tracking what governments actually spend on cancer. Several studies, including work from Australia, treat financial toxicity as a cancer outcome in its own right rather than a side effect of treatment. Others address legal protections for people affected by cancer, conflict-of-interest safeguards in policymaking, and legal frameworks for population-based registries. Legislation, financing and governance are increasingly understood as cancer-control interventions in themselves.

Digital health, AI and precision oncology

Technology is advancing quickly across the collection. Examples include deep-learning detection of perineural invasion in oral cancer; machine-learning risk stratification for lung cancer among never-smoking Chinese women in Singapore; a randomised trial of large language models to improve patients' understanding of colposcopy reports; multimodal language models for cervical lesion assessment; AI-simulated patients for training clinicians in screening management; and AI-enabled point-of-care screening for oral potentially malignant disorders in primary care. Precision approaches include circulating microRNAs as early-detection biomarkers, polygenic risk scores in Asian BRCA carriers and the costs of mainstreaming BRCA testing.

These studies sit beside resource-adapted interventions rather than replacing them. The Sarawak acute lymphoblastic leukaemia programme is a clear example. After a locally adapted, standardised protocol was introduced across three hospitals, two-year overall survival rose from 23.8% to 68.8%, with no significant increase in induction mortality or major toxicity, although the pilot cohort was small and requires longer follow-up. Innovation delivers value only when it comes with affordability, the capacity to implement it, sound governance and equitable access.

Overall picture

Taken as a whole, the APOCP abstracts portray cancer control as an interconnected continuum extending from prevention and risk assessment through screening, diagnosis and treatment to survivorship and palliative care – and ultimately into financing, law, governance and social policy. They also reveal a region increasingly willing to test sophisticated technologies whilst simultaneously confronting basic questions of access.

Perhaps the clearest message from this collection is that the principal challenge is no longer simply producing more cancer knowledge, but ensuring that knowledge reaches populations in forms that are affordable, accessible and actionable. In that respect, the abstract programme strongly embodies the conference theme: *Cancer Intelligence for Action.*

Dr Yolanda Augustin, MBBS, MRCP, FRCR, MSc, PhD
Chair of the Scientific Committee

Table of Contents of the Abstracts

Abstract Code: APOCP-27-0001

Title: Study of Knowledge, Attitude, Belief and Uptake of Cervical Cancer Screening among Women Attending Health Clinic in Kuala Lumpur

Subject: Screening & Early Detection

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Introduction: Cervical cancer remains a significant public health concern globally, ranking as the fourth most common cancer among women. Malaysia has transitioned to Human Papillomavirus (HPV) testing as the primary cervical cancer screening strategy. This study aims to apply a translated, cross-culturally adapted questionnaire with validated psychometric properties to assess Malaysian women's knowledge, attitudes, and beliefs regarding HPV screening and self-sampling, and to examine the proportion of HPV screening uptake and associated factors.

Methods: This study will be conducted in two phases. Phase 1 will involve the translation and cross-cultural adaptation of the Cervical Cancer and HPV Testing Knowledge Scale, HPV Testing Attitudes and Beliefs Scale, and HPV Self-Sampling Attitudes and Beliefs Scale, following methods proposed by Herdman et al. (1998) and Beaton et al. (2000). Psychometric validation will include face and content validity, reliability testing, and construct validity. Phase 2 is a cross-sectional study among women attending health clinics in Kuala Lumpur using systematic random sampling, with an estimated sample size of 677 participants. Descriptive analyses will summarise participant characteristics, knowledge, attitudes, and beliefs, and estimate HPV screening uptake. Bivariate analyses will compare scores between screened and unscreened women, while multivariable logistic regression will identify factors associated with screening uptake. Results will be reported as adjusted odds ratios with 95% confidence intervals, with $p < 0.05$ considered statistically significant.

Results: The translated instruments are expected to demonstrate acceptable validity and reliability, including content and face validity indices ≥0.83, adequate internal consistency, and satisfactory construct validity. The proportion of HPV screening uptake and associated behavioural factors will be reported.

Conclusion: This study will provide practice-based evidence to support the implementation of the national HPV screening programme in Malaysia and inform targeted health education and service delivery improvements within public healthcare settings.

Keywords: HPV Screening, HPV Testing, Knowledge Attitude And Belief, Cervical Cancer Screening

How to Cite: Hamzah, N. H., Ismail, M., & Yahya, A. study of knowledge, attitude, belief and uptake of cervical cancer screening among women attending health clinic in Kuala Lumpur [1]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0002

Title: Mammogram Screening Uptake and Its Associated Factors among Women in Samarahan, Sarawak

Subject: Screening & Early Detection

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Introduction: Breast cancer is the most prevalent cancer affecting women in Malaysia. Mammogram screening is recommended for early detection and reduction of breast cancer mortality. This study aimed to determine the prevalence of mammogram screening uptake and its associated factors among women in Samarahan, Sarawak. This study was guided by the Health Belief Model, framing mammogram screening uptake in relation to age, knowledge, perceived barriers, and perceived self-efficacy.

Methods: A community-based cross-sectional study was conducted among 374 women aged 30 and above in Samarahan District, Sarawak, using multistage random sampling. A total of 276 women aged 40 years and above were included in the mammogram analysis. Data were collected using a self-administered questionnaire assessing mammogram screening uptake, socio-demographic characteristics, healthcare accessibility, knowledge of breast cancer and screening, and health beliefs. Data were analysed using descriptive statistics, chi-square test, independent samples t-test, Mann-Whitney U test, and multiple logistic regression.

Results: Overall, 27.2% of participants had ever undergone mammogram screening, of whom 49.3% had their most recent mammogram within the past two years. Compared with women aged 40-49 years, those aged 50-59 years and 60 years and above were significantly more likely to undergo mammogram screening (AOR=4.65, 95% CI: 2.14, 10.12, $p<0.001$; AOR=2.74, 95% CI: 1.11, 6.77, $p=0.029$, respectively). Other significant predictors of mammogram screening uptake were higher knowledge score (AOR=1.14, 95% CI: 1.03, 1.26, $p=0.011$), higher perceived self-efficacy (AOR=3.71, 95% CI: 1.57, 8.77, $p=0.003$), and lower perceived barriers (AOR=0.20, 95% CI: 0.10, 0.40, $p<0.001$).

Conclusion: Mammogram screening uptake among women in Samarahan remains low, with only about one in four participants having ever undergone screening. Findings suggest the need for targeted, culturally appropriate interventions that improve knowledge of breast cancer and mammogram screening, reduce perceived barriers, and enhance self-efficacy to support screening participation and promote early detection among women in Sarawak.

Keywords: Breast Cancer, Mammogram Screening, Screening Uptake, Health Belief Model, Sarawak

How to Cite: Jong, P. Y., Jong, P. Y., & Ngadan, D. P. mammogram screening uptake and its associated factors among women in Samarahan, Sarawak [2]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0003

Title: Allostatic Load and Comorbidities in People with and without Cancer

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Allostatic load (AL) refers to the cumulative burden of "wear and tear" across multiple body systems resulting from chronic stress. Higher AL has been associated with chronic conditions and inferior health outcomes, but whether this relationship differs between people with and without cancer is unclear. This study examined the relationship between AL and comorbidities in people with and without cancer.

Methods: This cross-sectional study used data from the National Health and Nutrition Examination Surveys 2015-2023. An AL score was constructed using twelve biomarkers representing immune, metabolic, and cardiovascular system functions. The patterns of comorbidities (comprising depression, diabetes, thyroid, cardiovascular, respiratory, arthritis, liver, and kidney diseases) were examined using latent class analysis (LCA). Multivariable logistic and multinomial regression models assessed the relationship between AL and comorbidities stratified by cancer status.

Results: A total of 15,553 people were analyzed including 1774 (11%) with a history of cancer. LCA identified three comorbidity phenotypes–low comorbidity, high comorbidity, and selected condition profile (diabetes, cardiovascular, and kidney disease)–in both the cancer and non-cancer groups. Higher AL (≥3 versus <3 scores) was associated with increased odds of high comorbidity and selected-comorbidity phenotypes compared to low-comorbidity phenotypes in both cancer and non-cancer groups, although the magnitude of the association varied by the specific combination of conditions. For individual comorbidity types, higher AL (≥3 versus <3 scores) was associated with increased odds of all eight comorbidities in the non-cancer group. Similar patterns were observed in the cancer group, although the associations did not reach statistical significance for thyroid disease and depression.

Conclusion: There was a positive association between AL and the presence of comorbidities, regardless of cancer status, although the effect magnitude differed by comorbidity type. Further research is needed to elucidate the mechanisms underlying AL and comorbidity in cancer to inform risk stratification strategies.

Keywords: Comorbidity, Allostatic Load, Cancer

How to Cite: Ng, H. S., Woodman, R., Ferrar, K., Davies, L., Buckley, E., Mangoni, A., & Koczwara, B. allostatic load and comorbidities in people with and without cancer [3]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0004

Title: Divergent Effects of Obesity on Serum Tumour Markers: A Cross-Sectional Study at a Tertiary Care Hospital in Eastern India

Subject: Screening & Early Detection

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Introduction: Obesity has been recently shown to affect serum tumor markers, potentially influencing the sensitivity of screening programs and interpretation of results. Expansion of plasma volume and chronic inflammation may drive these differences, which may affect markers disparately. The present study aims to determine the effect of BMI on common tumor markers and if a BMI-specific reference range is needed in an Indian cohort.

Methods: This was a cross-sectional study conducted at a tertiary care center in Eastern India. The study group consisted of 117 subjects, 59 obese and 58 normal weight controls. Serum tumor markers were analyzed via Chemiluminescence Immunoassay (CLIA). Mann–Whitney U tests were performed for between-group differences as well as quantile regression for interaction effects across the distribution. ROC curves were used to visualize areas of greatest effect by obesity status.

Results: Obese status affected each tumor marker differently. Carcinoembryonic Antigen (CEA) and CA 19-9 had decreased mean values in obese patients compared to normal weight controls, supporting hemodilution effect as hypothesized. Furthermore, there was a significant interaction between female sex and obesity status for CEA (p=0.029), indicating lower values in obese women compared to both obese males and normal weight females. Markers with presumed stronger associations with inflammatory/metabolic processes demonstrated higher values among obese patients. PSA levels were higher in obese males, while CA125 mean values and variability were higher in obese females.

Conclusion: Serum tumor markers are affected disparately by obesity in our cohort. Decreased values of CEA and CA 19-9 may lead to false-negative interpretations, while increased PSA and CA 125 in obese males and females respectively may lead to false positives. This supports the creation of BMI-specific reference intervals for tumor markers.

Keywords: Obesity, Tumour Markers, Hemodilution, PSA, Asian Indian Phenotype, Cancer Screening.

How to Cite: Jasu, S. & Bhattacharya, S. divergent Effects of Obesity on Serum Tumour Markers: A Cross-Sectional study at a Tertiary Care Hospital in Eastern India [4]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0005

Title: Cancer Intelligence for Liver Cancer Control in Malaysia: From Risk Transition to Surveillance Gaps

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Liver cancer, mostly hepatocellular carcinoma (HCC), is a high-mortality cancer in Malaysia. National registry summaries show a clear male burden and many cases diagnosed at advanced stage. HBV remains important, but metabolic risks such as diabetes, obesity and NAFLD/MAFLD are becoming more relevant. Therefore, liver cancer control in Malaysia should also focus on surveillance and care entry.

Methods: An evidence-mapping review of Malaysia-relevant liver cancer literature was conducted. PubMed was searched up to 10 May 2026 using terms for Malaysia and liver cancer/HCC. Articles and reviews were eligible. National cancer registry and GLOBOCAN estimates were used to contextualise population burden. Records were classified by setting, study design, evidence domain, etiologic focus, relevance, and intended use for policy or research priority-setting.

Results: 44 unique records were mapped. The evidence included registry summaries, narrative reviews, single-centre clinical studies, case-control studies, diagnostic studies and health-economic analyses. Malaysian current evidence suggests high case fatality, frequent late presentation and limited population-based HCC outcome data. HBV remains the main prevention target, but diabetes, obesity, NAFLD/MAFLD, alcohol exposure and aflatoxin-related pathways are also relevant. The key gaps were seen across the surveillance cascade: risk identification, enrolment and retention in surveillance, early detection, timely referral, treatment access and palliative care.

Conclusion: Malaysia's liver cancer control agenda should move beyond treatment expansion alone. Priorities include sustained viral hepatitis control, integration of metabolic risk management into primary and hepatology care, redesign of risk-based HCC surveillance pathways, validation of early detection tools, and generation of contemporary population-based cohorts stratified by geography, ethnicity, and socioeconomic status. Evidence mapping can support data-driven priority-setting for equitable liver cancer control in Malaysia.

Keywords: Liver Cancer, Hepatocellular Carcinoma, Malaysia, Cancer Intelligence, Surveillance, Health Systems, Cancer Control

How to Cite: Zhu, J. cancer intelligence for liver cancer control in Malaysia: from risk transition to surveillance gaps [5]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0006

Title: Impact of DNA Extraction Methods on HPV Test Reliability: A Pilot Comparison Using Seegene PCR and Cobas Assay

Subject: Screening & Early Detection

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Introduction: In cervical cancer screening programs, particularly in low- and middle-income countries (LMICs), variability in liquid-based cytology (LBC) media and non-standardized pre-analytical workflows can affect HPV test reliability. Differences in sample preservation and compatibility with extraction methods may contribute to higher invalid rates and reduced assay efficiency. This study compared two DNA extraction methods (TanBead and Qiagen) using Seegene PCR, with results evaluated against the Cobas HPV assay.

Methods: In this pilot study, 38 cervical samples collected in BD SurePath and ThinPrep PreservCyt media were tested using the Cobas HPV assay and Seegene PCR following DNA extraction with TanBead and Qiagen, enabling paired comparisons across methods. The primary outcome was test performance, assessed using invalid rates and test efficiency. Secondary outcomes included agreement between methods (percent agreement, Cohen's κ) and variation by collection media. Statistical analysis included Cochran's Q test and McNemar's test; analyses were exploratory.

Results: DNA extraction method substantially impacted HPV test reliability, with invalid rates differing by >20% across methods. Qiagen demonstrated superior performance, with no invalid results (0.00; 95% CI: 0.00–0.09) and the highest efficiency (1.00; 95% CI: 0.91–1.00), compared to TanBead (invalid rate 0.21; 95% CI: 0.10–0.37; efficiency 0.79; 95% CI: 0.63–0.90). Cobas showed low invalid rates (0.03; 95% CI: 0.00–0.14) and high efficiency (0.97; 95% CI: 0.86–1.00). Performance varied markedly by transport media, with TanBead showing substantially lower efficiency in BD SurePath samples (38.5%) compared to ThinPrep (100%), while Qiagen remained consistent. Differences across methods were observed ($Q = 12.67$, $p = 0.002$). Agreement between Qiagen and Cobas was 85.3% ($\kappa = 0.63$).

Conclusion: DNA extraction method significantly influences HPV test reliability and may impact screening program performance in LMIC settings. The interaction between extraction method and transport media highlights a critical pre-analytical factor requiring optimization to ensure reliable and scalable HPV screening.

Keywords: HPV DNA, Comparison

How to Cite: Sk, A., Ravi, K., Somaiya, D., Karnam, R., Jayakrishna, P., Kane, A., & Madhivanan, P. impact of DNA Extraction Methods on HPV Test Reliability: A Pilot Comparison Using Seegene PCR and Cobas Assay [6]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0007

Title: Vaginal Microbiota and High-Risk HPV Genotype Distribution among Women at Tertiary Care Hospital

Subject: Screening & Early Detection

Authors: Bhagyashri Patil-Takbhate[1]*, Chanda Vyawahare[1], Prachi Athavale[2], Hemant Deshpande[3], Charusheela Gore[4], Shahzad Mirza[2], Priyanka Jali[5], Ajay Koli[1], Poonam Suryawanshi[1]

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Introduction: Persistent infection with high-risk human papillomavirus (HR-HPV) is the primary cause of cervical cancer. Emerging evidence suggests that vaginal microbiota dysbiosis influences HPV persistence and further precancer and cancer lesions. Data on the regional HR-HPV genotype distribution and its association with vaginal microbiota in western India are limited. Understanding the relationship between vaginal microbiota and HPV infection has important implications for cervical cancer management.

Methods: This observational, cross-sectional study included 150 women aged 25–50 years who attended a tertiary care hospital in Pune, India. Vaginal swabs were analysed using culture and 16S rRNA Illumina MiSeq sequencing. Cervical samples were collected using liquid-based cytology and subjected to PAP testing and HR-HPV genotyping by real-time PCR.

Results: HR-HPV was detected in 13.88% of women. The identified genotypes included HPV 16, 31, 33, 51, 52, 58, 59, and 68, with HPV 68 and 59 being the most frequent. HPV 16 was associated with high-grade squamous intraepithelial lesions, while non-16/18 genotypes were detected in treated cancer cases. HPV-positive women exhibited significantly higher vaginal microbial diversity and reduced Lactobacillus dominance, with an enrichment of anaerobic genera, including Gardnerella, Prevotella, and Dialister ($p < 0.05$). Evidence from this and previous studies suggests that HR-HPV-associated vaginal dysbiosis may contribute to preneoplastic changes leading to invasive cancer. Cytological examination revealed inflammation in 90 women (60%), while inflammatory atypia was observed in 7 cases. Clue cells were detected in 50% of the samples, A shift from normal vaginal flora was identified in 6% of the women.

Conclusion: Non-16/18 HR-HPV genotypes contribute substantially to HPV infections and are associated with vaginal dysbiosis. Integrating HPV genotyping with microbiota profiling may improve risk stratification and support targeted vaccination and microbiome-based interventions. Future research could explore probiotics, microbiome modulation, restoration therapies to prevent HPV persistence and progression to cervical neoplasia.

Keywords: High-Risk HPV, Vaginal Microbiota, Lactobacillus, Pregnancy Outcomes, Cervical Cancer

How to Cite: Patil-Takbhate, B., Vyawahare, C., Athavale, P., Deshpande, H., Gore, C., Mirza, S., Jali, P., Koli, A., & Suryawanshi, P. vaginal microbiota and high-risk HPV genotype distribution among women at tertiary care hospital [7]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0008

Title: Factors Associated with Return to Work among Cancer Survivors in a Low- and Middle-Income Setting

Subject: The Human Experience of Cancer

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Introduction: Despite return to work (RTW) being a critical milestone in cancer survivorship, determinants of workforce reintegration remain poorly characterized in low- and middle-income country settings.

Methods: A retrospective cohort analysis was conducted using secondary data from 250 Malaysian cancer survivors who were employed prior to diagnosis. Data were obtained from a study investigating financial toxicity among cancer patients. RTW was defined as returning to any paid employment within one year following diagnosis. Variables included socio-demographic characteristics, clinical factors, workability assessed using the Work Ability Index (WAI), and financial toxicity measured using the Comprehensive Score for Financial Toxicity (COST). Descriptive statistics, univariable logistic regression, and multivariable logistic regression analyses were performed to identify factors associated with RTW.

Results: The RTW rate was 62.4%, with a median return time of 4 weeks. Univariable analysis showed that older age, lower education level, employment in small companies, lower household income, lack of medical insurance, later-stage cancer, greater financial toxicity, and poorer workability were associated with lower likelihood of RTW. In multivariable logistic regression analysis, increasing age (AOR: 0.95, 95% CI: 0.92–0.98); Stage IV cancer compared with Stage I disease (AOR: 0.29, 95% CI: 0.09–0.86); residence in West Malaysia (AOR: 2.38, 95% CI: 1.12–5.04); middle household income compared with low household income (AOR: 2.35, 95% CI: 1.13–4.90); and higher COST scores (AOR: 1.06, 95% CI: 1.02–1.09) were independently associated with RTW.

Conclusion: Clinical and socioeconomic factors, particularly disease severity and financial well-being, were independently associated with return to work among cancer survivors. Addressing financial and social barriers may support sustainable workforce reintegration in low- and middle-income settings.

Keywords: Cancer Survivorship, Return To Work, Financial Toxicity, Workability, Workplace Reintegration, Low- And Middle-Income Countries

How to Cite: Sadasivam, S. & Bhoo-Pathy, N. factors associated with return to work among cancer survivors in a low- and middle-income setting [8]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0009

Title: Health Service Use among People Living with Disability and Cancer and Their Use of Telehealth

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: There is limited data on how the patterns of health service use differ by disability status in people with and without cancer. The aim of this study was to examine the patterns of health service use, and the characteristics associated with telehealth use by cancer and disability status.

Methods: This cross-sectional study analysed data from the Australia's Patient Experience Survey 2023-2024. The study population were classified into four groups according to self-reported cancer and disability status (included both disability or restrictive condition). Multivariable logistic regression models were used to compare the patterns of health services and to examine the characteristics associated with telehealth use by cancer and disability status.

Results: Nearly two-thirds of people with cancer (n=678/1058; 64%) and one-third of those without cancer (n=7398/22,841; 32%) reported having a disability. People living with both cancer and disability had the highest odds of visiting a medical specialist (adjusted odds ratio (aOR)=8.85, 95%CI=6.93-11.45), three or more health professionals (aOR=6.85, 95%CI=5.74-8.19), emergency department (aOR=2.55; 95%CI=2.12-3.05), telehealth service (aOR=2.12; 95%CI=1.77-2.53) and being admitted to hospital (aOR=3.58; 95%CI=2.99-4.27) compared to people without cancer and disability. About one-third of people with disability in each cancer and non-cancer group, and one-fifth of people without disability in non-cancer group used telehealth. Several characteristics including being born overseas and having a lower education level were associated with lower odds of telehealth service use, whereas having other long-term conditions was linked to higher odds of telehealth use among cancer group with disability and non-cancer group with and without disability.

Conclusion: People living with both cancer and disability have higher health service utilisation for a range of services than those without cancer and disability. Further studies are needed to identify optimal approaches of care delivery including implementation enablers and barriers targeting this specific group of population with greater healthcare needs.

Keywords: Cancer, Disability, Health Service, Telehealth

How to Cite: Ng, H. S., Walsan, R., Harrison, R., & Koczwara, B. health service use among people living with disability and cancer and their use of telehealth [9]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0010

Title: Cancer Care for All - At Your Doorstep (the Model in Odisha State)

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: Odisha is a state on the eastern coast of India, with a population 0f over 41 million. It has 30 districts, with Bhubaneswar as it's capital. Health care in the state is unfortunately concentrated in the twin cities of Bhubaneswar and Cuttack, while the rest of the state is lacking in quality health care. Presently the state has only one Govt cancer hospital (AHPGIC), located in Cuttack, while there are 2 more private cancer centres in Cuttack and 5 in Bhubaneswar. Besides this there is a cancer centre at AIIMS Bhubaneswar.

Methods: Taking due cognisance of the unmet need of cancer care in most of the state, AHPGIC in collaboration with the state embarked on this novel scheme of "cancer care for all, at your doorstep". Pursuant to this, we have created 30, 6 – bed, Day care Chemotherapy centres (DCC) in all our 30 districts, to facilitate dispensation of Chemo near the patients home. This functions on a 'Hub & Spoke" model, with AHPGIC as the Hub and the 30 DCCs as the spokes. The cancer patient undergoes his initial management including the 1 st Chemo cycle at AHPGIC, Cuttack, and the subsequent cycles are administered at the DCC.

Results: We have now expanded our cancer care ventures to initiate a PBCR (population Based Cancer Registry) and an Early detection program (EDP) for cancer. The EDP envisages its implementation in a 'Pyramidal' fashion; wherein the ASHA & Anganwadi workers are at the base of the Pyramid and AHPGIC is at the apex.

Conclusion: With this unique venture we hope to provide "Cancer care for all, at your doorstep" in Odisha.

Keywords: Decentralising Cancer Care, In The 'Hub & Spoke' Model

How to Cite: Rautray, D. & Swain, S. cancer care for all - at your doorstep (the model in Odisha state) [10]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0011

Title: Navigating the Five Pillars: A Spatial Analysis of Travel Burden for Cancer Patients in Sarawak's Northern Zone

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Centralisation of oncology services forces rural patients in Northern Sarawak to face severe logistical challenges. Fragmented infrastructure, remote settlements, and the Brunei enclave significantly limit equitable access to the five treatment modalities (Surgery, Chemotherapy, Targeted Therapy, Immunotherapy, and Radiotherapy). This study aims to quantify travel burdens and composite accessibility scores across six rural communities, characterising access to these modalities while documenting Hospital Miri's operational decentralisation model for systemic oncology therapies.

Methods: A network spatial analysis integrated geographic information system (GIS) road routing, AirBorneo (formerly MASwings) short take-off and landing (STOL) flight metrics, cross-border transit delays for Limbang and Lawas and workflow data from Hospital Miri's Cytotoxic Drug Reconstitution (CDR) Unit. Composite accessibility scores (0–1 scale) were calculated using a weighted inverse-time accessibility model prioritising regional access to Miri General Hospital over referral access to Sarawak General Hospital (SGH) (0.70:0.30 weighting). Six origin communities were analysed: Batu Niah, Marudi, Long Lama, Long Bedian, Limbang, and Lawas.

Results: Composite accessibility scores ranged from high in Batu Niah (0.9575) to severe access limitations in Lawas (0.2597). AirBorneo aviation was the primary transport modality for Limbang and Lawas, reducing travel times by 150 and 255 minutes respectively compared to road routing, but introducing financial toxicity via out-of-pocket travel cost. Radiotherapy services remain fully centralised at SGH, with all six communities recording accessibility scores below 0.25.

Conclusion: Decentralisation of systemic oncology therapies in Northern Sarawak represents a pragmatic strategy to improve healthcare equity under substantial geographic constraints. Nevertheless, major structural gaps remain. Policy interventions are needed to improve regional road connectivity, reduce out-of-pocket travel costs, address the financial burden of government-unsubsidised cancer therapies, and expand access to radiotherapy services within Sarawak's Northern Zone.

Keywords: Spatial Accessibility, Oncology, Rural Health, Sarawak, Cancer Treatment Decentralisation, Brunei Enclave

How to Cite: Ong, W. J. navigating the five pillars: a spatial analysis of travel burden for cancer patients in Sarawak's northern zone [11]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0012

Title: Circulating miR-27b-3p as a Potential Early Detection Biomarker in Breast Cancer: Diagnostic Performance and Clinicopathological Correlations

Subject: Screening & Early Detection

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Introduction: Breast cancer remains the most prevalent malignancy among women worldwide, with increasing incidence in low- and middle-income countries. The identification of reliable, minimally invasive biomarkers for early detection is therefore essential. Circulating microRNAs (miRNAs) have emerged as promising candidates due to their stability in plasma and role in cancer-related pathways. Among these, miR-27b-3p has been implicated in breast cancer progression; however, its diagnostic utility across tumour sizes and associations with clinicopathological features remain unclear.

Methods: This study evaluated plasma miR-27b-3p expression and its diagnostic performance in 29 pathologically confirmed breast cancer patients, stratified by tumour size (T1, T2, T3/T4), and 10 healthy controls. Total RNA was extracted from plasma and quantified using real-time PCR, with SNORD44 as the reference gene. Statistical analyses included Brown–Forsythe ANOVA for group comparisons, receiver operating characteristic (ROC) curve analysis for diagnostic performance, and independent t-tests and one-way ANOVA for associations with clinicopathological parameters.

Results: No statistically significant differences in miR-27b-3p expression were observed among tumour size groups. However, moderate to large effect sizes suggested biologically relevant trends, particularly in early-stage disease. ROC analysis demonstrated promising diagnostic performance for T1 tumours (AUC = 0.744), with 100% sensitivity and 50% specificity. In contrast, performance for T2 and T3/T4 tumours was poor (AUC < 0.60), and combined-stage analysis showed limited diagnostic accuracy. Elevated miR-27b-3p expression was significantly associated with patients aged below 50 years and oestrogen receptor–positive tumours, with no significant associations observed for progesterone receptor, HER2 status, tumour grade, or molecular subtype. Conclusions: Plasma miR-27b-3p demonstrates potential as an early-stage screening biomarker for breast cancer but lacks sufficient specificity as a standalone diagnostic tool. These findings support its context-dependent biological role and highlight the need for further large-scale validation studies.

Keywords: Breast Cancer, MiR-27b-3p, Biomarkers, QPCR, Diagnostic Performance

How to Cite: Jusoh, A. R., Din, T. A. D. A. A. T., Yahya, M. M., Rahman, W. F. W. A., & Patar, M. N. A. A. circulating miR-27b-3p as a Potential Early Detection Biomarker in Breast Cancer: Diagnostic Performance and Clinicopathological Correlations [12]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page].h ttps://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0013

Title: Building a Resource-Adapted Adult Acute Lymphoblastic Leukaemia Programme in East Malaysia: Early Outcomes of the Sarawak ALL Protocol (SWKALL)

Subject: Policy, Capacity Building & Sustainable Cancer Control

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Introduction: Adult acute lymphoblastic leukaemia (ALL) remains associated with poor survival in many low- and middle-income countries due to resource limitations, restricted access to specialised care, and challenges in delivering intensive paediatric-inspired treatment protocols. Sarawak faces additional barriers from its large geographical area and dispersed population. Before SWKALL, treatment was not standardised and consisted of physician-selected regimens including HyperCVAD, MASPORE, GMALL, and other intensive protocols. In 2023, the Sarawak ALL Protocol (SWKALL) was introduced as a uniform statewide treatment pathway tailored to local resources and patient characteristics. Key adaptations included attenuated dexamethasone-based induction, reduced cytarabine exposure, high-dose methotrexate consolidation, generic pegylated asparaginase, and age-adjusted dose modifications.

Methods: This prospective multicentre pilot study included adult ALL patients treated at Sarawak General Hospital, Sibu Hospital, and Miri Hospital between 2020 and 2025. Patients receiving intensive chemotherapy were categorised into a pre-SWKALL cohort (2020–2022) and a SWKALL cohort (2023–2025). Overall survival (OS), progression-free survival (PFS), treatment response, and toxicity were analysed using Kaplan–Meier methods, Cox regression, and chi-square analysis.

Results: Fifty-three patients were diagnosed with ALL; 46 received intensive chemotherapy. Twenty-one were treated pre-SWKALL and 25 received SWKALL. Median age was 34 years, and 55.1% had high-risk disease. Following SWKALL implementation, 2-year OS improved from 23.8% to 68.8% (p=0.040), while 2-year PFS improved from 23.8% to 51.5% (p=0.039). Median OS and PFS were not reached with SWKALL, compared with 8 and 6 months pre-SWKALL. On multivariable analysis, pre-SWKALL treatment remained independently associated with inferior OS (HR 4.33, p=0.008) and PFS (HR 5.23, p=0.005). No significant differences were observed in induction mortality, neutropenic sepsis, neurotoxicity, or cardiotoxicity.

Conclusion: SWKALL standardized adult ALL care across Sarawak and was associated with substantially improved survival without increased treatment-related toxicity. These pilot results support SWKALL as a pragmatic strategy where regional capacity building can strengthen cancer control in resource-limited setting. Larger studies with longer follow-up are required to validate these findings and assess long-term outcomes.

Keywords: Sarawak, Treatment, Acute Lymphoblastic Leukaemia

How to Cite: Leong, T. S., Ko, C. T., Chew, L. P., Yong, K. Y., Tan, X. Y., Lee, G. W. C., & Chong, S. M. building a resource-adapted adult acute lymphoblastic leukaemia programme in East Malaysia: early outcomes of the Sarawak ALL protocol (SWKALL) [13]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0014

Title: Navigating Cancer: Insights from Patient Journey Mapping

Subject: The Human Experience of Cancer

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Introduction: Cancer is an increasing public health problem in South Africa, with breast cancer being the most diagnosed cancer and cervical cancer the leading cause of cancer deaths among women. Despite the complexity of breast and cervical cancer patients' journeys through the healthcare system, patients' voices are still predominantly missing from the body of literature. Patient journey mapping, as a qualitative research method, offers an opportunity for centring patients in their care journeys and reimagine healthcare provision for the potential improvement of health systems and patient outcomes. The aim of this study was to map journeys of breast and cervical cancer patients across the cancer care continuum.

Methods: Using patient journey mapping, we conducted six focus group discussions with patients with breast and cervical cancer who had completed treatment in Gauteng, KwaZulu Natal and the Western Cape, South Africa. The process involved three steps: 1.) development of individual maps; 2.) narrative sharing; and 3.) development of a collective map. Results of the study were shared in feedback sessions. Findings: A total of 31 people participated in the focus groups: 23 with breast cancer, 7 cervical cancer and one had both cancers during her lifetime. The participants' ages ranged between 30 and 69 years old. A patient journey map was developed drawing on the individual and collective maps and participant narratives. The findings of the paper constellate around three themes. The first theme, (de)personalised care, offers an examination of how relational, institutional and structural factors shape and are reshaped through participants lived experiences across the cancer care continuum. The second theme, self-advocacy, explores how participants advocate for their healthcare needs throughout the cancer care continuum. The third theme, intersecting vulnerabilities, explores how intersecting social identities, such as socioeconomic factors, gender, comorbidities and mental health, shape their cancer care journeys.

Conclusions: By centring patient with breast and cervical cancer voices, patient journey mapping not only showed where services and systems fall short but also provided guidance for redesigning a more patient responsive health system.

Keywords: Lived Experience, Cancer Care Continuum, Breast Cancer, Cervical Cancer, South Africa, Intersectionality

How to Cite: Day, S., Harries, J., Sawula, B., Payne, A., Bray, S., Okova, D., Pretorius, L., & Moodley, J. navigating cancer: Insights from patient journey mapping [14]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0015

Title: Challenges and Facilitators in Pathways to Cancer Diagnosis in Southern Africa: A Qualitative Study

Subject: Screening & Early Detection

Authors: Sarah Day[1]*, Kirsten Deanne Arendse[2], Suzanne E Scott[2], Melinda Moyo[3], Sunga Mzeche[3], Bothwell Takaingofa Guzha[3], Tegama Natalie[2], Valerie Anne Sills[2], Tasleem Ras[4], Fiona M Walter[2], Jennifer Moodley[5]

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Introduction: Considering the burden of breast, cervical and colorectal cancer in Southern Africa, strategies and interventions are needed to ensure timely diagnosis. Improving earlier diagnosis of cancer in Southern Africa requires understanding pathways from symptom recognition to diagnosis where both patient-related and health system-related delays are common. Drawing on the Model of Pathways to Treatment, this study therefore aimed to explore primary, secondary and tertiary level public sector HCWs experiences, barriers and facilitators in managing patients with symptoms of possible breast, cervical or colorectal cancer in two Southern African countries with varying health system challenges.

Methods: A qualitative in-depth interview study with HCWs managing patients with breast, cervical and colorectal cancer symptoms. We also conducted workshops with a group of HCWs to check the credibility of the interview findings. The study was conducted with staff working in primary, secondary and tertiary public health facilities in the Eastern and Western Cape in South Africa (SA) and Harare and Bulawayo and their referral provinces in Zimbabwe. HCWs with experience in managing patients with symptoms of possible breast, cervical or colorectal cancer were recruited for the study.

Results: A total of 56 participants (26 in SA and 30 in Zimbabwe) participated in the in-depth interviews. Twenty-six (12 in SA and 14 in Zimbabwe) participated in four clinical advisory group workshops across both countries. HCW perceptions of patient-level factors influencing the diagnostic interval included financial limitations, and patients' absence and delays in attendance. Healthcare provider and system factors included: challenges with referral and feedback systems; training needs; low awareness of protocols and guidelines; inappropriate and suboptimal clinical assessments; and broader socio-economic factors and resource limitations.

Conclusion: Improving the timely diagnosis of breast, cervical, and colorectal cancer in Southern Africa necessitates targeted strategies that address both patient-related, provider and health-system delays.

Keywords: Early Diagnosis, Southern Africa, Breast Cancer, Cervical Cancer, Colorectal Cancer, Healthcare Workers

How to Cite: Day, S., Arendse, K. D., Scott, S. E., Moyo, M., Mzeche, S., Guzha, B. T., Natalie, T., Sills, V. A., Ras, T., Walter, F. M., & Moodley, J. challenges and facilitators in pathways to cancer diagnosis in Southern Africa: a qualitative study [15]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0016

Title: Identifying Core Financial Navigation Services for Cancer Care in Malaysia: A Modified Delphi Study

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: Financial toxicity is a substantial burden of cancer treatment and structured frameworks for financial navigation remain limited in middle-income settings. This study aimed to develop a consensus-based set of core financial navigation services for oncology patients in Malaysia.

Methods: Financial navigation services were first identified through literature review and stakeholder interviews. A two-round modified Delphi study was then conducted with 34 stakeholders, including healthcare professionals, social workers, navigators, patients, caregivers, financial specialists, and pharmaceutical representatives. Consensus was defined using rigorous a priori criteria: a Median of 3.0 on a 3-point scale, an Interquartile Range (IQR) of 1.0 or less, and a minimum of 75% agreement.

Results: Of the 17 proposed financial navigation services, 14 achieved consensus after two Delphi rounds. Stakeholders prioritised services related to upfront cost transparency, breakdown of treatment and medication costs, estimation of out-of-pocket expenses, insurance coverage explanation, eligibility assessment, and active administrative assistance for government welfare schemes, EPF withdrawals, tax relief claims, and pharmaceutical assistance programs. Although several services achieved agreement levels of 69% in Round 2, these items demonstrated stable median scores, low response dispersion, and consistent stakeholder support across rounds, supporting their retention in the final framework. In contrast, group-based financial education workshops, general debt counselling, and life insurance advisory services failed to achieve consensus and were excluded.

Conclusion: This study established a consensus-based framework of 14 core financial navigation services for oncology care in Malaysia. The Delphi process enabled refinement of stakeholder priorities and ensured the framework was contextually relevant, patient-centred, and suitable for implementation within pluralistic middle-income health systems.

Keywords: Financial Toxicity, Delphi Method, Financial Navigation, Cancer Care, Health Services Research

How to Cite: Lee, P. Y., Rajah, H. D. A., & Pathy, N. B. identifying core financial navigation services for cancer care in Malaysia: a modified Delphi study [16]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0017

Title: Mobile Mammography as a Model for Equity in Breast Cancer Screening: Findings from Rural Communities in Malaysia

Subject: Screening & Early Detection

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Introduction: Breast cancer is the most common cancer among Malaysian women, and late diagnosis remains a significant challenge, particularly in rural communities where access to screening is limited by barriers such as distance, cost, and low awareness. To address this issue, the National Cancer Council (MAKNA) launched a Digital Mobile Mammogram Unit (DMMU) service in 2011, expanding to Sabah and Sarawak in 2022 to provide free breast cancer screening in underserved areas.

Methods: This retrospective descriptive study evaluated the 2-year outcomes of the program from January 2023 to December 2024, analysing participation, abnormal findings, cancer detection, and implications for improving access and equity in breast cancer screening. Free digital mammography was offered to women aged 40 years and above, with portable ultrasound used for immediate triage of abnormal findings.

Results: During the study period, 13,343 mammograms were performed across 80 screening events, of which 63 (78.8%) were conducted in rural areas, attracting 9,848 participants (73.8%) from these communities. Most participants were between 40 and 59 years of age. Abnormal findings were identified in 3,693 women (27.7%), of whom 1,682 (45.5%) underwent ultrasound assessment and 180 (1.3% of all screened; 4.9% of those with abnormalities) were referred to hospital for further evaluation. A total of 33 breast cancers were diagnosed, representing 0.25% of all women screened, with 48.5% detected at an early stage and 51.5% at a late stage.

Conclusion: These findings demonstrate that mobile mammography is a practical and equitable approach to expanding breast cancer screening access in rural and underserved populations; however, the continued presence of late-stage diagnoses underscores the need for stronger follow-up systems and greater public awareness to improve early detection and optimise screening outcomes.

Keywords: Malaysia, Rural Health, Breast Cancer Screening, Lower-Income Women, Ultrasound Triage, Southeast Asia, Mobile Mammography

How to Cite: Justi, A. B., Chandran, S., Taib, M. F. B. M., & Siddiq, H. M. mobile mammography as a model for equity in breast cancer screening: findings from rural communities in Malaysia [17]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0018

Title: Repurposing Antimalarial Artesunate to Enhance Platinum Based Chemotherapy in Cervical Cancer Cell Lines

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: Cervical cancer remains a major public health burden across the Asia-Pacific, with disproportionately high incidence and mortality in regions such as Sarawak. There is a critical need for affordable therapeutic strategies that improve treatment outcomes. Drug repurposing offers a cost-effective approach by leveraging agents with established safety profiles. Malaysia is establishing a drug repurposing ecosystem through the International Affordable Diagnostics and Therapeutics Alliance (IA-DATA) to accelerate the development of affordable and accessible oncology therapies by leveraging existing drugs with established safety profiles. Artesunate, an anti-malarial drug, has demonstrated anticancer activity, potentially through mechanisms such as oxidative stress induction and apoptosis. This study evaluates the potential of artesunate to enhance the efficacy of platinum-based chemotherapy in cervical cancer cell lines.

Methods: HeLa and SiHa cervical cancer cell lines were treated with artesunate, cisplatin, and carboplatin individually and in combination. Cell viability was assessed using the CCK-8 assay to determine half-maximal inhibitory concentration (IC50) values. Drug interactions were analysed using combination index methods. Apoptosis and cell cycle distribution were evaluated by flow cytometry. The most promising combination will be further validated in three-dimensional cervical cancer organoid models.

Results: Both cisplatin and artesunate demonstrated dose-dependent growth inhibition in HeLa and SiHa cells. The IC50 values for cisplatin were 5.641 μM in HeLa and 5.682 μM in SiHa. Artesunate showed comparable cytotoxicity, with IC50 values of 5.711 μM in HeLa and 12.79 μM in SiHa, indicating greater sensitivity in HeLa cells. In contrast, carboplatin exhibited markedly lower potency, with IC50 values exceeding 100 μM in both cell lines. Ongoing analyses are assessing the extent of synergistic interactions between artesunate and platinum agents.

Conclusion: These findings demonstrate that artesunate has cytotoxic activity comparable to cisplatin and greater potency than carboplatin in cervical cancer cell lines. The data support its potential role as a chemosensitising agent in platinum-based therapy. Further validation in organoid models will inform its translational potential as an accessible and cost-effective adjunct in cervical cancer treatment.

Keywords: Cervical Cancer, Artesunate, Drug Repurposing, 3D Patient-Derived Organoids, Cisplatin, Carboplatin

How to Cite: Yew, K. L., Lim, M. S. H., Augustin, Y., Krishna, S., Chung, I., Divis, P. C., & Tay, S. P. repurposing antimalarial artesunate to enhance platinum-based chemotherapy in cervical cancer cell lines [18]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0019

Title: Cancer Caregiving as a Policy Stress Test: A Comparative Policy Scoping Review in High-Income Countries

Subject: Policy, Capacity Building & Sustainable Cancer Control

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Introduction: Informal caregivers are central to cancer care but often experience substantial financial, psychosocial, and employment burdens. Despite increasing reliance on family-based care, most caregiver support policies remain disease-general rather than cancer-specific. This study compared caregiver policy frameworks across six high-income countries to identify structural gaps in support for cancer caregiving.

Methods: A comparative policy scoping review was conducted across six purposively selected high-income countries between 2000 and 2025, selected to capture variation in caregiver support arrangements across Western and Asia-Pacific policy contexts. Caregiver-related legislation, policy documents, and national frameworks relevant to caregiver support were identified through government databases and grey literature, yielding policy documents for final analytical mapping. Policies were mapped across six key domains including financial support, employment protection, care integration, psychosocial services, legal recognition, and cancer-specific support measures. Cross-national differences were comparatively assessed in relation to cancer caregiving needs and policy responsiveness.

Results: Most countries relied predominantly on general caregiver policies with limited cancer-specific provisions. Eligibility frameworks commonly designed around chronic disability, aging, or activities of daily living impairment demonstrated limited alignment with the volatile and treatment-intensive trajectory of cancer caregiving. Western countries, particularly the United Kingdom, more frequently incorporated caregiver leave entitlements, employment protection measures, and formal legal recognition of caregivers within statutory frameworks. In contrast, support in Singapore and Japan was more often embedded within patient-centred benefit structures and family-based care arrangements, with fewer policies explicitly designating caregivers as independent beneficiaries.

Conclusion: Current caregiver policies demonstrate limited alignment with the clinical and economic demands of cancer caregiving. Future policy development should incorporate cancer-specific support measures and stronger recognition of caregivers within cancer care systems.

Keywords: Cancer Caregiving, Informal Caregivers, Caregiver Policy, Comparative Policy Analysis, Scoping Review

How to Cite: Liang, Z. & Bhoo-Pathy, N. cancer caregiving as a policy stress test: a comparative policy scoping review in high-income countries [19]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0020

Title: Psychosocial Outcomes of Adolescent and Young Adult Cancer Survivors from a Survivorship Clinic from a Tertiary Cancer Center

Subject: The Human Experience of Cancer

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Introduction: Adolescent and young adult (AYA) cancer survivors face distinct medical and psychosocial challenges that can adversely affect long-term well-being. Although distress among cancer survivors has been widely studied, evidence from India remains limited. This study assessed the distress and its associated factors among AYA cancer survivors attending follow up at a tertiary cancer centre in India.

Methods: In this cross-sectional study, AYA cancer survivors diagnosed between the age 15-39 with ≥2 years of disease-free survival attending the After-Completion Therapy (ACT) Clinic of a tertiary cancer centre were enrolled (N=274) from Jan 2023 to March 2025. Distress was assessed using the National Comprehensive Cancer Network Distress Thermometer (NCCN-DT). Pain, fatigue, and cognitive function were evaluated using the Visual Analog Scale (VAS), Symbolic Assessment of Fatigue (SAFE), and Mini-Mental State Examination (MMSE), respectively. Descriptive statistics were used to summarise participant characteristics. Associations between distress and clinical and demographic variables were examined using the chi-square test.

Results: Of the 274 participants, 106 (38.7%) reported moderate-to-severe distress. Most survivors had hematolymphoid malignancies (221/274, 80.7%) and were from rural areas. Distress was significantly associated with residential setting (p=0.05), treatment modality (p= 0.05), pain (p= 0.001), and fatigue (p= 0.028). Cognitive impairment was not significantly associated with distress.

Conclusion: More than one-third of AYA cancer survivors reported clinically significant distress. Distress was associated with rural residence, treatment modality, pain, and fatigue, highlighting the importance of integrating routine distress screening, symptom management, and psychosocial support into survivorship care. Multidisciplinary survivorship program tailored to the needs of AYA survivors may improve long-term health and quality-of-life outcomes.

Keywords: Adolescent And Young Adult Cancer Survivors, Distress, Psychosocial Outcomes, Pain, Fatigue, Cancer Survivorship

How to Cite: Rajkumar, D., Veeraiah, S., Radhakrishnan, V., & Sudhakar, R. psychosocial outcomes of adolescent and young adult cancer survivors from a survivorship clinic from a tertiary cancer center [20]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0021

Title: Beyond Survival: Fertility Preservation Inequities across Low- and Middle-Income Countries in Cancer Care

Subject: Policy, Capacity Building & Sustainable Cancer Control

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Introduction: As cancer survival rates are improving, treatment-induced fertility issues are being recognised as an important aspect of survivorship care. Despite international guidelines recommending early counselling and referral prior to cancer treatment, fertility preservation (FP) remains a critical survivorship challenge. As most guidelines originate in high-income countries (HICs), implementing them in low and middle-income countries (LMICs) remains challenging, where sociocultural expectations, financial barriers, and limited survivorship infrastructure shaping reproductive decision-making among young cancer patients. This review explored FP-related knowledge, attitudes, practices, and barriers across HICs and LMICs.

Methods: A narrative review of literature (N=31) was conducted using ProQuest, Scopus, and Google Scholar databases for studies published between 2015-2025.

Results: FP was consistently recognised as an important component of survivorship care across both HICs and LMICs. Healthcare professionals generally reported positive attitudes toward FP discussions, while patients expressed concerns regarding future fertility and parenthood. However, fertility counselling and referral practices remained inconsistent across settings. A clear implementation divide emerged between HICs and LMICs. In HICs, barriers to FP discussions were primarily related to competing clinical priorities, limited consultation time, and inconsistent integration of fertility care within routine oncology services. In contrast, LMIC studies identified additional structural and sociocultural barriers, including the high FP costs, limited specialised services, inadequate provider training, and lack of referral pathways. Patients often reported insufficient FP information while FP-related decisions were also shaped by family/societal expectations.

Conclusion: This review suggests differences in FP practices between HICs and LMICs, where LMIC practices are shaped not only by knowledge deficit but also by healthcare systems, sociocultural experiences and expectations. Additionally, it highlights the need for contextually and culturally relevant FP communication. These findings emphasize the importance of culturally sensitive fertility communication and counselling strategies to improve equitable FP services and reproductive survivorship care for young cancer patients.

Keywords: Fertility Preservation, Onco-Fertility, Health Equity, Cancer Survivorship, Low And Middle-Income Countries.

How to Cite: Seethi, H. K. & Chawak, S. beyond survival: fertility preservation inequities across low- and middle-income countries in cancer care [21]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0022

Title: Leaving a Legacy: Experience of Role of a Psycho-Oncologist and Navigating Decision-Making in Palliative Care

Subject: Policy, Capacity Building & Sustainable Cancer Control

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Introduction: The field of psycho-oncology has evolved from the task of addressing historical stigma surrounding cancer to now spanning across various domains such as curative, palliative, and caregiver support. While the professional and psycho-social burdens of psycho-oncologists are an area of global enquiry, limited work has been done in the Indian context, where cultural variations may be relevant. Research studies in India have indicated low patient involvement and a heavy reliance on supportive networks in oncology treatment decisions, creating a need for examining the process of decision-making through a professional lens. Hence, the current study aims to explore the lived experiences of a psycho-oncologist in treatment decision-making.

Methods: Using Interpretative Phenomenological Approach, a psycho-oncologist working in a palliative care setting was interviewed. Data was analysed using Interpretative Phenomenological Analysis.

Results: The themes constructed for the study were: (I) 'Physical Battle' Experiences of working as a psycho-oncologist: perceived as an agony aunt by colleagues, change in narrative over time, therapy as very alien to clients (II) 'Decision making is ensuring patients have a good death' Navigating decisions in palliative care: informational needs of clients from a health literacy and a collusion perspective, multistakeholder yet patient-centred nature of decision-making, interventions in palliative care.

Conclusion: The findings suggest that the involvement of multiple stakeholders in treatment decision-making requires psycho-oncologists to initially navigate interactions with medical professionals who may possess limited or misconstrued understandings of the psychology profession. Moreover, treatment decision-making is complicated by mental health stigma and patients' and caregivers' limited familiarity with the therapeutic process. The study highlights the need for initiatives that improve understanding of the psycho-oncologist's role among healthcare professionals and interventions that address patients' and caregivers' understanding of mental health and lack of awareness about need for mental health support (to improve quality of life) in cancer care.

Keywords: Psycho-Oncologist, Palliative Care, Interpretative Phenomenological Analysis

How to Cite: Navalkar, V. & Chawak, S. leaving a legacy: experience of role of a psycho-oncologist and navigating decision-making in palliative care [22]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0023

Title: 'Open Doors or Closed Ranks?': Family Communication Patterns in Navigating Oncology Care

Subject: The Human Experience of Cancer

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Introduction: Managing chronic conditions such as cancer requires significant support for patients in areas such as medication administration, emotional assistance, and surrogate decision-making. Family members often assume the role of caregivers; however, challenges such as collusion, along with non-disclosure of illness to patients, are prevalent in oncology settings, with occurrences reported as high as 46% to 54.1% in India. This paper proposes integrating Family Communication Patterns Theory (FCPT) to better understand these complexities. Hence, a narrative review was carried out to explore the utilisation of FCPT in general healthcare and the oncology setting.

Methods: A comprehensive narrative review was carried out to analyse research papers (N=20) published in the last 10 years. The studies were sourced from PubMed, Web of Science, and Google Scholar.

Results: Based on FCPT dimensions, four types of communication patterns (i.e., consensual, pluralistic, protective, and laissez-faire) were found to influence health outcomes such as cognitive-emotional (i.e., decision making confidence, processing health messages, positive attitudes and patient satisfaction), behavioural (i.e., health risk sharing, health information seeking, discussions about end-of-life and better clinical interactions) and relational (i.e., relationships of patients with caregivers, healthcare professionals and other support networks) outcomes. Specifically, in oncology, these caregiving patterns determined caregiver roles, health seeking challenges, and supportive care needs.

Conclusion: The review provides insights into the communication dynamics within a family that may facilitate or hinder patient-caregiver communication. Further, the study provides a deeper understanding of the FCPT typologies and its relation with caregivers' unmet supportive care needs. These findings imply the need to develop interventions that may help recognise and adopt family communication patterns that encourage open communication between patient-physician-caregiver. The study will also aid in understanding patient preferences and enhance patient-caregiver involvement and autonomy in decision-making.

Keywords: Caregivers, Family Communication Patterns, Oncology Care

How to Cite: Navalkar, V. & Chawak, S. 'open doors or closed ranks?': family communication patterns in navigating oncology care [23]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0024

Title: Characteristics and Spatial Distribution of Cancer Patients Attending Hospitals in Nakhon Phanom Province, Thailand, 2010 - 2024

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Following the cessation of cancer data reporting from Nakhon Phanom Province after 2009, this study aimed to determine the geographical distribution and update the cancer burden to support local cancer control planning.

Methods: A retrospective descriptive cohort study was conducted, encompassing all 11,660 cancer cases identified and recorded within the hospital-based registry of Nakhon Phanom Province between January 2010 and December 2024. Summary analyses of patient characteristics were performed using descriptive statistics, alongside an assessment of the geographical spread of cancer cases at the sub-district level across various time intervals.

Results: The majority of cases were female, totaling 6,330, while male cases reached 5,330. Among male patients, liver and bile duct cancer accounted for the highest proportion (29.8%), followed by colorectal cancer (13.2%), lung cancer (10.9%), prostate cancer (4.8%), and stomach cancer (4.2%). Among female patients, breast cancer emerged as the most prevalent malignancy (23.8%), followed by liver and bile duct cancer (16.6%), colorectal cancer (10.7%), cervix uteri (8.8%), and lung cancer (4.8%). Most cancer patients were concentrated in Mueang district and surrounding urban areas. This pattern reflected a high density of patients in urban settings throughout the initial five years of the study, largely attributed to the proximity of the provincial hospital. However, during the period from 2020 to 2024, the distribution of patients expanded more broadly across the province, following improvements in accessibility to medical services.

Conclusion: Liver and bile duct cancer and breast cancer remained the leading malignancies in Nakhon Phanom Province. Cancer cases shifted from urban concentration toward broader provincial distribution over time, reflecting improved access to medical services. These findings highlighted the need for targeted screening programs and a sustainable cancer registry to support effective cancer control planning across the province.

Keywords: Cancer, Spatial Distribution, Cancer Burden, Hospital-Based Registry, Geographical Distribution

How to Cite: Sahat, O. & Kamsa-Ard, S. characteristics and Spatial Distribution of Cancer Patients Attending Hospitals in Nakhon Phanom Province, Thailand, 2010 - 2024 [24]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0025

Title: A Budget Reform Agenda to Improve Malaysia's Cancer Care Financing: A Comparative Policy Analysis of Fiscal Transparency in ASEAN-6

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: Public health systems cannot plan cancer services effectively if oncology spending cannot be separately tracked. This study examines fiscal transparency as an overlooked barrier to evidence-based cancer financing in Malaysia, focusing on whether current budget systems allow disease-level expenditure to be identified, evaluated, and linked to service needs.

Methods: A qualitative comparative policy analysis was conducted across ASEAN-6 countries: Malaysia, the Philippines, Indonesia, Singapore, Thailand, and Vietnam. Government budget documents, financing reports, statutory instruments, and policy literature were reviewed using four dimensions: expenditure tracking granularity, capital expenditure visibility, clinical coding integrity, and the gap between formal budget methodology and practical implementation.

Results: The analysis shows substantial variation in oncology fiscal transparency. The Philippines provides the clearest model of disease-level visibility through explicit cancer-related budget lines, including the National Integrated Cancer Control Program and Cancer Assistance Fund. Thailand and Singapore demonstrate stronger technical capacity for structured health financing and case-based information, although detailed oncology-specific public reporting remains limited. Indonesia has granular hospital-level case-based reimbursement data, but weak integration with national accounts and coding inconsistencies limit disease-level tracking. Vietnam records detailed transactions but lacks consolidated oncology program reporting, especially where hospital autonomy and off-budget financing obscure capital investment. Malaysia, the focal case, identifies oncology and radiotherapy within Ministry of Health activity structures but limits to emoluments and services and supply. Capital investments, facility-level disbursements, coding quality, and service outputs cannot yet be reliably reconciled.

Conclusion: Malaysia's challenge is not simply insufficient cancer funding, but insufficient visibility over how cancer funds are planned, spent, and translated into services. A feasible reform agenda would link oncology sub-program classification, disease-specific capital reporting, ICD-11 coding quality, and the forthcoming 2027 DRG system into a single accountability framework, enabling cancer financing to be planned against real disease burden rather than broad ministry-level estimates.

Keywords: Fiscal Transparency, Cancer Care Financing, Comparative Policy Analysis

How to Cite: Anand, V. A. & Bhoo-Pathy, N. a budget reform agenda to improve Malaysia's cancer care financing: a comparative policy analysis of fiscal transparency in ASEAN-6 [25]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0026

Title: Financial Burden beyond Treatment: Out-of-Pocket Expenditure among Head and Neck Cancer Survivors during Supportive Care in Malaysia

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: Head and neck cancer (HNC) survivors often require long-term supportive care to manage treatment-related complications affecting eating, speaking, oral health, and daily functioning. Although Malaysia provides subsidised cancer treatment through its public healthcare system, evidence on the financial burden experienced by survivors beyond active treatment remains limited. This study estimated the direct out-of-pocket (OOP) costs incurred during supportive care among HNC survivors and identified the major contributors to expenditure.

Methods: A multicentre cross-sectional study was conducted among HNC survivors attending seven referral centres across six regions of Malaysia. Participants were recruited through convenience sampling. Direct costs were assessed using a validated OOP expenditure checklist covering direct medical and non-medical supportive care expenses. Annual direct costs were estimated by annualising reported expenditures and analysed descriptively to determine cost distribution and key expenditure categories.

Results: A total of 143 participants completed the survey. Non-medical expenses accounted for 79.27% of total expenditure, substantially exceeding medical costs. The median annual direct cost of supportive care was RM 6,459.00 (IQR: RM 3,014.50 – RM 13,620.00) per survivor. Home-care expenses were the largest contributor, accounting 78.5% of non-medical costs and largely driven by special dietary requirements. Travel and accommodation constituted the second largest non-medical cost category. Among medical costs, investigation and follow-up services and oral health-related care were the principal cost drivers, while oral care products and dental aids were the most frequently reported expenditures.

Conclusion: HNC survivors incurred substantial OOP expenditure during supportive care, with non-medical expenses accounting for the majority of costs and home-care needs representing the largest contributor. These findings suggest that financial burden of cancer extends beyond active treatment and into survivorship. Strengthening survivorship-focused financing and supportive care coverage should be considered to enhance financial protection and support equitable cancer care within Universal Health Coverage framework.

Keywords: Health Expenditure, Financial Burden, Direct Costs, Head And Neck Cancer (HNC), Supportive Care.

How to Cite: Nor, S. M., Anuwar, A. H. K., Nor, N. A. B. M., & Rohani, M. M. financial burden beyond treatment: out-of-pocket expenditure among head and neck cancer survivors during supportive care in Malaysia [26]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0027

Title: Socioeconomic Burdens among Cancer Survivors: Catastrophic Health Expenditure and Job Disruption after Cancer Diagnosis

Subject: The Human Experience of Cancer

Authors: Janine Marie Balbedina[1]*, Yeol Kim[2], Hye Joo Jang[2], Ha Yeong You[2], Jae Hyun Park[3], Hyun Woo Lee[4], Ji Soo Park[5], Yu Ri Choe[6], Kyu Won Jung[2]

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Introduction: As cancer survival rates continue to rise, ongoing care needs and socioeconomic disruptions leave survivors facing severe financial burdens. Evaluating these long-term challenges is crucial to improving survivorship care and national health policy. This study aims to assess the socioeconomic burdens of cancer and identify vulnerable patient groups among Korean cancer survivors.

Methods: The Korean Survey for Cancer Survivorship is a national, multicenter survey of adult cancer survivors diagnosed with stomach, colorectal, lung, liver, breast, gynecological, or prostate cancer who had completed active treatment and were at least one-year post-diagnosis. Descriptive statistics and multivariable regression analyses were conducted to identify vulnerable patient groups to catastrophic health expenditure (CHE).

Results: A total of 4,517 survivors completed the survey. Among those employed at diagnosis, 41.3% experienced a post-diagnosis employment change, with 50.5% experiencing job loss and 56.0% reporting income loss. Moreover, among those who experienced a leave of absence or unemployment due to cancer, 36.8% were unable to return to work. Regarding financial toxicity, 53.7% indicated financial burden from medical expenses, and 51.9% reported unmet needs for financial support for medical costs and income loss. Although health insurance covered 98.3% of participants, 42.3% reported out-of-pocket (OOP) payments >50% of their medical fees, and 20.1% experienced catastrophic spending (>40% of income spent on OOP expenses). Multivariable regression models revealed that CHE was significantly higher among survivors who are unmarried/single (OR=1.71), unemployed (OR=2.29), experienced post-diagnosis job changes (OR=1.45), and not covered by the National Health Insurance (OR=2.20). Lung (OR=1.94), liver (OR=2.82), and gynecologic (OR=2.43) cancer patients diagnosed at Stage II/III (OR=1.89) and Stage IV (OR=2.76) also reported significantly higher odds of CHE.

Conclusion: The findings highlight the need for integrated survivorship care models that extend beyond clinical care to incorporate comprehensive financial and employment protections to reduce socioeconomic vulnerability among cancer survivors.

Keywords: Socioeconomic Burden, Financial Toxicity, Employment, Cancer Survivorship, Catastrophic Health Expenditure

How to Cite: Balbedina, J. M., Kim, Y., Jang, H. J., You, H. Y., Park, J. H., Lee, H. W., Park, J. S., Choe, Y. R., & Jung, K. W. socioeconomic burdens among cancer survivors: catastrophic health expenditure and job disruption after cancer diagnosis [27]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0028

Title: Where Access Breaks: Comparing Breast Cancer Diagnosis and Treatment Bottlenecks across Four Asian Health Systems

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: In settings with or approaching universal health coverage, formal entitlement to cancer services does not always translate into timely, affordable and equitable access. This study compared access barriers to breast cancer diagnosis and treatment across Indonesia, Malaysia, Thailand and Singapore, focusing on how gaps between coverage and real-world access varied by pathway stage and health-system context.

Methods: We conducted a comparative qualitative health-systems synthesis across four purposively selected Southeast Asian countries representing different health-system development, financing arrangements and cancer-care capacity. Data were drawn from government policy documents, academic literature and publicly available sources on breast cancer services, cancer control, health financing and reimbursement. Using a patient care pathway framework, constraints were mapped across diagnostic and treatment stages and organised by diagnostic capacity, service distribution, treatment availability, implementation capacity, reimbursement design and patient affordability.

Results: Access bottlenecks differed by country and pathway stage. In Indonesia, constraints were concentrated upstream: limited diagnostic infrastructure, workforce shortages, urban concentration of diagnostic and oncology services, and uneven referral capacity restricted timely care outside major centres. In Malaysia, diagnostic capacity was stronger, but treatment access was limited by procurement ceilings, hospital budget constraints, limited formulary inclusion of high-cost therapies and post-approval delays in availability. In Thailand, regional oncology networks supported broad access to essential services, but global budget controls and inter-scheme differences in reimbursement constrained equitable uptake of high-cost innovations. In Singapore, diagnostic and treatment services were widely available; however, selective subsidies, reimbursement restrictions and co-payment exposure shaped access to high-cost therapies.

Conclusion: Across the four systems, the dominant barrier to breast cancer care fell at a different stage of the pathway, tracking health-system design rather than national income. Expanding coverage does not remove access barriers but relocates them, so investment must match where each system's barrier currently sits and reach the next stage before it becomes binding.

Keywords: Breast Cancer, Health Systems, Universal Health Coverage, Cancer Policy, Southeast Asia

How to Cite: Zhang, Y. & Bhoo-Pathy, N. where Access Breaks: Comparing Breast Cancer Diagnosis and Treatment Bottlenecks Across Four Asian Health Systems [28]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0029

Title: Emergency Department Utilization Based on Causality and Severity after Curative Radiotherapy in Adult Solid Malignancy

Subject: The Human Experience of Cancer

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Introduction: This study aims to characterize emergency department (ED) visits after radiotherapy (RT) and to assess the causality and severity of these visits.

Methods: Patients who received curative RT for solid malignancies from 2016 to 2021 were retrospectively analyzed. The timeframe for ED visits was defined from the start of RT to 3 months after the completion of RT. Causes of ED visits were classified as 1) cancer treatment, 2) RT, 3) cancer itself, and 4) temporary event, and the degree of relevance for each cause was assessed as 1) certain, 2) probable, 3) possible, or 4) unlikely. Severity was graded using the Korean Triage and Acuity Scale (KTAS). Predictors related to strong relevance (certain and probable) for each cause and to severe events were examined using binary logistic regression analysis. A p-value <0.05 indicated statistical significance.

Results: A total of 177 patients presented to the ER, accounting for more than 5% of the estimated total patient population at our institution, and 192 ED visits were evaluated. The thoracic site was the most frequent primary location, and 67.2% of cases were stage III/IV. KTAS3, indicative of urgent condition, was the most frequent at 64.1%. RT-related relevance was positively correlated with KTAS grade (r=0.253, p<0.001). The proportions of ED visits with strong relevance for cancer treatment, RT, cancer itself, and temporary events were 62.5%, 31.2%, 16.2%, and 38.1%, respectively. Among strongly relevant causes, concurrent chemo-RT (OR 4.24, p<0.001) and a definitive treatment aim (OR 3.23, p<0.001) were most significantly associated with cancer treatment and RT, respectively. Severe events were more frequently observed with thoracic primary tumors (OR 3.01, p=0.005), intervals >30 days after RT (OR 2.60, p=0.016), and age ≥65 years (OR 2.37, p=0.022).

Conclusion: Patient subgroups with key prognostic factors require continuous and close follow-up even following RT.

Keywords: Cancer, Radiotherapy, Emergency Room, Korean Triage And Acuity Scale, Concurrent Chemoradiotherapy

How to Cite: Yoon, W. S., Park, S., Moon, S., Park, J. H., Kim, J., Choi, J., & Rim, C. H. emergency department utilization based on causality and severity after curative radiotherapy in adult solid malignancy [29]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0030

Title: Bridging the Acceptability-Uptake Gap in HPV Self-Sampling for Cervical Cancer Screening: A Narrative Review

Subject: Screening & Early Detection

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Introduction: Cervical cancer remains a major public health concern among women, where screening coverage is low and under-screening persists. Human papillomavirus (HPV) self-sampling is increasingly promoted to improve screening participation, particularly among under-screened women, because it offers privacy, convenience, autonomy, and reduced embarrassment. However, high acceptability does not consistently translate into completed screening. This narrative review examined the acceptability–uptake gap in HPV self-sampling and synthesised the behavioural barriers that prevent women from converting willingness into screening action.

Methods: A structured narrative review of PubMed, Scopus, and Web of Science was conducted. Search concepts included HPV self-sampling, cervical cancer screening, acceptability, uptake, hesitancy and behavioural barriers. From 564 records identified, 296 duplicates were removed and 268 records were screened. Eight studies met the inclusion criteria, comprising systematic reviews, qualitative evidence syntheses, meta-analyses of randomised trials, and a qualitative study. Findings were synthesised thematically using behavioural constructs including self-efficacy, response efficacy, perceived response cost, stigma, health literacy, and cues to action.

Results: Four themes were identified. First, intention gap: women perceived HPV self-sampling as convenient and preferable, but this alone did not ensure completion of screening. Second, active delivery: uptake improved when self-sampling was actively offered through mailed kits, opt-out approaches, outreach, community-based distribution, or healthcare service offers. Third, confidence and capability: low self-efficacy, doubts about sample accuracy, fear of results, stigma, cultural or religious concerns, and limited health literacy reduced women's readiness to act. Fourth, theory-informed implementation: education, confidence-building, reminders, culturally sensitive support, trusted-provider and community engagement, and clear follow-up pathways were needed to convert willingness into screening completion.

Conclusion: HPV self-sampling should not be implemented as a stand-alone technological solution. Closing the acceptability–uptake gap requires behaviourally informed, culturally responsive and community-supported strategies that strengthen confidence, trust and completion across the cervical cancer screening pathway.

Keywords: HPV Self-Sampling, Cervical Cancer Screening, Behavioural Barriers, Screening Uptake, Acceptability

How to Cite: Rafiai, F. A. B., Abdullah, N., Ruzlin, A. N. B. M., Isa, M. R., & Nasir, N. M. bridging the acceptability-uptake gap in HPV self-sampling for cervical cancer screening: a narrative review [30]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0031

Title: Development and Implementation of a Low-Cost Automated Screening and Tracking System to Support Navigation Programmes for Patients with Cancer

Subject: Policy, Capacity Building & Sustainable Cancer Control

Authors: Sheng Yu Lim[1]*, Wan Muhammad Irfan Wan Mohd Zohar[2], Pei Yie Lee[2], Harenthri Devy Alagir Rajah[2], Nirmala Bhoo Pathy[2]

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Introduction: In low- and middle-income settings, the lack of affordable digital infrastructure hinders the scalability of cancer patient navigation programmes. Commercial platforms are often cost-prohibitive, leaving busy public clinics without efficient tools to rapidly screen patients for financial toxicity then systematically track enrollees. This study describes the development of a low-cost, replicable system built on freely available platforms, operable and maintainable by navigation staff without specialist IT support.

Methods: This system was developed as part of an ongoing study to establish an Evidence-Based Financial Navigation Programme and tested across two government hospitals, Hospital Kuala Lumpur and Institut Kanser Negara. Development followed five phases: (1) workflow evaluation, (2) navigation team feedback, (3) system design, (4) pilot run identifying constraints, including misidentified automated fields and date validation failures, and (5) iterative feature optimisation. Patients self-administer the COmprehensive Score for Financial Toxicity (COST) questionnaire electronically via a QR-linked Google Form, with navigator assistance where required, replacing paper-based assessment to reduce transcription errors and processing time. Responses are automatically captured in a linked Google Sheets workbook comprising separate screening and tracking modules with automated scoring, eligibility flagging, data validation, conditional formatting, and follow-up tracking. Patients identified as experiencing financial toxicity are enrolled and assessed at baseline, 3, 6, and 12 months.

Results: Automated scoring replaced a manual, error-prone process — involving item-specific rules, reverse-scoring, and summation — with near-instantaneous colour-coded stratification. Centralized real-time tracking replaced fragmented manual follow-ups, improving cross-navigator coordination via automated reminders and timestamping. Currently, 70 patients completed baseline assessment with 3-month follow-up ongoing, indicating strong retention. Mortality-related discontinuations are recorded separately. The system was built and is maintained entirely by navigation staff without technical support.

Conclusion: This initiative demonstrates a viable capacity-building model for cancer care delivery in resource-limited settings, by empowering navigation staff to independently build and maintain automated digital infrastructure using freely available tools.

Keywords: Low-Cost, Automated Tracking, Screening System, Cancer Care, Systems, Navigation Programme, Finance

How to Cite: Lim, S. Y., Zohar, W. M. I. W. M., Lee, P. Y., Rajah, H. D. A., & Pathy, N. B. development and implementation of a low-cost automated screening and tracking system to support navigation programmes for patients with cancer [31]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0032

Title: CancerLink Plus – A Resource to Facilitate Prospective Investigations into Cancer-Related Health Outcomes in the Singapore Population Health Studies and Cancer Outcomes in the ANCHOR Database

Subject: Policy, Capacity Building & Sustainable Cancer Control

Authors: Hui Miao[1]*, Peh Joo Ho[1], Su Hyun Park[1], Ryan Tan[2], Brenda Tay[2], Wei Jie Seow[1], Grace Yang[2], Dawn Chong[2], Xueling Sim[1], Iain Tan[2], Adeline Seow[1]

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Introduction: Cancer is a leading cause of mortality worldwide, driven by complex interactions between genetic, environmental, lifestyle, and socioeconomic factors. Linking population-based cohorts with real-world clinical and healthcare utilization data provides important opportunities to better understand cancer risk and outcomes, especially in multi-ethnic Asian populations.

Methods: CancerLink Plus will link and integrate data from the Singapore Population Health Studies (SPHS), the ANCHOR hospital-based cancer database, and government administrative and health records via Singapore's TRUST Platform. SPHS is a collection of population-based cohorts initiated since 2005 with detailed sociodemographic, lifestyle and behavioural risk factors, chronic diseases, physical and clinical measurements. ANCHOR includes cancer patients diagnosed or treated between 2018 and 2024 at the National Cancer Centre Singapore (NCCS), capturing information on demographics, tumour characteristics, molecular subtypes, treatment, and progression. Descriptive statistics were used to characterise both cohorts.

Results: Analysis included five SPHS sub-cohorts (n=50,970), comprising Chinese (60%), Malay (19%), and Indian (20%) participants. Median baseline age was 46 years (IQR: 35–56), with 56% female. Over a median follow-up of 7.1 years, 2,159 incident cancer cases were identified through linkage with the Singapore Cancer Registry. The most common cancers were breast (n=424), colorectal (n=280), lung (n=245), and prostate (n=189). The ANCHOR cohort included 46,317 patients, with breast (23%), colorectal (14%), lung (13%) and prostate (9%) cancers being most common. Median age at diagnosis was 66 years (IQR: 57–74), and 53% were female. Stage data were available for 91% of patients, with 61% diagnosed at Stage I–III.

Conclusion: CancerLink Plus represents the first integrated population health, cancer outcomes and administrative linked data resource in Singapore. It provides a unique platform for generating evidence to inform health policies, precision prevention strategies, and equitable cancer control efforts aimed at improving public health outcomes and reducing the population burden of cancer.

Keywords: Population Health, Cancer Registry

How to Cite: Miao, H., Ho, P. J., Park, S. H., Tan, R., Tay, B., Seow, W. J., Yang, G., Chong, D., Sim, X., Tan, I., & Seow, A. cancerLink Plus – A resource to facilitate prospective investigations into cancer-related health outcomes in the Singapore Population Health Studies and cancer outcomes in the ANCHOR database [32]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0033

Title: Acceptability of HPV Self-Sampling in LMICs: A Qualitative Systematic Review and Thematic Synthesis.

Subject: Screening & Early Detection

Authors: Shobha Tara Nambiar[1], Nafeesa Akma Mat Ali[2]*, Sophie Webb[3], Henry Staines[4], Kevin Hayes[5], Sally Hargreaves[6], Ayna Latisya Azfar Rizal[7], Mohammad Haikal Kushahrin Sadikin[7], Melissa Siaw Han Lim[8], Sanjeev Krishna[2], Yolanda Augustin[2]

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Introduction: Cervical cancer disproportionately affects women in low- and middle-income countries (LMICs), where screening uptake remains limited. Human papillomavirus (HPV) self-sampling may improve access to cervical screening, but its acceptability depends on women's experiences, beliefs and local context.

Methods: A qualitative systematic review and thematic synthesis was conducted to examine women's experiences and perceptions of HPV self-sampling in LMICs. Medline, Embase, PsycINFO and CINAHL were searched for studies published from January 2012 to April 2023. Qualitative and mixed-methods studies were eligible; for mixed-methods studies, only qualitative findings were analysed. Study quality was appraised using the Critical Appraisal Skills Programme checklist, and confidence in review findings was assessed using GRADE-CERQual.

Results: Twelve studies involving 644 women from 12 LMICs were included. Fifty-one descriptive codes were synthesised into 17 subthemes and six overarching themes. Women generally found HPV self-sampling acceptable because it was less painful, less invasive, less embarrassing and more convenient than clinician-based screening. Important barriers included concerns about collecting the sample correctly, fear of self-harm, limited privacy at home, stigma, low awareness of cervical cancer and uncertainty about follow-up care. Social support, trust in community health workers and culturally appropriate education increased willingness to participate. Confidence in the review findings ranged from high to low, with the strongest evidence supporting comfort, privacy and convenience as key motivators.

Conclusion: HPV self-sampling is generally acceptable among women in LMICs and could improve participation in cervical cancer screening. Successful implementation will require clear instructions, culturally appropriate education, trusted community support and accessible follow-up pathways

Keywords: HPV Self-Sampling, Cervical Cancer Screening, Low- And Middle-Income Countries, Qualitative Evidence Synthesis, Implementation, Women's Health

How to Cite: Ali, N. M., Nambiar, S. T., Ali, N. A. M., Webb, S., Staines, H., Hayes, K., Hargreaves, S., Rizal, A. L. A., Sadikin, M. H. K., Lim, M. S. H., Krishna, S., & Augustin, Y. acceptability of HPV self-sampling in LMICs: a qualitative systematic review and thematic synthesis. [33]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0034

Title: Patient-Reported Experiences with Shared Decision-Making across Six Asia-Pacific Countries among People with Lived Experience of Lymphomas and CLL

Subject: The Human Experience of Cancer

Authors: Shawn Sajkowski[1]*, Mavis Lui[1], Lorna Warwick[1], Marjorie Morrison[1]

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Introduction: Shared decision-making (SDM) is a crucial part of patient-centred care requiring patients being adequately informed and involved in their health decisions along each stage of care. With differing healthcare systems among countries within the Asia-Pacific, we sought to explore the variances in key areas of SDM in people with lived experience of lymphoma and CLL (PWLE-lymphoma) throughout the APAC region.

Methods: A cross-sectional online global survey was deployed in 2024 which captured the lived experiences of people affected by lymphoma and CLL. PWLE-lymphoma were asked two questions critical to SDM within the survey: how informed they felt about the processes and stages of their healthcare and their perceived involvement in key care decisions (eg. diagnosis, monitoring, and treatment). Data from six APAC countries, Australia (n=676), China (n=668), India (n=81), Japan (n=111), South Korea (n=248) and the Philippines (n=80) were prioritised for descriptive analysis.

Results: The median age of respondents was 65 years, 64% were female. SDM related responses varied considerably across the six countries analysed. In Australia, 69% of patients felt well or very well informed about their stages of care followed by the Philippines (58%), India (44%), South Korea (22%), Japan (21%) and China (15%). Additionally, 65% of patients in the Philippines believed they were involved as much as desired in key decisions regarding their care followed by Australia (57%), India (53%) Japan (52%), South Korea (39%) and China (35%).

Conclusion: Our analysis demonstrates highly variable but suboptimal levels in key areas of SDM among PWLE-lymphoma throughout the APAC countries investigated. When SDM is successfully employed, both clinicians and patients report a higher overall care experience including better treatment adherence and improved patient wellbeing. As an established best practice, SDM should be embedded within patient-centred care models throughout the region to support PWLE-lymphoma being adequately informed and involved along their care continuum.

Keywords: Shared Decision Making, Patient Reported Outcome, Lymphoma

How to Cite: Sajkowski, S., Lui, M., Warwick, L., & Morrison, M. patient-reported experiences with shared decision-making across six Asia-Pacific countries among people with lived experience of lymphomas and CLL [34]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0035

Title: Health System and Ethical Barriers to Priority Setting in Palliative End-of-Life Care in India: An Interpretative Phenomenological Analysis

Subject: The Human Experience of Cancer

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Introduction: Sustainable development aims to ensure equitable access to quality healthcare. But the importance of palliative care and patient involvement in cancer is frequently overlooked in India. This study explores the perception of palliative care, expanding regulatory frameworks and practical implementation of ethical principles underlying person-centred care in achieving universal health coverage for terminal cancer.

Methods: Fifteen participants consisting of patients, family caregivers, and palliative care professionals were recruited purposively from a tertiary regional cancer centre in West Bengal. Based on disease progression and anticipated survival, patients and informal caregivers were respectively categorised into two and three groups: those receiving palliative care for 15-30 days; those receiving palliative care for 3–4 months and those with 6 months post-bereavement. Formal caregivers were not subdivided. In-depth interviews were conducted and analysed using Interpretative Phenomenological Analysis.

Results: Eight superordinate themes with individual subthemes are reported: 1. Bureaucracy in Healthcare and Dignified Death; 2. Myths of Palliative Care; 3. Dichotomous Attitude Towards Hospice/Hospital; 4. Moral Dilemma in Caregiving; 5. Cancer Stigma; 6. Death as Relational Experience; 7. Resilience at End-of-Life; and 8. Individuality in Bereavement.

Conclusion: Terminal cancer care currently faces challenges due to bureaucratic hurdles, medical hierarchies, overburdened healthcare system, limited financial resources, and scepticism toward palliative care. Referrals are influenced by medical gatekeeping, and varying economic autonomy, which exacerbate inequitable access to essential services. Systemic and economic barriers foster illusion of high-quality care in private-facilities, causing helplessness, non-adherence to palliative recommendations, over-medicalization, and increased out-of-pocket expenses. Cancer precipitates social isolation, eroding individual's sense of identity and perceived value. A paternalistic approach, particularly surrounding death planning and the misplaced moral imperative to sustain hope, generates complex ethical dilemmas for patients, families, and clinicians. These challenges reflect global issues like healthcare financing, strategic purchasing, stigma and the pursuit of equity in accessing diagnosis, treatment, and supportive care services.

Keywords: Palliative Care, Terminal Cancer, Healthcare System, India, Phenomenology

How to Cite: Chakraborty, A., Ray, D., & Mandal, R. K. health system and ethical barriers to priority setting in palliative end-of-life care in India: an interpretative phenomenological analysis [35]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0036

Title: Clinical Profile and Survival Outcomes of Hormone Receptor-Positive, HER2-Negative Breast Cancer in Sarawak – A Subgroup Analysis

Subject: Screening & Early Detection

Authors: Shirley Siang Ning Tan[1]*, Izzati Wan Maharuddin[2], Sharifah Ashrina Wan Ali[3], Xun Ting Tiong[1], Keng Sheng Chew[4], Adam Malik Ismail[5], Yolanda Augustin[6], Pei Jye Voon[2], Melissa Siaw Han Lim[4]

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Background: Hormone receptor-positive, HER2-negative breast cancer is an endocrine-responsive subtype with distinct prognostic and treatment implications. In the published Sarawak breast cancer survival cohort, biomarker subtype independently predicted survival, and hormone receptor-positive, HER2-negative disease showed the most favourable prognosis while representing the largest biomarker-defined group.

Methods: We analysed and described the hormone receptor-positive, HER2-negative cases (Group A) from a retrospective cohort of histologically confirmed breast cancer diagnosed at Sarawak General Hospital from 2018-2022.

Results: Among 1,297 patients with biomarker results, 632 (48.7%) were Group A. Mean age was 57.55 years (SD 12.5), and 99.5% were female. Ethnicity was Chinese (38.9%), Malay (26.7%), Iban (19.6%) and others (14.7%). Most were married (75.5%). Primary residence was Kuching (44.9%), Miri (11.9%), Sibu (10.4%) and other divisions. A history of cancer was reported in 35.6%; smoking and alcohol histories were reported in 3.8% and 5.1%, respectively. Mean symptom duration was 10.5 months (SD 18.5; range 0.1–120). Common presentations were hard lump (60.0%) and thickened mass (16.5%). More than half of patients were diagnosed at stage I or II, comprising 35.4% and 25.0%, respectively, while approximately one-fifth were diagnosed at stage III or IV. Majority had invasive carcinoma (80.9%), followed by in situ carcinoma (18.9%) and rare histologies including neuroendocrine disease (0.5%). Approximately two third received combined surgery and oncologic treatment (72.9%); 5.2% received oncologic treatment alone and 0.6% surgery alone. There were 87 deaths (13.8%). Overall survival at 1, 3 and 5 years were 96.0%, 90.0% and 79.3%. Compared with stage I, stage III and IV disease had higher mortality, adjusted HR: 4.9 (95% CI 2.1–11.7) and 13.2 (95% CI 5.9–29.6), respectively.

Conclusion: Group A breast cancer represents a major survivorship subgroup in Sarawak. Despite favourable survival, advanced stage remained the key independent predictor of survival, supporting earlier detection and timely care.

Keywords: Hormone Receptor-Positive, HER2-Negative, Breast Cancer, Survival

How to Cite: Tan, S. S. N., Maharuddin, I. W., Ali, S. A. W., Tiong, X. T., Chew, K. S., Ismail, A. M., Augustin, Y., Voon, P. J., & Han, M. L. S. clinical Profile and Survival Outcomes of Hormone Receptor-Positive, HER2-Negative Breast Cancer in Sarawak – A subgroup analysis [36]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0037

Title: Real-World Clinical Outcomes in CML Patients Enrolled in the Malaysia Patient Assistance Programme (MyPAP): Interim Results: From the MyMPN RWE Analysis

Subject: Health Systems, Universal Health Coverage & Cancer Care

Authors: Lee Ping Chew[1]*, Soo Min Lim[2], Ahlam Naila Kori[3], Ahmad Zakiyy Mohamed[4], Yuen Goh Chew[5], Chin Hau Wong[6], Ganesh Kasinathan[7], Yip Kam Hoo[8], Yong Kar Ying[9], Kuldeep Kaur Sarban Singh[10], Lily Lee Lee Wong[11], Nur Aini Syakirah Binti Ahmad Shuyuti[12], See Guan Toh[13], Sharifah Suryani Syed Rahim Shah[14], Si Yuan Ng[15], Kar Poh Wong[16], Meriell Gayongala[16], Tze Hua Yeu[16], Ai Sim Goh[5]

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Introduction: The Malaysia Patient Assisted Programme (MyPAP) is a funded initiative providing universal access to tyrosine kinase inhibitors (TKIs) for patients with chronic myeloid leukemia (CML) treated at Ministry of Health (MoH) facilities in Malaysia. Since its inception, MyPAP has provided near-universal TKI coverage to CML patients nationally, with imatinib and nilotinib as the cornerstone agents over the extended programme duration. This abstract describes real-world outcomes from patients treated under MyPAP between 2018 and 2023, drawn from the Malaysia Myeloproliferative Neoplasms Real-World Evidence (MyMPN RWE) interim analysis.

Methods: Real-world data were collected from 608 patients with Philadelphia-positive (Ph+) CML in chronic phase (CP) diagnosed between January 2018 and December 2023 across MoH centres in Malaysia. Retrospective data on treatment patterns and clinical outcomes were analysed. An assumption-based modelling approach was applied to project clinical outcomes under two scenarios, world with and without MyPAP, to estimate the population level impact of structured TKI access.

Results: Among 608 CML-CP patients, first line therapy comprised imatinib (61.7%), nilotinib (36.0%), asciminib (0.7%) and dasatinib (0.2%). At 12-months, 41% achieved major molecular response (MMR) and 21.9% achieved deep molecular response (DMR). During the observation period, real world progression to AP/BP occurred in 3% of patients, with overall mortality of 5%, most deaths unrelated to CML progression. Projected modelling estimates suggest that without MyPAP, achievement of MMR at 12-months would have been substantially lower (~12%), with AP/BP progression at observation period approximately doubled, reflecting the clinical burden expected in the absence of universal TKI access.

Conclusion: These findings provide meaningful real-world clinical outcomes among CML patients supported by MyPAP. Sustained and equitable access to TKI therapy is essential to optimising long-term clinical outcomes for CML patients in Malaysia. These data provide a real-world evidence to inform sustainable access decisions that support continued improvements in patient outcomes.

Keywords: Universal Health Coverage, Chronic Myeloid Leukemia

How to Cite: Chew, L. P., Lim, S. M., Kori, A. N., Mohamed, A. Z., Chew, Y. G., Wong, C. H., Kasinathan, G., Hoo, Y. K., Ying, Y. K., Singh, K. K. S., Wong, L. L. L., Shuyuti, N. A. S. B. A., Toh, S. G., Shah, S. S. S. R., Ng, S. Y., Wong, K. P., Gayongala, M., Yeu, T. H., & Goh, A. S. rEAL-WORLD CLINICAL OUTCOMES IN CML PATIENTS ENROLLED IN THE MALAYSIA PATIENT ASSISTANCE PROGRAMME (MYPAP): INTERIM Results: FROM THE MYMPN RWE ANALYSIS [37]. Asian Pacific Journal of Cancer

Abstract Code: APOCP-27-0038

Title: Three-Year Trends in HPV Vaccine Awareness and Uptake among Women Attending Cervical Screening in Low-Resource Areas of China

Subject: Screening & Early Detection

Authors: Lingqing Qiu[1]*, Xi'ao Da[2], Xinhua Jia[2], Youlin Qiao[2]

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Introduction: Cervical cancer remains a major public health burden in China. In 2025, China introduced bivalent HPV vaccination into the National Immunization Programme for 13-year-old girls. Women aged 35–64 years in low-resource counties remain dependent on self-paid vaccination, while also representing the core cervical screening population and the maternal generation of NIP-eligible girls. Evidence on HPV vaccine awareness, uptake, temporal changes, and HPV infection in this group is limited.

Methods: We conducted a multicentre repeated cross-sectional analysis at eight county-level cervical screening sites across four Chinese provinces from 2023 to 2025. Participants completed a standardized questionnaire and underwent high-risk HPV testing. After deduplication, 152,839 unique participants were included. Modified Poisson regression estimated prevalence ratios, adjusting for sociodemographic characteristics and site fixed effects.

Results: Temporal trends, interactions, and absolute and relative gaps were assessed. HPV vaccine awareness declined from 51.34% in 2023 to 40.66% in 2024, then partially rebounded to 44.61% in 2025 (P for trend<0.001). Uptake increased from 5.53% to 7.61% before declining to 6.25% (linear-trend P=0.004). Age-specific patterns differed across years (P for interaction<0.001), with gains concentrated at ages 35–49 years and persistently low coverage at ≥50 years. The urban–rural uptake gap widened from 8.94 to 12.84 percentage points. In 2025, uptake ranged from 1.12% among women with primary education to 32.44% among those with junior college education. Prior vaccination was associated with lower hrHPV infection (adjusted aPR 0.81, 95% CI 0.70–0.91).

Conclusion: Across 2023–2025, awareness and uptake fluctuated, with widening geographic and educational inequities. Screening visits may provide a platform for HPV vaccine education, risk communication, and parental engagement for adolescent NIP uptake, while addressing adult women's access barriers.

Keywords: HPV Vaccine, Cervical Cancer Prevention, Vaccine Awareness, Vaccine Uptake, Health Equity, Low-Resource Settings

How to Cite: Qiu, L., Da, X., Jia, X., & Qiao, Y. three-year trends in HPV vaccine awareness and uptake among women attending cervical screening in low-resource areas of China [38]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0039

Title: "Awareness, Knowledge, and Uptake of the Human Papillomavirus (HPV) Vaccine among Female Adolescents and Young Women in Low-Resource Settings in Jalgaon, India: Experience from Repeated School- and Community-Based Vaccination Drives (2022–2025)"

Subject: Screening & Early Detection

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Introduction: Human papillomavirus (HPV) vaccination is a critical strategy for cervical cancer prevention in India, where screening coverage and health literacy remain uneven, particularly among less privileged girls and young women. Persistent gaps in awareness, combined with sociocultural concerns, continue to limit HPV vaccine uptake in many districts.

Methods: From 2022 onwards, a structured HPV vaccination and awareness program was implemented in Jalgaon district, Maharashtra, delivered primarily through school-based camps and supplemented by outreach to colleges and community settings, targeting females aged 9–26 years with emphasis on less privileged beneficiaries. The program included educational sessions, interactive counselling meetings with parents and teachers, and vaccination camps conducted in partnership with local health coordinators. Written informed consent was obtained from parents or participants, as appropriate, before vaccination. Educational content addressed HPV transmission, its link to cervical cancer, vaccine schedules and safety, and prevalent myths and stigma. Program performance was monitored descriptively by documenting that, in each successive year, an increasing number of local partners proactively requested HPV vaccination drives and awareness sessions.

Results: Between 2022 and 2025, more than 8,000 predominantly school-going girls and young women received HPV vaccination through the initiative, with a consistent year-on-year rise in beneficiaries. The initial year required intensive counselling to address hesitancy and misconceptions. From the second year onwards, repeated unsolicited requests from schools, colleges, and community partners for annual awareness activities and vaccination camps were observed, alongside expanding coverage among less privileged groups, suggesting improved awareness, acceptance, and normalization of HPV vaccination.

Conclusion: A sustained, mainly school-based but inclusive school–college–community HPV awareness and vaccination model in Jalgaon was feasible, acceptable, and associated with increasing uptake and self-initiated annual requests from local partners. These findings support the potential scalability of similar multi-year, partnership-driven strategies to strengthen HPV vaccine uptake in comparable Indian settings.

Keywords: HPV Vaccination, Cervical Cancer Prevention, Vaccine Uptake, Community Outreach, School, India

How to Cite: Khare, N. "awareness, knowledge, and uptake of the human papillomavirus (HPV) vaccine among female adolescents and young women in low-resource settings in Jalgaon, India: experience from repeated school- and community-based vaccination drives (2022–2025)" [39]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0040

Title: Addressing Financial Toxicity in Cancer Care: Australian Insights, Strategic Priorities and Policy Imperatives

Subject: Policy, Capacity Building & Sustainable Cancer Control

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Introduction: People affected by cancer in the Australian setting continue to experience increasing out-of-pocket and indirect costs, financial distress and toxicity. In response, advocacy, service and delivery, and return to work reform, headline the Clinical Oncology Society of Australia's roadmap to reducing financial toxicity.

Methods: To advance short term action, two reviews were conducted. First, a systematic scoping review of Australian health, social services, and welfare system policies – guided the Joanna Briggs Institute framework – identified and mapped policy-level supports and mechanisms that currently reduce, or could be adapted to reduce, financial toxicity for people affected by cancer. Second, a systematic legal and policy review examined Australian legislation, case law, and policy documents to identify legal rights, employer obligations, and gaps in protections relevant to employment retention and return-to-work following cancer.

Results: The scoping review identified national and state funded supports and mechanisms that may be accessed by patients and carers across the cancer care continuum. These include medication thresholds, travel rebates, prostheses reimbursements, allied health subsidies, social welfare payments and early access to superannuation. Of note, most of these were not specific to the context of cancer, rather to chronic disease more broadly. The legal and policy analysis identified significant variation in protections across national and state jurisdictions, with notable gaps in employer obligation clarity and practical guidance for cancer survivors. Key enablers included reasonable adjustment provisions and flexible work entitlements; key barriers included inconsistent enforcement, limited cancer-specific case law, and poor alignment between clinical survivorship care and employment support frameworks.

Conclusion: Addressing financial toxicity is a critical component of comprehensive cancer care. By identifying legal and policy levers for advocacy action, and elevating this issue within Australian public health, policy and political discourse, we can move toward a more compassionate and sustainable approach to cancer treatment, and survivorship.

Keywords: Financial Toxicity, Health Policy, Health Systems, Equity, Supportive Care

How to Cite: Sharman, A., Wishart, L., Thamm, C., Mcloone, J., Woodall, S., Collins, L., Chan, R., & Varlow, M. adressing financial toxicity in cancer care: Australian insights, strategic priorities and policy imperatives [40]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page], https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0041

Title: Clinicopathological Characteristics and Human Papillomavirus Genotype Distribution among Cervical Cancer Patients in Sarawak, Malaysia

Subject: Screening & Early Detection

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Introduction: Chronic human papillomavirus (HPV) infection is the primary cause of cervical cancer. Data on HPV genotype distribution and clinicopathological characteristics among cervical cancer patients in Sarawak are limited. This study investigated the distribution of HPV genotypes and their association with clinicopathological features in cervical cancer patients in Sarawak.

Methods: This prospective study included 100 patients diagnosed with cervical cancer in Sarawak. HPV detection and genotyping were performed using the Allplex™ HPV28 detection assay. Demographic and clinicopathological data were obtained from medical records and analysed using IBM SPSS Statistics (v29.0.1.0).

Results: The mean age of patients was 50.8±12.3 years, with the highest proportion of cases occurring in the 50-59 age group (34%). The main ethnic groups were Iban (38.0%), Malay (21.0%), and Chinese (19.0%). Overall HPV positivity was 92%, with single and multiple HPV infections detected in 67.0% and 25.0% of cases, respectively. The most prevalent genotypes were HPV16 (45.7%), HPV18 (34.8%), and HPV52 (12.0%). Squamous cell carcinoma (SCC) was accounted for 73.0% of cases, followed by adenocarcinoma (ADC) (24.0%) and other subtypes (3.0%). Most patients presented with advanced-stage disease (FIGO stage III–IV, 57%). HPV16 was more frequently associated with SCC compared to ADC (49.3% vs 16.8%, p = 0.006), while HPV18 was more frequently associated with ADC compared to SCC (58.3% vs 24.7%, p = 0.005). There was no significant association between HPV genotype and FIGO stage.

Conclusion: HPV16 and HPV18 are the commonest genotypes in cervical cancer patients in Sarawak, with HPV52 also contributing to disease burden. The observed associations between HPV16 and SCC, and HPV18 and ADC, underscore distinct genotype-histology relationships. The high proportion of advanced stage disease highlights the need to strengthen cervical screening and prevention strategies in the region.

Keywords: Cervical Cancer, Human Papillomavirus (HPV), Genotype Distribution, Sarawak

How to Cite: Chee, C. S. M., Han, M. L. S., Sim, E. U. H., Augustin, Y., Jinam, T. A., Divis, P. C. S., Krishna, S., Staines, H. M., Maharuddin, I. W. M. B. W., Voon, P. J., Tiong, X. T., Ning, S. T. S., Rahim, N. K. B. A., Tuloi, R. A., Pressie, S. O. A., & Ismail, A. M. clinicopathological characteristics and human papillomavirus genotype distribution among cervical cancer patients in Sarawak, Malaysia [41]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0042

Title: Average Duration of Cancer among Middle-Aged and Older Adults in India: A State-Level Analysis

Subject: The Human Experience of Cancer

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Introduction: Cancer survival is a critical but inadequately measured component of cancer burden in India. In settings where population-based survival data are limited, the average duration of cancer (ADC)-derived from the relationship between prevalence and incidence-serves as a pragmatic proxy indicator of survival and health system performance. Despite decades of surveillance by the National Cancer Registry Programme (NCRP), comprehensive state-specific estimates of cancer duration remain unavailable. This study aimed to estimate national and state-specific ADC among adults aged ≥45 years in India to identify geographic disparities in cancer outcomes.

Methods: State-specific cancer prevalence was derived from the Longitudinal Ageing Study in India (LASI), Wave 1 (2017–18). Incidence rates were obtained from NCRP Population-Based Cancer Registries (2012–16); for states lacking direct registry coverage, rates were estimated using pooled data from geographically proximate registries. ADC was calculated as the ratio of prevalence to incidence for males, females, and the total population. Geographic variation was evaluated using descriptive and spatial analyses, and sensitivity analyses tested the robustness of registry allocation assumptions.

Results: The estimated national ADC was 1.5 years among males, 2.2 years among females, and 1.9 years overall. Marked geographic variation was observed: among males, ADC ranged from 0.3 years (Karnataka) to 5.8 years (Himachal Pradesh); among females, from 0.5 years (Meghalaya) to 7.0 years (Andaman and Nicobar Islands). The 12-fold difference between states with the highest and lowest ADC, coupled with a coefficient of variation exceeding 60%, highlights profound interstate inequality. Longer durations clustered in parts of western, southern, and northern India, while shorter durations predominated in north-eastern and central states.

Conclusion: This study provides the first nationwide assessment of average cancer duration across India. The substantial geographic heterogeneity suggests significant disparities in cancer outcomes, survival, and health system performance. As a population-level indicator, ADC is a valuable indirect estimate of cancer survival, useful for health system monitoring and cancer control planning, particularly in regions where longitudinal survival data are limited.

Keywords: Average Duration Of Cancer, Cancer Surveillance, Geographic Variation, India, Health System Performance

How to Cite: Gupta, V. & Dhar, M. average duration of cancer among middle-aged and older adults in India: a state-level analysis [42]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0043

Title: Dietary Vitamin D Intake and Risk of Cancer: Insights from a Prospective Cohort Study in Northern Vietnam

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Vitamin D has been implicated in cancer prevention through its roles in cell regulation and apoptosis, yet evidence remains inconsistent, particularly in Asian populations. This study aimed to investigate the association between dietary vitamin D intake and total cancer mortality in Northern Vietnam.

Methods: We conducted a prospective cohort study of 42,146 participants aged ≥10 years from nine communities in Hanoi, Hung Yen, and Phu Tho provinces. Dietary vitamin D intake was assessed at baseline (2007) using a validated semi-quantitative food frequency questionnaire. Participants were followed for mortality outcomes until 2019 through systematic death records. Cox proportional hazards models were applied to estimate hazard ratios (HRs) and 95% confidence intervals (CIs), adjusting for demographic, lifestyle, and dietary covariates.

Results: Over 457,228 person-years of follow-up, 556 cancer deaths were recorded. Mean daily vitamin D intake ranged from 0.2 µg/day in the lowest quintile (Q1) to 10.1 µg/day in the highest (Q5). Higher vitamin D intake was inversely associated with cancer mortality: Q5 vs. Q1 HR = 0.74 (95% CI: 0.56–0.99, p = 0.04). On a continuous scale, per-quintile HR = 0.94 (95% CI: 0.88–1.00, p = 0.04), and per-SD HR = 0.86 (95% CI: 0.78–0.96, p = 0.01). Associations were more pronounced among adults aged ≥60 years (Q5 vs. Q1 HR = 0.60, 95% CI: 0.39–0.93, p=0.02), with no clear relationship observed in younger participants. The inverse associations persisted after excluding early deaths and adjusting for calcium, phosphorus intake, and smoking status.

Conclusion: Higher dietary vitamin D intake was significantly associated with lower cancer mortality in this Vietnamese cohort, particularly among older adults. These findings support the importance of adequate vitamin D intake for cancer prevention in aging populations.

Keywords: Cancer Mortality, Vitamin D Intake, Nutritional Epidemiology

How to Cite: Nguyen, B., Nguyen, T., Truong, N., Nguyen, H., Luong, L., Nguyen, T., Nguyen, M., Le, T., & Le, N. dietary vitamin D intake and risk of cancer: insights from a prospective cohort study in northern Vietnam [43]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0044

Title: A Two-Stage Deep Learning Framework for Detection and Classification of Perineural Invasion in Oral Squamous Cell Carcinoma

Subject: Screening & Early Detection

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Introduction: Perineural invasion (PNI) is a well-recognized prognostic factor in oral squamous cell carcinoma (OSCC), associated with increased risks of local recurrence, regional metastasis, and poor survival outcomes. Accurate identification and grading of PNI are therefore critical but remain time-consuming and subjected to interobserver variability. This study aimed to develop and evaluate a two-stage deep learning framework for automated detection and classification of PNI in OSCC.

Methods: A total of 1128 digitized images with PNI in OSCC were included in the study. Regions of interest containing PNI were annotated to establish the ground truth labels. In Stage 1, a YOLOv8 object detection model was trained to localize PNI regions by consolidating all PNI subtypes into a single detection class. In Stage 2, the detected regions of interest were classified into high encirclement (HE), medium encirclement (ME), and low encirclement (LE) categories using multiple deep learning architectures. Performance was compared with a conventional single-stage YOLOv8 model that simultaneously performed detection and classification.

Results: The single-stage model achieved an overall accuracy of approximately 55%, indicating limitations in jointly learning localization and multiclass classification tasks. In contrast, the two-stage framework achieved a PNI detection accuracy of 97.1%. Classification performance improved substantially following staged fine-tuning, with ConvNeXt-Tiny achieving the highest accuracy of 90%, followed by ResNeXt50-32×4d, Swin Transformer-Tiny, DenseNet121, and EfficientNet-B0 at 89%. Earlier classifier configurations demonstrated lower accuracy, ranging from 64% to 79%.

Conclusion: The proposed two-stage deep learning framework demonstrated superior performance compared to the single-stage approach, enabling more accurate PNI localization and classification. Given the established role of PNI as an indicator of tumour aggressiveness, and adverse prognosis, this framework represents a promising step toward AI-assisted diagnostic pathology, with potential applications in prognostication, risk stratification, and personalized management of patients with OSCC.

Keywords: Oral Squamous Cell Carcinoma, Perineural Invasion, Deep Learning, Artificial Intelligence, Digital Pathology

How to Cite: Noorjamal, N. A., Hassan, T. D. A. P. T. D. E. H., Harun, N., Mohammad, N., & Nizar, M. A. M. a Two-Stage Deep Learning Framework for Detection and Classification of Perineural Invasion in Oral Squamous Cell Carcinoma [44]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0045

Title: Health Belief Profiles and Breast Cancer Screening Participation among Women in Low-Resource Areas of China

Subject: Screening & Early Detection

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Introduction: Breast cancer screening is essential for early detection, yet participation remains uneven among women in low-resource areas. Beyond demographic factors, understanding women's screening-related health beliefs based on the Health Belief Model (HBM) may support strategies to improve screening participation.

Methods: This cross-sectional study included 6,132 women aged 35 to 65 years from January to December 2024. Participants completed a questionnaire on HBM-based breast cancer screening-related health beliefs, demographic characteristics, breast cancer-related risk factors, knowledge, and sources of screening information. Self-reported breast cancer screening participation was used as the outcome. Latent profile analysis was used to identify HBM profiles, and multivariable logistic regression was used to assess the associations of HBM profiles and other relevant factors with screening participation.

Results: Among 6,132 women, 3,166 (51.6%) reported no breast cancer screening participation, whereas 2,966 (48.4%) reported participation in at least 1 screening examination. Four HBM profiles were identified: proactive prevention profile (5%), low-barrier general participation profile (80%), high-barrier constrained profile (9%), and low-cognition and low-efficacy profile (6%). Screening participation was highest in the proactive prevention profile (63.5%) and less than 50% in the remaining profiles. Compared with the proactive prevention profile, women in the high-barrier constrained profile (AOR, 0.61; 95% CI, 0.45–0.84) and the low-cognition and low-efficacy profile (AOR, 0.48; 95% CI, 0.34–0.67) had lower odds of screening participation. Older age, higher knowledge level, and a history of breast-related disease were also associated with screening participation, with consistent findings in sensitivity analyses.

Conclusion: In this cross-sectional study of women in low-resource areas, distinct health belief profiles were associated with breast cancer screening participation. Tailored strategies that identify women with high perceived barriers or low cognition and low self-efficacy, reinforce practitioner engagement, and improve informational outreach may help improve screening uptake and advance equitable early detection.

Keywords: Breast Cancer Screening, Low-Resource Areas, Health Belief Model, Screening Experience, Latent Profile Analysis, Real-World Study

How to Cite: Xu, Y., Yan, H., & Qiao, Y. health belief profiles and breast cancer screening participation among women in low-resource areas of China [45]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0046

Title: Cancer Deaths and Cases Attributable to Infectious Agents in China

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Infectious agents remain important contributors to cancer burden. This study estimated cancer cases and deaths attributable to major infectious agents in China to provide evidence for cancer prevention priorities.

Methods: We used a population attributable fraction approach to estimate the proportion of cancers attributable to major infectious agents, including Helicobacter pylori, hepatitis B virus, hepatitis C virus, human papillomavirus, Epstein–Barr virus, human immunodeficiency virus, and Clonorchis sinensis. Infection prevalence was obtained from national surveys of Chinese populations, relative risks from meta-analyses and large-scale studies, and cancer incidence and mortality data for 2019 from the National Central Cancer Registry of China. Overall estimates were reported, with selected results further described by sex and urban–rural residence. Findings were compared with estimates from 2005 and 2013 and with global data to contextualize changes in China's infection-attributable cancer burden.

Results: In 2019, an estimated 401,453 cancer deaths (16.68%) and 603,886 cancer cases (13.94%) in China were attributable to infections. The burden was higher in men than in women and in rural compared with urban populations. Infection-attributable cancer deaths were predominantly driven by H. pylori (7.23%), HBV (5.98%), HPV (1.86%), and EBV (1.04%), followed by HCV, Clonorchis sinensis, and HIV. Regarding incidence, the leading contributors were H. pylori (5.51%), HBV (3.78%), HPV (3.13%), and EBV (1.14%), with smaller contributions from HCV, HIV, and Clonorchis sinensis.

Conclusion: Although infection-attributable cancer burden in China has declined substantially since 2005, infections remain major contributors to cancer cases and deaths. The higher burden in rural populations highlights inequalities in infection exposure and access to prevention and healthcare services. Therefore, sustained vaccination, infection control, and targeted prevention strategies in low-resource areas are essential to further reduce the infection-attributable cancer burden.

Keywords: Population Attributable Fraction, PAF, Infections, Cancer Burden, China

How to Cite: Xu, Y., Shi, Z., & Qiao, Y. cancer deaths and cases attributable to infectious agents in China [46]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0047

Title: Repositioning CDK4/6 Inhibitors to Overcome T-Cell Resistance in Pancreatic Ductal Adenocarcinoma

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: Pancreatic ductal adenocarcinoma (PDAC) remains poorly responsive to T cell-based immunotherapies, in part due to intrinsic resistance mechanisms that limit tumour cell killing. Our previous work identified cyclin-dependent kinase (CDK) inhibitors as a class of agents capable of sensitising PDAC cells to T cell-mediated cytotoxicity. Building on this finding, we sought to reposition clinically approved CDK4/6 inhibitors as a translatable strategy to enhance T cell killing in PDAC.

Methods: BxPC3 and SW1990 PDAC cell lines, including parental cells and their T cell-resistant cells, were cultured and screened against three FDA-approved CDK4/6 inhibitors: abemaciclib, palbociclib, and ribociclib. Cell killing was evaluated using T cell co-culture cytotoxicity assays, and apoptosis induction was assessed in treated cells.

Results: Among the three inhibitors screened, abemaciclib demonstrated the greatest potency, effectively killing both parental and T cell-resistant BxPC3 and SW1990 cells. Abemaciclib induced apoptosis and cell-cycle arrest in PDAC cells, supporting a direct cytotoxic mechanism in addition to its capacity to overcome T-cell resistance.

Conclusion: Our findings identify abemaciclib as a potent, repurposable CDK4/6 inhibitor capable of killing both parental and T cell-resistant PDAC cells. These results support further preclinical and clinical investigation of abemaciclib, particularly in combination with T cell-based immunotherapies, as a strategy to overcome resistance in PDAC.

Keywords: Pancreatic Ductal Adenocarcinoma, CDK4/6 Inhibitors, Drug Repurposing, Abemaciclib

How to Cite: Lim, W. M., Looi, C. K., Mai, C. W., Hii, L. W., Lei, F. C. F., & Leong, C. O. repositioning CDK4/6 inhibitors to overcome t-cell resistance in pancreatic ductal adenocarcinoma [47]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1): [Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0048

Title: The Development and Feasibility of a Humour-Infused Health Promotion Video for Breast Cancer Screening among Indigenous Women

Subject: Screening & Early Detection

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Introduction: Breast cancer is the leading female cancer in Malaysia, yet screening uptake remains low in underserved and Indigenous communities. Health promotion is commonly used to improve awareness and encourage early detection; however conventional approaches may not fully address fear, embarrassment, modesty norms, cancer fatalism, limited health literacy, and access barriers among Orang Asli women. Humor may offer a culturally engaging, low-anxiety way to reduce resistance and make screening messages relatable. This study aims to develop and validate a humor-infused health promotion video and assess its feasibility and preliminary effects on screening intention

Methods: This study employs a two-phase design. Phase 1 involves stakeholder interviews to identify screening barriers and enablers, mapped using the Integrated Screening Action Model, followed by storyboard and script development grounded in the Health Belief Model. The intervention is a culturally tailored animated health promotion video incorporating humor and entertainment-education principles for supervised group viewing. Content and face validation will be conducted with expert reviewers and community representatives. Phase 2 is a cluster-level quasi- experimental pilot in Orang Asli villages in Selangor, comparing the humor-infused video with standard breast cancer health promotion material. Assessments will be conducted at baseline, immediately post-intervention, one month, and three months using interviewer-administered questionnaires. Outcomes will be analyzed using descriptive statistics and generalized estimating equations.

Results: Expected outcomes include a validated humor-infused health promotion video, feasibility evidence, and preliminary estimates of changes in screening intention, awareness and health belief constructs. These findings may support more relatable breast cancer health promotion, earlier health-seeking behavior, and culturally responsive cancer control initiatives.

Conclusion: A humor-infused health promotion video may reduce resistance, enhance comprehension, and offer a scalable, low-cost approach to breast cancer screening among Orang Asli communities. Findings are expected to inform future equitable cancer control strategies.

Keywords: Health Belief Model, Breast Cancer, Health Promotion, Indigenous People

How to Cite: Delucia, D., Thamarai, C., & Thangiah, N. the development and feasibility of a humour-infused health promotion video for breast cancer screening among indigenous women [48]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1): [Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0049

Title: Dietary Calcium Intake and Risk of Lung Cancer

Subject: Screening & Early Detection

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Introduction: Lung cancer is a major global health challenge contributing substantially to morbidity and mortality worldwide. Although the biological mechanisms linking calcium to lung cancer have been demonstrated, epidemiological evidence regarding this relationship remains inconsistent. This study aims to investigate the association between dietary calcium intake and lung cancer risk.

Methods: A population-based case-control study in Vietnam was conducted on 2,640 individuals, including 2,415 controls and 225 cases. Dietary calcium intake was assessed using a validated food frequency questionnaire. Multivariable logistic regression models were used to estimate odds ratios (ORs) and 95% confidence intervals (CIs) for the association between dietary calcium intake and lung cancer risk.

Results: A non-linear association was observed between dietary calcium intake and lung cancer risk in the overall population or subgroup for gender, BMI<23 kg/m2, history of smoking, drinking alcohol and cancer. For total population, odds of lung cancer were significantly higher in both the lowest (171.6 mg/day) and highest (581.4 mg/day) calcium intake quintiles, with OR=3.68, 95%CI: 2.22-6.11, p<0.001 and OR=29.29, 95%CI: 12.09-70.94, p<0.001, respectively. Among individuals with a history of smoking and alcohol consumption, calcium intake tertiles 2 and 5 showed the highest odds of lung cancer, with OR=41.00, 95%CI: 11.35-148.09, p<0.001 and OR=16.25, 95%CI: 4.13-63.86, p<0.001, respectively. Furthermore, a potential U-shaped association was found between dietary calcium intake and odds of lung cancer for non-diabetic individuals, with the lowest odds in quintile 2, while higher odds were observed at both lower (OR=3.61, 95%CI: 2.02-6.43, p<0.001) and higher (OR=21.55, 95%CI: 8.04-57.75, p<0.001) intake levels compared with quintile 2.

Conclusion: Non-linear associations with a possible U-shaped pattern were seen between dietary calcium intake and odds of lung cancer across different subgroups. These results may have implications for dietary recommendations in lung cancer prevention strategies. Besides, further prospective studies are needed to confirm these findings.

Keywords: Dietary Calcium Intake, Lung Cancer, Non-Linear Association, U-Shaped Pattern, Vietnam

How to Cite: Pham, P., Nguyen, B., Nguyen, T., Hoang, H. A., Nguyen, T., Nguyen, P., Pham, T., & Le, N. dietary calcium intake and risk of lung cancer [49]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0050

Title: Expanding Access to BRCA Genetic Testing in Malaysia: Cost Implications of a Mainstreaming Model for Precision Oncology

Subject: Cancer Burden, Inequities & Priority Setting

Authors: Zi Xin Hoo[1]*, Hamizah Sa'at[2,3], Kah Seng Khoo[2], Sook Yee Yoon[4], Rifhan Azwani Mazlan[5], Nur Aishah Mohd Taib[6], Ainol Haniza Kherul Anuwar[7,8]

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Introduction: BRCA1/2 genetic testing enabled risk stratification, targeted treatment, and preventive interventions for carriers of BRCA pathogenic variants. However, access to genetic services in Malaysia remains constrained due to shortages of specialist genetic service providers, geographical barriers, and referral bottlenecks. Mainstreaming genetic testing, whereby trained breast surgeons provide pre-test counselling, is a potential strategy to expand access while reducing reliance on specialist genetic services. This study estimated and compared the provider costs of mainstreaming and conventional BRCA genetic testing pathways to inform implementation of mainstreaming genetic testing for breast cancer patients within Malaysia's public healthcare system.

Methods: A cost analysis was conducted at University Malaya Medical Centre between December 2025 to April 2026 using an activity-based, bottom-up micro-costing approach from the healthcare provider perspective. Direct observation of 54 clinical encounters involving 13 healthcare professionals and four administrative staff was undertaken to quantify resource utilization across both pathways, including personnel time, consumables, and administrative resources.

Results: Personnel cost constituted the largest component of pathway costs, primarily driven by specialists' consultation time. The mainstreaming pathway demonstrated consistently lower costs than the conventional pathway across all testing outcomes. Total pathway costs for mainstreaming pathway ranged from RM 107.79 to RM 118.94, compared to RM127.82 to RM 134.33 for the conventional pathway. Sensitivity analyses identified the duration of cancer diagnostic disclosure consultations as the primary cost driver. Additional consultation time provided by breast surgeons had minimal impact on overall pathway costs.

Conclusion: The mainstreaming BRCA genetic testing pathway demonstrated lower provider costs than the conventional specialist-led pathway across all testing outcomes. These findings suggest that mainstreaming may offer a resource-efficient approach to expanding access to genetic testing services for breast cancer patients in Malaysia. The study provides evidence to inform implementation of precision oncology services in settings facing constraints in genetic counselling capacity.

Keywords: BRCA Genetic Testing, Mainstreaming, Genetic Counseling, Cost Analysis, Healthcare Access

How to Cite: Hoo, Z. X., Sa'at, H., Khoo, K. S., Yoon, S. Y., Mazlan, R. A., Taib, N. A. M., & Anuwar, A. H. K. expanding access to BRCA genetic testing in Malaysia: cost implications of a mainstreaming model for precision oncology [50]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0051

Title: What Shapes Clinical Breast Examination Practice? Nurses' Experiences in Limited-Resource Settings in Malaysia

Subject: Screening & Early Detection

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Introduction: Breast cancer early detection remains challenging in settings where screening is largely opportunistic and late-stage presentation is common. In such contexts, clinical breast examination (CBE) continues to play a practical role in early assessment of breast abnormalities. Nurses are often at the frontline of promoting and performing CBE, yet little is known about how they experience this work in routine care. This study explored nurses' experiences of practising and promoting CBE and the perceived contribution of the breast cancer short course to practice.

Methods: A qualitative descriptive study was conducted using two focus group discussions involving 11 nurses from hospital- and community-based settings in Malaysia. Participants had completed the breast cancer short course and were involved in promoting and performing CBE in their settings. Data were analysed using thematic analysis.

Results: Five themes emerged. CBE practice was shaped by service context, workflow, staffing, privacy, referral pathways, and cost-related barriers rather than delivered through a uniform model. Promoting CBE also required explanatory and supportive work, as women's willingness to undergo examination depended not only on awareness, but also on explanation, reassurance, and active invitation. Participants viewed CBE as an important entry point into early detection and onward care, particularly for identifying abnormalities, guiding referral, and strengthening women's breast awareness. The breast cancer short course was perceived as enhancing knowledge, confidence, communication, and understanding of the breast cancer pathway, while highlighting the need for more practical exposure and wider training.

Conclusion: Nurses regarded CBE as an important component of early detection of breast cancer, but its practice and promotion were shaped by service context, structural constraints, and women's willingness to engage. Strengthening CBE in limited-resource settings may require practical service support, culturally sensitive engagement strategies, and continued practice-oriented nurse training.

Keywords: Breast Cancer, Cancer Early Detection, Community Health Nursing, Qualitative Research, Oncology Nursing, Malaysia

How to Cite: Sa'at, H., Chui, P. L., & Taib, N. A. M. what shapes clinical breast examination practice? nurses' experiences in limited-resource settings in Malaysia [51]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0052

Title: Perceived Stigma, Acceptance, Anxiety, and Depression among Chemotherapy Cancer Patients in a Klang Valley Private Hospital

Subject: The Human Experience of Cancer

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Introduction: Chemotherapy imposes substantial physical and emotional strain on cancer patients. Perceived stigma arising from societal misconceptions is frequently linked to lower illness acceptance and heightened psychological distress, yet these interconnected profiles remain underexplored locally. This study assessed the levels and associations of perceived stigma, acceptance, anxiety, and depression among cancer patients undergoing chemotherapy.

Methods: A cross-sectional quantitative survey was conducted at a private hospital in Klang Valley using face-to-face administration and convenience sampling. A structured questionnaire incorporated the Shame and Stigma Scale, Acceptance of Illness Scale, and Hospital Anxiety and Depression Scale. Data from 158 participants were analysed in SPSS v31 using descriptive statistics, Chi-square, Spearman's rho, Kruskal-Wallis, and Mann-Whitney tests ($p < 0.05$).

Results: Most participants reported normal perceived stigma (56.3%) and good acceptance (51.3%), with the majority classified as non-cases for anxiety (85.4%) and depression (92.4%). All primary variables were significantly intercorrelated ($p < 0.001$). Perceived stigma correlated negatively with acceptance ($rs = -0.544$) and positively with anxiety ($rs = 0.668$) and depression ($rs = 0.532$), while anxiety and depression showed the strongest relationship ($rs = 0.696$). Among sociodemographic factors, only age, education level, cancer type, and treatment cycle were significantly associated with the psychological variables.

Conclusion: Although most patients showed favourable psychological profiles, perceived stigma was significantly tied to reduced acceptance and greater distress, with specific subgroups more vulnerable. Targeted psychosocial interventions that reduce perceived judgment and strengthen illness acceptance may help prevent clinical anxiety and depression in this population.

Keywords: Stigma, Acceptance, Anxiety, Depression, Chemotherapy Patients

How to Cite: Kang, W. H., Liew, S. F., Tho, L. M., Ho, G. F., Chan, D. S. F., Lau, Z. S., & Yong, W. S. perceived Stigma, Acceptance, Anxiety, and Depression Among Chemotherapy Cancer Patients in a Klang Valley Private Hospital [52]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0053

Title: Impact of the COVID-19 Pandemic on Treatment Delivery and Outcomes in Elderly Diffuse Large B-Cell Lymphoma: A Multicentre Study from Sarawak, Malaysia

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: The Coronavirus Disease 2019 (COVID-19) pandemic substantially disrupted cancer care delivery worldwide. However, data regarding its impact on elderly diffuse large B-cell lymphoma (DLBCL) patients from geographically dispersed and underserved populations in Southeast Asia remain limited. This study evaluated the influence of the pandemic on treatment patterns and outcomes among elderly DLBCL patients in Sarawak, Malaysia.

Methods: This multicentre retrospective study included elderly DLBCL patients aged ≥65 years treated at Sarawak General Hospital, Miri Hospital, and Bintulu Hospital between January 2020 and December 2023. Patients diagnosed during 2020–2021 were classified as the pandemic restriction period, while those diagnosed during 2022–2023 represented the healthcare recovery period. Baseline characteristics, treatment delivery, treatment responses, and survival outcomes were compared. Overall survival (OS) and progression-free survival (PFS) were analysed using Kaplan-Meier and Cox proportional hazards models.

Results: A total of 103 patients were included, comprising 40 patients diagnosed during the pandemic restriction period and 63 during the healthcare recovery period. Baseline characteristics, laboratory parameters, treatment intent, treatment discontinuation, treatment responses, treatment toxicities, and survival outcomes were comparable between groups. Patients diagnosed during the pandemic period were significantly less likely to receive at least three cycles of rituximab (37.5% vs. 61.9%, p=0.016). After a median follow-up of 39.8 months, the 3-year OS and PFS rates were 45.6% and 44.8%, respectively. Multivariable analysis demonstrated that the pandemic period was not independently associated with OS or PFS, whereas ECOG ≥2 independently predicted inferior OS (HR 3.06, 95% CI 1.67–5.62, p<0.001) and PFS (HR 3.03, 95% CI 1.67–5.52, p<0.001).

Conclusions: The pandemic was associated with reduced rituximab utilization but did not independently compromise survival outcomes. Baseline performance status remained the principal determinant of prognosis, suggesting that established patient-related factors may exert a greater influence on outcomes than pandemic-related disruptions to cancer care delivery.

Keywords: Cancer Care Delivery, COVID-19, Diffuse Large B-Cell Lymphoma, Elderly, Rituximab

How to Cite: Lau, W. J., Ying, Y. K., Ideris, A. R., Lai, B. J., Leong, T. S., & Chew, L. P. impact of the COVID-19 pandemic on treatment delivery and outcomes in elderly diffuse large b-cell lymphoma: a multicentre study from Sarawak, Malaysia [53]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0054

Title: Estimation of Cancer Incidence and Mortality Attributable to Human Papillomavirus Infection in China, 2019

Subject: Cancer Burden, Inequities & Priority Setting

Authors: Zhengyang Shi[1]*, Yeting Xu[1]

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Introduction: Persistent infection with high-risk human papillomavirus (HPV) can affect cancer site other than cervix, including penis, anus, vulva, vagina, and some sites on head and neck. Previous estimates of HPV-attributable cancer burden in China have often relied on population attributable fractions derived from international data, which may not fully reflect the Chinese population. This study aimed to estimate the burden of HPV-attributable cancers in China in 2019 using China-specific parameters whenever available.

Methods: HPV-associated cancer sites were defined according to International Agency for Research on Cancer monographs and included cancers of the cervix uteri, penis, anus, vulva, vagina, oropharynx, oral cavity, and larynx. HPV prevalence, HPV positivity among cancer cases, and relative risks or odds ratios were obtained from literature review, prioritizing China-specific and biomarker-consistent estimates. Population attributable fractions were calculated using Levin's or Miettinen's formula according to data availability.

Results: In 2019, an estimated 130,494 new cancer cases in China were attributable to HPV infection, corresponding to an age-standardized incidence rate of 6.06 per 100,000 persons. Cervical cancer accounted for 117,682 cases, or 90.2% of the total. Non-cervical cancers accounted for 9.8%, led by anal, penile, and oropharyngeal cancers. Rural areas had a higher age-standardized incidence rate than urban areas, despite fewer absolute cases. In total, 42,872 cancer deaths were attributable to HPV infection, corresponding to an age-standardized mortality rate of 1.82 per 100,000 persons. Cervical cancer accounted for 36,212 deaths, or 84.5% of HPV-attributable cancer deaths.

Conclusion: HPV infection caused a substantial cancer burden in China in 2019, with cervical cancer remaining the predominant contributor. Non-cervical HPV-attributable cancers, particularly among men, and higher rural age-standardized rates highlight the need to expand HPV vaccination, improve cervical cancer screening, and strengthen surveillance of non-cervical HPV-associated cancers.

Keywords: Human Papillomavirus, Cancer Burden, Population Attributable Fraction, China

How to Cite: Shi, Z. & Xu, Y. estimation of cancer incidence and mortality attributable to human papillomavirus infection in China, 2019 [54]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0055

Title: Age-Specific Patterns of HPV Incidence, Persistence, and Clearance among Women in Inner Mongolia, China

Subject: Screening & Early Detection

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Introduction: Persistent infection with human papillomavirus (HPV) is a major cause of cervical cancer, and the natural history of HPV infection may vary by age, genotype, and region. This study aimed to describe age-specific patterns of HPV incidence, persistence, and clearance among women in the Inner Mongolia Autonomous Region, China.

Methods: This longitudinal study included women who underwent repeat HPV testing at a hospital in Inner Mongolia. The first HPV test was defined as baseline, and the earliest eligible retest after 6 months was used as follow-up. HPV outcomes were assessed at the type-specific level. Persistence was defined as detection of the same HPV genotype at both tests, clearance as disappearance of a baseline-detected genotype at follow-up, and incidence as appearance of a positive HPV genotype among baseline-negative type-specific observations. Logistic regression models were fitted separately for persistence and clearance, adjusting for age, HPV genotype group, and retest interval.

Results: HPV incidence showed a non-linear, U-shaped age pattern, with relatively higher rates in younger and older women. HPV persistence increased with age, whereas HPV clearance decreased with age. In multivariable models, each 5-year increase in age was associated with higher odds of HPV persistence (aOR = 1.10, 95% confidence interval: 1.07–1.14, $P < 0.001$) and lower odds of clearance (aOR = 0.91, 95% CI: 0.88–0.93, $P < 0.001$). Longer retest intervals were associated with lower persistence and higher clearance.

Conclusion: Among women in Inner Mongolia, HPV persistence increased and clearance decreased with age. HPV16 showed the strongest tendency for persistence and the lowest likelihood of clearance. These findings highlight the importance of age, HPV genotype, and retest interval when interpreting repeat HPV test results and assessing the risk of persistent HPV infection.

Keywords: Human Papillomavirus, HPV Persistence, HPV Clearance, HPV Incidence, Cervical Cancer Prevention

How to Cite: Shi, Z. age-specific patterns of HPV incidence, persistence, and clearance among women in Inner Mongolia, China [55]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0056

Title: Supportive Care Needs in Breast and Colorectal Cancer: A Cross-Cancer Comparison in an Upper Middle-Income Setting

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: As cancer survival improves in middle-income countries, supportive care needs (SCN) are increasingly central to survivorship. However, services remain under-developed. Whether needs differ by cancer type or share common factors shapes how supportive care should be built. This secondary data analysis compared SCN in breast and colorectal cancers within a single multiethnic Malaysian health-system.

Methods: We compared two cohorts, each assessed with a locally developed, validated, cancer-specific tool: breast cancer (n = 723; Needs Assessment Tool for Breast Cancer, NeAT-BC) and colorectal cancer (n = 630; NeAT-CC). High need was defined by each tool's validated cut-off (NeAT-BC: mean domain score 2.01–3.0 on a 0–3 scale; NeAT-CC: 3.01–5.0 on a 0–5 scale). Because the scales and cut-offs differ, prevalence was not compared directly; the comparison focused on domain rankings, commonly endorsed items, and associated factors.

Results: In breast cancer, high need was most prevalent in the hospital appointments (29.5%) and information/services (28.1%) domains; in colorectal cancer, high need was most prevalent in the healthcare (78.6%), psychosocial/information (70.0%) and diagnosis (59.4%) domains. Although domain prevalence was not directly comparable, item-level priorities showed close convergence. Commonly endorsed needs included shorter waiting times, easily understood information, self-care and dietary guidance, timely communication of test-results, and accessible facilities. In breast cancer, advanced disease was consistently associated with higher needs. In colorectal cancer, higher needs were more evident among younger respondents and those receiving care in public hospitals.

Conclusion: Although measured using different cancer-specific tools, both cohorts identified similar priority needs related to communication, waiting times, self-care guidance, test-result communication and service access. This convergence suggests that supportive care gaps in Malaysia are partly rooted in shared health-system functions rather than cancer type alone. Cross-cutting investment in navigation, communication support and care coordination are needed, with deliberate extension beyond breast cancer.

Keywords: Supportive Care Needs, Breast Cancer, Colorectal Cancer

How to Cite: Yip, J., Hoo, Y. Y., Yip, C. H., & Bhoo-Pathy, N. supportive care needs in breast and colorectal cancer: a cross-cancer comparison in an upper middle-income setting [56]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0057

Title: Exploring the Supportive Care and Information Needs of Parents of Children with Retinoblastoma in India

Subject: The Human Experience of Cancer

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Introduction: India has around 1500 new cases of retinoblastoma each year, with common treatments being systemic chemotherapy and enucleation. Parents' information and supportive care needs may be unmet. This study aimed to: (1) identify unmet support and information needs of parents of children undergoing treatment for retinoblastoma, (2) explore differences in unmet needs between mothers versus fathers, and (3) explore needs of parents whose child underwent an enucleation as well as the needs of those whose children received chemotherapy (exclusively or after enucleation).

Methods: Mothers (n=32; mean age=28.46 years) and fathers (n=30; mean age=32.42 years) of children being treated for retinoblastoma at a tertiary care hospital in India were invited to participate in the study. Individual, semi-structured, audio-recorded interviews were conducted at the treating hospital. Data saturation was reached, as no new themes were emerging from the interviews. Framework analysis followed by thematic analysis was used to analyze the transcripts.

Results: Three themes emerged, outlining unmet needs for: (1) emotional and financial support, (2) improved communication with healthcare providers and other family members and (3) logistical and peer support from parents of other children being treated for retinoblastoma. Mothers' most commonly reported (1) need for support taking care of the unwell child and their siblings, and (2) for familial support for domestic labor tasks. Parents of children who underwent enucleations reported emotional distress over the loss of a vital organ, while parents of children who underwent chemotherapy reported need for more treatment-related and prognostic information.

Conclusion: Findings indicate the need for systemic solutions at the treating hospital including psychosocial support by trained counsellors and facilitating peer support between parents offering solutions to caregiving needs. It would also be beneficial for mothers and fathers to receive person-centered and treatment-specific interventions (e.g., targeted psychoeducation)

Keywords: Unmet Needs, Retinoblastoma, Childhood Cancer, Pediatric Psycho Oncology, India

How to Cite: Namjoshi, S., Chittem, M., Kaliki, S., Kelada, L., & Wakefield, C. E. exploring the supportive care and information needs of parents of children with retinoblastoma in India [57]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0058

Title: Communicating with Trust: Physicians' and Parents' Perspectives on Treatment Decision-Making in Retinoblastoma

Subject: The Human Experience of Cancer

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Introduction: Retinoblastoma is an aggressive eye cancer that affects infants and young children. Treatment usually entails heavy dosage chemotherapy and removal of the eye. Consequently, conversations and decision-making around these treatment options can be challenging for physicians and parents alike. This study aimed to explore: (1) experiences of physicians in developing trust regarding treatment-related discussions with parents, (2) experiences of trust for parents when communicating about the treatment with physicians, and (3) factors that aid in trust-building between physicians and parents.

Methods: Physicians (n=6; male=2, female=4; mean age= 40 years) treating children for retinoblastoma and parents (n=15; male=8, female=7; mean age=32 years) were recruited to participate in three distinct focus group discussions: one with physicians, conducted online and two with parents conducted at the treating hospital. The FGD questions centered on both the groups' experiences and views on trust during retinoblastoma treatment decision-making. Thematic analysis was used to analyze the transcripts and identify patterns across data from all three groups.

Results: We developed three overarching themes across both groups: (1) language barriers and cultural taboos pose significant challenges to building trust during treatment-related discussions, (2) reputable and approachable physicians, transparent in their communication elicit greater trust, and (3) physicians valuing the parents' insights and encouraging their participation was pivotal in trust-building and parents trusted their physicians when they were listened to and reassured and were given specific and accurate information.

Conclusion: Findings indicate a need to develop multilingual information aids to address language barriers in retinoblastoma treatment communication. It may be beneficial to design treatment-specific communication skills training for physicians which focus on transparency, reassurance, and provision of information in an empathic and accurate manner. In addition, communication aids (e.g., decision aids) may be one way to help increase parent participation in treatment discussions.

Keywords: Trust In Communication, Physicians, Parents, Retinoblastoma, Pediatric Cancer

How to Cite: Namjoshi, S., Chittem, M., Sharma, R., Kelada, L., & Wakefield, C. E. communicating with trust: physicians' and parents' perspectives on treatment decision-making in retinoblastoma [58]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0059

Title: Permission to Live: An Analysis of Key Legal Protections of People Impacted by Cancer

Subject: The Human Experience of Cancer

Authors: Mary Grace Anne Rosales-Sto. Domingo[1]*, Hayley Jones[1]

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Introduction: People affected by cancer face a variety of challenges as they navigate life following cancer diagnosis. These span from financial challenges relating to costs of cancer care, barriers in returning to or maintaining work, to stigma and discrimination associated with a cancer diagnosis. Reintegration of people impacted by cancer in society and their quality of life rely heavily on availability of and access to legal protections that enable them to thrive. Law is a crucial tool in all aspects of cancer prevention and control. The McCabe Centre for Law and Cancer, with support from WHO, conducted a policy scan of legal protections for people affected by cancer to determine what key legal protections exist and identify global examples of such legislation that demonstrate good practice.

Methods: The McCabe Centre adopted a doctrinal legal research methodology that focused on primary sources of law to identify, gather and describe relevant legal protections for people affected by cancer.

Results: Legal protections including social protections exist to protect and promote rights of people impacted by cancer. Legal protections cover unhampered access to healthcare without financial hardship; income protection through sickness benefits; rights at work; and inclusion and anti-discrimination. Countries have a duty to implement such laws in line with international human rights principles that protect everybody's right to health, social security, work, dignity and non-discrimination, while acknowledging and disabling barriers to access social protections. Meaningful engagement of people with lived experience will be crucial to understand and work towards stronger and more effective legal protections.

Conclusion: Laws play a significant role in providing social protections for people impacted by cancer and reducing social inequities. Governments should be guided by international human rights frameworks and develop appropriate interventions given the local context and customs provided that people with lived experience are constantly engaged as part of that process.

Keywords: Legal Protections, Social Protections

How to Cite: Domingo, M. G. A. R. S. & Jones, H. permission to live: An analysis of key legal protections of people impacted by cancer [59]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0060

Title: Hands off Our Policy: Developing Minimum Safeguards in Law to Prevent Conflict of Interest in Cancer Policy Development

Subject: Policy, Capacity Building & Sustainable Cancer Control

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Introduction: Time and again, health-harming industries such as tobacco, alcohol and ultra-processed food industries have sought to influence health policy development. With a foot in the door, these industries have managed to secure a seat in technical working groups, drafting committees and consultation hearings, propagating their own narrative of their right to be consulted in matters concerning their products and thereby affecting their business. Industry's actions have led to policy dilution and severe delays in implementation.

Methods: The McCabe Centre for Law and Cancer analysed key international guidance and human rights laws to elicit key minimum standards that must be embedded in a country's legal framework to prevent conflict of interest in health policy development and ensure the credibility of the policy development process.

Results: The McCabe Centre identified key lessons from tobacco control, alcohol control and promoting healthy diets in preventing conflict of interest that may be applied more generally in the development of policies that prevent and control noncommunicable diseases including cancer. These include steps that should be taken by government at every step of the policy process from identifying who should be in the room during policy development, the difference between what is government duty to consult its stakeholders and what is subject to the discretion of the government. Governments have a duty to ensure that policies are developed, enacted and implemented free from conflict of interest. They have a duty to ensure that health policies, cancer control and NCD policies in particular, are designed to protect and promote public health and developed with the best interest of the public in mind.

Conclusion: Laws play a vital role preventing conflict of interest. Governments have a duty to institutionalize minimum legal safeguards to prevent conflict of interest and promote transparency and accountability in NCD policy development.

Keywords: Cancer Policy, Conflict Of Interest, Industry Interference, Commercial Determinants Of Health

How to Cite: Domingo, M. G. A. R. S. & Jones, H. hands off our policy: Developing minimum safeguards in law to prevent conflict of interest in cancer policy development [60]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0061

Title: Strengthening Legal Capacity for Cancer Control: A Global Legal Training Program Evaluation

Subject: Policy, Capacity Building & Sustainable Cancer Control

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Introduction: WHO recommends enactment of laws addressing major cancer and noncommunicable disease risk factors as one of the most effective and cost-effective ways to prevent and control cancer/NCDs. Yet, law remains to be underutilised to address cancer/NCDs. In an effort to build legal capacity within the cancer control community, the McCabe Centre for Law and Cancer launched its flagship international legal training program in 2014.

Methods: Ten years after, the McCabe Centre conducted an impact assessment of the ILTP using both qualitative and quantitative data. This included examining participant survey data, outcomes of self-identified participant priority projects and interviews with 17 alumni and stakeholders.

Result: From 2014-2023, the program trained 450 participants from 97 countries and territories across 13 iterations. The ILTP contributed to cancer and NCD law and policy change in a documented 30 countries with tobacco control laws and regulations by far the most common measure worked on, the defence of legal challenges to cancer/NCD laws in five countries, and the initiation of a legal challenge against the tobacco industry to recover health care costs in one country. In addition, the ILTP had less tangible impacts, including building networks that facilitate law and cancer/NCD action, empowering individuals to become NCD champions, and creating impact beyond nominated 'priority projects', with examples including contributing to ripple effects of new cancer/NCD laws in regions.

Conclusion: In a period where global health funding is increasingly limited, this study confirms the power of law, as a cost-effective tool to prevent and control cancer/NCDs. The study highlights the need to invest in cancer/NCD capacity and leadership for the long-term - both to achieve specific laws and policies, and build a community of people with the skills, confidence and commitment to act on NCDs. We share lessons for anyone who is developing, funding or evaluating capacity building programs on how to run a long-term, successful capacity building program.

Keywords: Capacity Building, Legal Capacity, Law

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Abstract Code: APOCP-27-0062

Title: Developing a Legal Framework for Population-Based Cancer Registries: A Toolkit for Global Adaptation

Subject: Policy, Capacity Building & Sustainable Cancer Control

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Introduction: Population-based cancer registries (PBCRs) are critical for generating reliable data on cancer incidence and survival, which underpin national cancer control strategies. Despite their importance, many jurisdictions lack a clear legal mandate for mandatory reporting of cancer diagnoses, resulting in incomplete data and policy impact. Strengthening legal frameworks is essential to ensure systematic data collection and compliance with international best practices, ultimately helping to identify and address global cancer inequities.

Methods: The McCabe Centre for Law and Cancer, in collaboration with the International Agency for Research on Cancer and the African Cancer Registry Network, designed a multi-component resource. Global health lawyers based in Australia, New Zealand, Kenya, The Philippines and Samoa undertook review and analysis of existing global cancer registry laws, regulations and best practices, integrating feedback from legal and health policy experts and drew upon expert guidance from IARC and AFCRN to develop these resources.

Results: The Toolkit comprises: · A technical report outlining key legal principles and global examples; · A fillable legislation template for drafting cancer registry laws; · A searchable database of existing national laws for comparative analysis. The Toolkit is now freely and publicly available as IARC Technical Report 49 on the IARC website (https://publications.iarc.who.int/656), and provides a step-by-step process for law development, including needs assessment, stakeholder consultation, drafting, and implementation. It addresses essential elements such as mandatory reporting, data privacy, confidentiality, indemnity, and enforcement provisions. By offering customizable templates and practical guidance, the Toolkit enables countries to create robust legal frameworks that support comprehensive cancer registration and improve data quality for cancer control planning.

Conclusion: This Toolkit represents a much-needed resource to advance global cancer surveillance efforts. By facilitating the enactment of legally sound, context-sensitive cancer registry laws, it promotes data completeness, strengthens health systems, and supports evidence-based cancer control policies. Countries can therefore accelerate progress towards international standards, enhancing their capacity to monitor and reduce the cancer burden. The authors hope that wide dissemination and feedback will lead to further refinement of the Toolkit, thereby strengthening approaches to cancer registry regulation worldwide.

Keywords: Cancer Registries, Model Law, Legal Toolkit

How to Cite: Domingo, M. G. A. R. S. & Jones, H. developing a Legal Framework for Population-Based Cancer Registries: A Toolkit for Global Adaptation [62]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0063

Title: Navigating the Margins: A Multi-Stakeholder Exploration of Cancer Care Experiences among Transgender Persons in Indian Hospital Settings

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Research on the sexual health narratives on transgender populations remain limited. Cancer care demands long term commitment with the hospital infrastructure however transgender persons in India continue to encounter barriers across the cancer care continuum. This study explores how transgender patients, caregivers, and healthcare providers experience and negotiate cancer care within hospital settings.

Methods: A qualitative multi-stakeholder study was conducted in tertiary care hospital settings in Mumbai, India. Semi-structured interviews were undertaken with transgender persons, healthcare providers and cis-gendered heterosexual participants affected by cancer using snowball sampling. Interviews explored experiences of screening, diagnosis, treatment, supportive care, institutional interactions, and healthcare navigation. Data were analysed using Reflexive Thematic Analysis informed by the 3A+Q framework.

Results: Participants reported the following barriers—(i) structural: where binary gender markers cause discrepancies in hospital documentation which misleads ward allocation and limits transgender inclusive screening pathways, (ii) procedural: where healthcare providers lacked institutional guidelines and formal education regarding trans inclusive healthcare strategies and (iii) interpersonal: where healthcare decisions were made by the guru within the transgender gharana system, a hierarchy that mimics a patriarchal institution which informs significant healthcare decisions.

Conclusion: These barriers collectively contributed to delayed access, reduced comfort within care settings, and concerns regarding quality and continuity of care. Findings highlight the need for transgender-inclusive screening protocols, documentation reforms, workforce training, and institutional policies that support gender-affirming care. Multi-stakeholder perspectives provide actionable insights for strengthening equitable cancer care delivery and reducing disparities within Indian health systems.

Keywords: Transgender Health, Cancer Care, Health Equity, Qualitative Research, India

How to Cite: Jha, S. & Chittem, M. navigating the margins: a multi-stakeholder exploration of cancer care experiences among transgender persons in Indian hospital settings [63]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0064

Title: Factors Associated with Smoking Cessation and Follow-Up Adherence among Participants in the Korean National Lung Cancer Program

Subject: Screening & Early Detection

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Introduction: Lung cancer is the leading cause of cancer-related mortality worldwide, making early detection through screening critically important. To maximize the effectiveness of screening, comprehensive post-screening management including smoking cessation and follow-up examinations for abnormal findings is critical to reducing lung cancer mortality. This study aimed to identify factors associated with smoking cessation and follow-up adherence among participants in Korean National Lung Cancer Screening (KNLCS) to provide evidence for strengthening post-screening management strategies. Methods the KNLCS participant satisfaction survey was conducted by the National Cancer Center, Korea, between 2021 and 2025.

Methods: We analyzed cross-sectional data from 3,186 current smokers at the time of screening and 676 participants notified of lung nodules. Multivariable regression analyses were performed to identify factors associated with smoking reduction and cessation after screening, as well as adherence to recommended follow-up examinations.

Results: Among 3,186 current smokers, 6.9% quit and 27.0% reduced smoking after screening. Smoking cessation was more likely among participants who received result counseling (Relative Risk Ratio, RRR=1.89; 95% CI: 1.37–2.59; p<0.001) and those with abnormal findings (RRR=3.33; 95% CI: 2.45–4.51; p<0.001). Among 676 participants with lung nodules, only 36.8% underwent follow-up examinations. Adherence to follow-up examinations was associated with receiving sufficient pre-screening information (OR=2.74; 95% CI: 1.29–5.84; p<0.01) and result counseling (OR=2.82; 95% CI: 1.82–4.36; p<0.001). Compared with participants in screening category 2, those in categories 3 (OR=2.48; 95% CI: 1.68–3.66; p<0.001) and 4 (OR=4.74; 95% CI: 2.83–7.92; p<0.001) were more likely to undergo follow-up examinations.

Conclusion: Receipt of result counseling and adequate pre-screening information were significantly associated with both smoking cessation and adherence to recommended follow-up examinations. Strengthening educational and counseling components within lung cancer screening programs may enhance post-screening care, promote behavioral change, and improve the overall effectiveness of screening among high-risk individuals.

Keywords: Lung Cancer, Screening, Smoking Cessation, Patient Compliance, Counseling

How to Cite: Kang, J., Balbedina, J. M., Lee, N., Song, J. Y., & Kim, Y. factors associated with smoking cessation and follow-up adherence among participants in the Korean national lung cancer program [64]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0065

Title: Understanding Factors Shaping Stakeholder Priorities for Financial Navigation Services for Patients with Cancer in Malaysia

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: Cancer care can impose substantial financial demands on patients and their families. Financial navigation has emerged as a promising approach to help patients identify and access appropriate sources of support. However, a better understanding of the factors influencing priorities for financial navigation services is needed to inform the development of effective financial support strategies for patients with cancer.

Methods: A qualitative content analysis was conducted on explanatory free-text responses collected during Round 1 of a two-round Modified Delphi study involving 34 stakeholders representing healthcare delivery, patient and caregiver perspectives, social support and navigation services, financial services and the pharmaceutical sector. Responses were analysed to identify the needs and concerns that shaped stakeholder priorities for financial navigation services for patients with cancer.

Results: Stakeholder recommendations were shaped by concerns about the financial challenges associated with cancer care and the difficulties patients face in navigating complex healthcare financing and support systems. First, participants noted that uncertainty regarding treatment costs and expected expenses limited patients' ability to prepare financially, highlighting the need for greater cost transparency and support for financial planning through medical bill assistance. Second, difficulties understanding insurance coverage, eligibility requirements, and available sources of assistance were frequently described, with stakeholders emphasising the importance of insurance and government scheme navigation in helping patients access support for which they were already eligible but often struggled to access. Third, stakeholders recognised that patients often experience practical, social, and financial challenges simultaneously, highlighting the need to identify unmet needs early and connect individuals with appropriate sources of support through social welfare navigation and pharmaceutical assistance programmes, particularly for those whose medications fall outside standard coverage. Finally, while financial literacy was considered valuable for informed decision-making, participants consistently placed greater emphasis on practical assistance and personalised guidance than on broader financial education initiatives. Overall, stakeholders emphasised that effective financial navigation requires more than the availability of resources; patients also need timely guidance and practical support to access them.

Conclusion: These findings highlight the needs and challenges that underpin stakeholder priorities for financial navigation services and provide insight into how financial support services can be better aligned with the needs of patients with cancer.

Keywords: Financial Toxicity, Financial Navigation, Cancer Care

How to Cite: Rajah, H. D. A., Yie, L. P., Yusak, S., Bustamam, R. S. A., & Pathy, N. B. understanding factors shaping stakeholder priorities for financial navigation services for patients with cancer in Malaysia [65]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0066

Title: Cancer Burden in Productive-Age Adults: A 14-Year Prospective Study of the LIFECARE Cohort in Sarawak

Subject: Cancer Burden, Inequities & Priority Setting

Authors: Xun Ting Tiong[1]*, Nur Ariefah Syamimi Abdul Latif[2], Joe Fu Wee[2], Afiq Aiman Hamdan[2], Shirley Siang Ning Tan[2], Melissa Siaw Han Lim[3], Tze Shin Leong[4], Pei Jye Voon[5], Lee Ping Chew[2,4], Alan Yean Yip Fong[2,6]

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Introduction: Evaluating the true burden of cancer requires quantifying both incident malignancies among survivors and cancer-specific mortality. This study utilizes the 14-year prospective LIFECARE cohort to calculate the annualized incidence rate and oncology mortality rates among adults age under 65 years in Sarawak.

Methods: A baseline cohort of 2,542 healthy individuals from the community aged 18–50 was enrolled between 2010 and 2011. Longitudinal endpoints up to December 2024 were captured using a dual-tracking strategy: National Death Registry (NDR) for the overall baseline cohort (N=2,542) to assess premature mortality (both solid tumours and haematological malignancies). Second, to account for longitudinal attrition, a sub-cohort of n=1553 individuals (1,500 alive, completed phase 3 and 53 deceased) were used to calculate a 14-year cumulative and annualized incidence rates. Most common cancer types were reported.

Results: NDR identified 53 all-cause premature deaths with 13 confirmed cancer-specific, 24 non-cancers, and 16 unclassified. Treating unclassified deaths as a sensitivity bound, cancer-specific mortality ranged from 13–29 deaths (24.5–54.7% of premature mortality). A total of 35 confirmed oncology events (22 living cancer diagnoses+ 13 deaths) were recorded. Within the sub-cohort (n=1,553), the annualized incidence rate was 160.9 cases per 100,000 person-years. Using baseline (N=2542) assuming no malignancies among untracked individuals, a baseline incidence rate of 98.3 cases per 100,000 person-years with an oncology mortality 36.5 deaths per 100,000 person-years. Breast cancer was predominant (37.1%), followed by lung and colorectal cancer (11.4% each).

Conclusion: In productive-aged adults under 65 years, the calculated annualized incidence rate range (98.3 – 160.9 cases per 100,000 person-years) brackets Malaysia's national all-ages registry baseline (143.9 per 100,000 person-years). Confirmed and possible cancer-specific deaths accounted for 24.5–54.7% of premature mortality. These findings suggest disproportionate cancer burden among Sarawak's working-age population, supporting targeted investment in regional screening, cause-of-death classification capacity, and oncology services to close this equity gap.

Keywords: Cancer Burden, Cancer Incidence, Premature Mortality, Prospective Cohort, Sarawak

How to Cite: Tiong, X. T., Latif, N. A. S. A., Wee, J. F., Hamdan, A. A., Tan, S. S. N., Lim, M. S. H., Leong, T. S., Voon, P. J., Chew, L. P., & Fong, A. Y. Y. cancer burden in productive-age adults: a 14-year prospective study of the LIFECARE cohort in Sarawak [66]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0067

Title: Women's Cancer Burden among Working-Age Women in the LIFECARE Cohort: A 14-Year Prospective Study in Sarawak

Subject: Cancer Burden, Inequities & Priority Setting

Authors: Xun Ting Tiong[1*], Nur Ariefah Syamimi Abdul Latif[2], Joe Fu Wee[2], Scholastica Ramih Bunya[2], Irene Gitek[2], Shirley Siang Ning Tan[2], Melissa Siaw Han Lim[3], Tze Shin Leong[4], Ming Ruey Ngu[5], Pei Jye Voon[5], Lee Ping Chew[2,4], Alan Yean Yip Fong[2,6]

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Introduction: Effective women's health policies require a clear understanding of both the frequency and specific types of cancers affecting women. This study utilizes the 14-year prospective LIFECARE cohort to evaluate annualized incidence, anatomical cancer patterns, and cause-specific mortality among working-age women (≤ 65 years) in Southern Sarawak.

Methods: A total of N=1,482 healthy women aged 18–50 were enrolled in 2010 and followed through December 2024. Deaths were determined for the full cohort via Malaysia's National Death Registry linkage. Incident cancers in sub-cohort n=888 women who completed Phase 3 follow-up; cases in non-completers were captured only if recorded as a cause of death. Owing to this dual ascertainment, annualised incidence is reported as a sensitivity range under differing person-year assumptions rather than a single point estimate.

Results: A total of 23 female cancers were identified (17 living survivors, 6 deceased), with cancer contributing 30.0% of cause-specific premature female deaths. Anatomical analysis showed a predominance of breast and gynaecological malignancies accounting for 78.3% (n=18) of all cases. Breast cancer was the leading malignancy, representing 56.5% (n=13; 10 living, 3 deceased) and 50.0% of oncology deaths. This was followed by cervical cancer at 17.4% (n=4) and endometrial cancer at 4.3% (n=1). The overall incidence rate for female malignancies ranged from 110.9 to 180.9 cases per 100,000 person-years, while breast cancer incidence ranged from 62.7 to 102.3 cases per 100,000 person-years.

Conclusion: The cancer burden among working-age women in Sarawak is predominantly driven by breast and gynaecological malignancies. These cancers contribute substantially to premature mortality, underscoring a significant public health impact in this population. Breast cancer incidence appears high and warrants formal comparison with age-standardised regional rates. Most women with breast cancer survive (10/13, 76.9%). These findings highlight the importance of strengthening targeted screening, early detection, and long-term survivorship care for women in Sarawak.

Keywords: Breast Cancer, Women's Cancer, Cancer Incidence, Cancer Mortality, Prospective Cohort

How to Cite: Tiong, X. T., Latif, N. A. S. A., Wee, J. F., Bunya, S. R., Gitek, I., Tan, S. S. N., Lim, M. S. H., Leong, T. S., Ngu, M. R., Voon, P. J., Chew, L. P., & Fong, A. Y. Y. women's cancer burden among working-age women in the LIFECARE cohort: a 14-year prospective study in Sarawak [67]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0068

Title: Lung Cancer Risk Factors in Asia: An Umbrella Review and Comparative Assessment of Evidence from Singapore

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Lung cancer incidence among females and never-smokers is increasing across Asia, yet underlying risk factors remains unclear. We explored lung cancer risk factors in Asian populations and evaluated whether findings from Singapore, a multi-ethnic population with high-quality cancer registry data, were consistent with regional evidence.

Methods: We searched PubMed, EMBASE, and Cochrane Library through April 2025 for English-language studies reporting effect estimates. Asian meta-analyses were qualitatively synthesized and pooled using random-effects models with 95% confidence intervals (CIs), with heterogeneity assessed using I^2. Singapore-specific studies were synthesized separately, with reproductive-factor meta-analyses conducted where appropriate. Study quality was assessed using the Newcastle–Ottawa Scale.

Results: Ninety-one Asian meta-analyses were included, most commonly examining passive smoking (n=15), respiratory disease history (n=8), and smoking status (n=5). Across Asia, the strongest associations were observed for cooking oil exposure (odds ratio [OR]=6.20), chronic obstructive pulmonary disease (OR=2.98), and smoking (OR=2.34). Thirty-two Singapore studies (16 case-control, 16 cohort; 69% high quality) examined 92 potential risk factors, with reproductive (n=24) and dietary (n=26) factors most frequently reported. Consistent with Asian evidence, meta-analysis suggested dose-dependent inverse associations of parity (hazard ratio [HR]=0.69 for 1–2 births; 0.63 for 3–4; 0.50 for ≥5) and hormonal replacement therapy among ever-smokers (HR=0.56; 95% CI: 0.18–0.93). Among females, smoking and chronic rhinosinusitis (potentially reflecting pan-airway inflammation) were notable risk factors. In never-smokers, family history and high meat consumption increased risk, whereas longer intervals between menstrual periods showed inverse associations.

Conclusion: Reproductive, lifestyle, and environmental factors contribute to lung cancer risk across Asia, with patterns varying by sex and smoking status. Singapore-specific evidence generally aligns with regional findings but remains limited for environmental exposures (e.g., passive smoking and air pollution). Improved local data collection and further validation studies are needed to support prevention strategies and risk assessment in Asian populations.

Keywords: Cancer, Risk Factors, Systematic Review, Public Health, Primary Prevention

How to Cite: Seow, W. J., Juang, Y. R., Zhao, Q., Lim, D. W. T., & Lee, P. lung cancer risk factors in Asia: an umbrella review and comparative assessment of evidence from Singapore [68]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0069

Title: Dietary Calcium Intake and Gastric Cancer Risk: A Case-Control Study in Northern Vietnam

Subject: Screening & Early Detection

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Introduction: Gastric cancer remains a leading cancer burden in Vietnam, yet the association between calcium intake and gastric cancer risk remains controversial in Asian populations. This study aimed to evaluate the relationship between dietary calcium intake and gastric cancer risk in a Northern Vietnamese population and to explore potential effect modification by demographic and lifestyle factors.

Methods: A case–control study was conducted using data collected from 2008 to 2025 in several provinces of Northern Vietnam. A total of 3,905 participants were included, comprising 1,182 incident gastric cancer cases and 2,723 controls. Dietary intake was assessed using a validated semi-quantitative food frequency questionnaire, and daily calcium intake was estimated from the Vietnamese food composition database. Participants were categorized into quintiles of calcium intake. Multivariable logistic regression models were used to estimate odds ratios (ORs) and 95% confidence intervals (CIs), adjusting for demographic characteristics, lifestyle factors, dietary intake, body mass index (BMI), family history of cancer, and other potential confounders. Stratified analyses were performed according to sex, BMI, smoking status, alcohol consumption, Helicobacter pylori infection, and other relevant factors.

Results: The mean calcium intake was 363.9 ± 142.2 mg/day. We observed a U-shaped association between dietary calcium intake and gastric cancer risk. Compared with the reference quintile, participants in the lowest calcium intake quintile had a significantly increased risk of gastric cancer (adjusted OR = 1.77; 95% CI: 1.32–2.36), while those in the highest quintile also exhibited a higher risk (adjusted OR = 2.01; 95% CI: 1.50–2.70). On a continuous scale, each increase of one calcium intake quintile was associated with a 23% higher risk of gastric cancer (adjusted OR = 1.23; 95% CI: 1.11–1.35). The association was observed primarily for non-cardia gastric cancer (adjusted OR = 2.04; 95% CI: 1.52–2.74 for the highest quintile), whereas no significant relationship was found for cardia gastric cancer. Stratified analyses showed consistent positive associations across sex, BMI, smoking, and alcohol consumption categories, with stronger effects among women and individuals with BMI ≥23 kg/m^2.

Conclusion: In this Vietnamese population, dietary calcium exhibited a U-shaped association with gastric cancer risk, with elevated risk at both low and high intake levels. These findings diverge from predominantly protective associations reported in Western cohorts, suggesting population-specific dietary contexts and calcium sources critically modulate this relationship. Prospective studies with detailed assessment of calcium sources and dietary patterns are warranted.

Keywords: Gastric Cancer Calcium Intake Dietary Factors Cancer Prevention Case-Control Study Vietnam

How to Cite: Nguyen, T., Le, N. T., Nhi, B. N., Hoang, H. A., Minh, P. N. T., & Hoang, T. P. P. dietary calcium intake and gastric cancer risk: a case-control study in northern Vietnam [69]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0070

Title: An Early Health Technology Assessment towards Cost-Effective Precision Lung Cancer Screening in Smokers and Never-Smokers

Subject: Screening & Early Detection

Authors: Yah Ru Juang[1*], Yue Zhang[2], Anthony Chau Ang Yii[3], Borame L Dickens[2], Yichen He[2], Shihui Jin[2], Laura Huey Mien Lim[2], Wei Jie Seow[2], Wenjia Chen[2]

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Introduction: Despite the proven benefits of low-dose computed tomography (LDCT) in lung cancer management, uptake remains limited due to cost. This study applies an early health technology assessment (HTA) framework to optimize LDCT screening through risk-stratified strategies in Singapore.

Methods: We developed a lifetime Markov model to simulate costs and outcomes for Singaporean smokers and never-smokers with a family history. Transition probabilities and costs were informed by local data, with utilities from published sources. Screening strategies varied by initiation age (50, 55, 60) and screening interval (annual, biennial, quinquennial). Outcomes included costs, quality-adjusted life-years (QALYs), and incremental cost-effectiveness ratios (ICERs), discounted at 3% annually. Using a validated local risk prediction model, reversed threshold analyses identified optimal risk cut-offs for cost-effective screening, supported by deterministic and probabilistic sensitivity analyses across a range of willingness-to-pay thresholds.

Results: Among smokers, risk-stratified annual screening initiated at age 50 (1-year risk thresholds: 0.39–0.58%) achieved the greatest health gains (0.14–0.19 QALYs) and demonstrated favourable cost-effectiveness (ICERs <$45,000/QALY), outperforming all risk-agnostic (criteria-based) strategies. Among never-smokers, risk-agnostic strategies were not cost-effective, while selected risk-based quinquennial screening from age 60 showed improved efficiency versus no screening under lower-risk thresholds (0.18-0.23%). Across all subgroups, results were generally robust to uncertainty, with key ICER drivers including discount rate, utility assumptions, and costs of advanced-stage disease.

Conclusion: Risk-stratified LDCT screening can improve clinical yield while maintaining good value for money, supporting more targeted implementation in practice. Early HTA provides a pragmatic solution to align screening eligibility with precise risk thresholds.

Keywords: Screening, Lung Cancer, Health Technology Assessment, Cost-Effectiveness, Early Detection

How to Cite: Juang, Y. R., Zhang, Y., Yii, A. C. A., Dickens, B. L., He, Y., Jin, S., Lim, L. H. M., Seow, W. J., & Chen, W. an early health technology assessment towards cost-effective precision lung cancer screening in smokers and never-smokers [70]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0071

Title: Mapping HPV Prevalence across Ethnic and Regional Populations in Malaysia: Findings from Program ROSE

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Program ROSE (Removing Obstacles to cervical ScrEening) is a comprehensive primary HPV-based cervical screening programme that integrates self-sampling and digital technology to facilitate women's access to care in Malaysia. This abstract describes the prevalence of high-risk human papillomavirus (HPV) infection across different ethnic groups and regions in Malaysia from Program ROSE.

Methods: Program ROSE conducted HPV-based screening activities via outreach events, primary care clinics, and hospitals across Malaysia. Low vaginal samples were collected using flocked swabs via a self-collection method and tested using a clinically validated HPV DNA PCR assay. All participant data, including demographics and test results, were captured in a digital registry, which also facilitated direct result delivery via SMS or WhatsApp. Participants who tested positive for HPV were referred to hospitals offering colposcopy services for timely follow-up care.

Results: Since 2018, Program ROSE has screened 40,115 women from 13 states and 2 federal territories in Malaysia. Most participants were Malay (58.6%), followed by Chinese (20.0%) and minority ethnic groups (13.5%). The overall HPV prevalence was 5.9%. Non-HPV16/18 high-risk genotypes accounted for the majority of HPV-positive cases (78.6%). The highest prevalence was observed among Indian women (8.8%) and minority ethnic groups, predominantly from Borneo (8.6%), while Malays recorded the lowest prevalence (4.7%). Regionally, Sabah and Sarawak recorded the highest HPV prevalence (7.7% and 7.8%, respectively), whereas the East Coast region recorded the lowest prevalence (3.6%).

Conclusion: Mapping HPV prevalence across ethnic and regional populations provides valuable insights into disparities in HPV burden in Malaysia. The higher HPV prevalence observed in Sabah and Sarawak reflects a greater underlying cervical cancer burden in these regions, consistent with their historically higher incidence of cervical cancer. These findings can inform more targeted prevention, screening, and resource allocation strategies, supporting more equitable and effective implementation of cervical cancer elimination efforts nationwide.

Keywords: HPV Prevalence, Program ROSE, Malaysia, Cervical Cancer

How to Cite: Khoo, S. P., Mohd-Roslee, A. N. J., & Woo, Y. L. mapping HPV prevalence across ethnic and regional populations in Malaysia: findings from Program ROSE [71]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0072

Title: Expanding Reach through Community-Centric Innovation: Outcomes from Program ROSE HPV Self-Sampling Screening Model

Subject: Screening & Early Detection

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Introduction: Cervical cancer remains a leading cause of cancer-related mortality among Malaysian women, driven by persistent barriers to screening access and uptake. Program ROSE (Removing Obstacles to Cervical ScrEening) was initiated as a pilot project in 2018 and officially launched in 2019 to address gaps in screening coverage. This study describes the scale-up and outcomes of Program ROSE community-centric screening model to expand screening coverage in Malaysia.

Methods: Program ROSE adopts a decentralised sampling and centralised testing approach. Screening is delivered through two models: (1) community outreach activities conducted in settings such as places of worship, schools, workplaces, and traditional houses; and (2) a hub model using a train-the-trainer approach through collaborations with primary care clinics and hospitals.

Results: From 2018 to 2025, Program ROSE screened more than 39,000 women across 500 community locations in Malaysia. The majority of screenings (66%) were conducted through community outreach, while the remainder were delivered through the hub model with public primary care clinics (27%) and hospitals (7%). Annual outreach events increased from four during the pilot year to 159 in 2024 and 109 in 2025, reflecting growing community trust. Rural outreach increased from 7.0% in 2023 to 29.1% in 2024 and 27.5% in 2025, demonstrating improved reach among underserved populations. Despite increased outreach volume, the average number of women screened per outreach declined by 32%, from 63 per event in 2020 to 43 per event in 2025, indicating engagement with harder-to-reach communities. The hub model expanded more than eight-fold, from four ROSE hubs in Klang Valley in 2018 to 35 hubs nationwide in 2025.

Conclusion: Program ROSE demonstrates that combining community mobilisation, social capital, and digital innovation can support scalable and equitable cervical screening. This two-pronged model provides a sustainable framework to increase screening uptake and accelerate cervical cancer elimination efforts in Malaysia.

Keywords: Program ROSE, Cervical Screening, Self-Sampling, Community

How to Cite: Khoo, S. P., Abdullah, N. A. R. B., & Woo, Y. L. expanding reach through community-centric innovation: outcomes from Program ROSE HPV self-sampling screening model [72]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0073

Title: A Competency-Based Framework for Assessing Gender Equity Integration in Oncology Curricula

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: Gender shapes cancer risk, access to care, treatment experiences, and professional opportunities across oncology. Although the WHO and the Lancet Commission on Women, Power and Cancer call for gender-responsive care and equitable oncology workplaces, no validated, competency-based tool exists to assess whether gender equity is integrated within oncology curricula. This study reports the development of such a framework.

Methods: Gender equity competencies from the Lancet Commission were mapped onto the Gender Integration Framework (Family Health International). Each competency was operationalized into measurable indicators applied at the level of published oncology training curricula. Together these form an assessment checklist designed for expert validation using the Content Validity Index (CVI) and Content Validity Ratio (CVR).

Results: Development produced a structured competency-based tool organized around four domains: gender-responsive cancer care across the continuum; equitable workplace and professional culture; recognition and reduction of gendered and intersectional health disparities; and gender-integrated health systems and policy. Each domain was disaggregated into between 15-30 indicators assessing not only the presence of gender-related content but its depth, distinguishing tokenistic mention from substantive integration across stated curriculum content, intended teaching and learning approaches, and assessment strategies. Indicators are designed to be scored consistently across diverse institutional and national contexts, enabling comparison rather than description alone. The framework will undergo expert validation using CVI and CVR to establish content validity prior to application.

Conclusion: This framework offers the first systematic, competency-anchored approach to evaluating gender equity integration in oncology curricula. It provides a foundation for identifying educational gaps, guiding curriculum reform, and preparing an oncology workforce equipped for equitable, gender-responsive cancer care, a priority of growing relevance across the Asia-Pacific.

Keywords: Gender Equity, Content Validity, Oncology Education, Gender-Responsive Cancer Care, Competency-Based Framework, Curriculum Assessment

How to Cite: Nuhu, N., Hammad, N., Htay, M. N. N., & Pathy, N. B. a competency-based framework for assessing gender equity integration in oncology curricula [73]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0074

Title: Co-Designing a Patient Navigation Program in Primary Care for Chinese- and Vietnamese-Speaking People Affected by Cancer in Australia (the "PEARL" Study)

Subject: Cancer Burden, Inequities & Priority Setting

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Background: Australia is a multicultural country, with one in five Australians speaking a language other than English at home. Cultural barriers, language differences and fragmented care lead to significant disparities in cancer survivorship outcomes for culturally and linguistically diverse (CALD) populations in Australia. While patient navigation effectively connects patients to care, no culturally tailored navigation programs exist in Australia to support the transition from active treatment to primary care. The "PEARL" study aims to evaluate the implementation and effectiveness of a patient navigation program for Chinese- and Vietnamese-speaking cancer survivors. The program involves a hub-and-spoke model in which patient navigators support a network of trained peer navigators, delivered by trusted community organisations with strong links to multicultural communities. We present insights from Phase I: the co-design of the PEARL program and toolkit.

Methods: This qualitative study employed the Double Diamond co-design methodology. We conducted workshops and interviews with 45 Chinese- and Vietnamese-speaking survivors and caregivers (in language) and 37 healthcare professionals and community organisation representatives across five sites in Australia. Data were analysed using inductive thematic analysis.

Results: Findings indicate PEARL fills significant gaps in the post-treatment period, including addressing an invisible crisis of psychological distress due to stigma and cultural beliefs, harnessing the cultural asset of peer navigators, bridging the cultural divide, and building trust and emotional connection. Twenty-five consensus-based refinements were made to a prototype program and toolkit. Key implementation strategies identified included co-design, integration into workflow, local adaptation, training, local champions and iterative refinement.

Conclusion: This work promotes health equity in Australia by delivering a scalable, evidence-based solution to address barriers in post-treatment care and optimising access to primary care for CALD people affected by cancer. Findings inform a subsequent hybrid Type II effectiveness-implementation randomised controlled trial, anticipate to begin recruiting in September 2026.

Keywords: Patient Navigation, Primary Care, Survivorship, Culturally And Linguistically Diverse

How to Cite: Ee, C., Sonego, S., Vuong, K., Chan, R., Emery, J., Grant, S., Kwok, C., Thamm, C., Mcbride, K., Chua, W., Lok, R., Duong, T., Dao, M. T., Liu, J., Cheung, A., Cai, L., Law, L., Malalasekera, A., Nekhlyudov, L., & Taylor, C. co-designing a patient navigation program in primary care for Chinese- and Vietnamese-speaking people affected by cancer in Australia (the "PEARL" study) [74]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0075

Title: Can Hospital Cancer Data Substitute Population-Based Registries? a Validation Study of Leading Cancer Sites in India

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Hospital-Based Cancer Registries (HBCRs) are frequently misutilized as convenient proxies for regional cancer tracking in low- and middle-income settings. While they reflect institutional workloads, they are inherently warped by specialized referral patterns. Using Population-Based Cancer Registries (PBCRs) as the epidemiological gold standard, this study critically evaluates the directional distortion and systemic validity of institutional cancer profiles across seven major Indian urban centers.

Methods: Mirroring datasets from matching sister registries (Bangalore, Chennai, Delhi, Dibrugarh, Kamrup, Mumbai, and Thiruvananthapuram) for leading cancer sites, we evaluated discrepancies in site-specific relative proportions. Disproportionalities between institutional data and true population benchmarks were rigorously quantified using Weighted Average Absolute Difference (WAAD, % units) and Weighted Average Relative Difference (WARD, %).

Results: Hospital data generated a highly distorted epidemiological profile. For males, institutional selection heavily over-represented mouth cancer, with a positive WARD peaking at 73.1% in Bangalore and 59.3% in Mumbai. Conversely, community-wide killers like lung cancer were severely under-represented in hospital workloads (WARD down to 31.9%). For females, the institutional distortion was structurally profound; cervix uteri showed extreme over-representation reaching an absolute deficit-surplus gap of 17.1% units (WARD: 139.2%) in Bangalore. Meanwhile, breast cancer was systemically masked, dropping by an absolute 13.3% units below its true community burden. Aggregate summary indices proved that female-specific cancers suffer the highest institutional skewing, with peak mean WAAD values reaching 11.5% units compared to 3.5% units for males.

Conclusion: Standalone HBCR statistics suffer from severe, non-random referral bias, rendering them invalid for public health planning, resource allocation, or epidemiological inferences. Hospital data reflects institutional marketing and clinical specialization rather than community biology. We conclude that applying mathematical correction frameworks like WAAD and WARD is mandatory before institutional registry output can safely inform regional cancer control programs.

Keywords: Hospital-Based Cancer Registry, Referral Bias, Public Health Surveillance, Data Validity, India

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Abstract Code: APOCP-27-0076

Title: Mobile-Based CBT Intervention for HPV-Positive Women in Low-Resource Settings in China: A Multicenter RCT Study

Subject: Screening & Early Detection

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Introduction: HPV-positive screening results can trigger anxiety, psychological distress, and self-stigmatization, especially in low-resource settings where psychosocial support is limited. This study evaluated the short-term psychological effects of a mobile-based cognitive behavioral therapy (CBT) intervention among HPV-positive women in China.

Methods: We conducted a multicenter randomized controlled trial across four counties in China: Xiangyuan and Yangcheng in Shanxi, Mangshi in Yunnan, and Shimian in Sichuan. Women who had received HPV-positive screening results within the previous month were randomly assigned to a CBT-based intervention or control group. The intervention was a one-week mobile-based program developed by public health and psychological experts, requiring 5-10 minutes per day and comprising three brief video modules per session. The program included psychoeducation, emotion regulation, cognitive restructuring, behavioral activation, coping strategies, and self-acceptance. The control group received usual cervical cancer screening care. Outcomes were assessed at baseline and 2-month follow-up, including anxiety (STAI-6), psychological distress (GHQ-12), self-stigma (SSS-S), perceived social support, and illness perception (B-IPQ). Intervention effects were estimated using generalized estimating equation models with group, time, and group-by-time interaction terms.

Results: Among 317 enrolled participants, 298 were included in the final analysis (138 intervention, 160 control). Baseline characteristics were comparable between groups. Compared with the control group, the intervention group showed greater reductions in anxiety (beta = -2.65, 95% CI -3.48 to -1.82, $p < 0.001$) and self-stigma (beta = -0.45, 95% CI -0.66 to -0.24, $p < 0.001$) at 2 months. No significant effect was observed for psychological distress.

Conclusion: A brief mobile-based CBT intervention reduced short-term anxiety and self-stigma among HPV-positive women in low-resource settings in China. Digital CBT may provide accessible psychosocial support after HPV result disclosure.

Keywords: HPV, Cervical Cancer Screening, Cognitive Behavioural Therapy, Digital Health, Randomized Controlled Trial, Self-Stigma, Anxiety

How to Cite: Wu, Y., Qiao, Y., Zhu, Y., Sun, R., & Yang, Y. mobile-based CBT intervention for HPV-positive women in low-resource settings in China: a multicenter RCT study [76]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0077

Title: Large Language Model-Driven Simulated Patient for Training in Abnormal Cervical Cancer Screening Management

Subject: Screening & Early Detection

Authors: Yijin Wu[1]*, Shuyan Shi[2], Mingyang Chen[2], Youlin Qiao[2]

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Introduction: Abnormal cervical cancer screening management requires physicians to integrate risk-based clinical reasoning with communication skills that address patient anxiety, fear, and stigma. Training these competencies depends on simulated practice, yet conventional standardised patients are limited by cost, inconsistent performance, and inflexibility. We developed and validated a large language model (LLM)-driven AI simulated patient (AI-SP) for training in this clinical context.

Methods: Twenty real-world consultations across different hospital levels were analysed to identify recurrent patient reactions, attitudes, and concerns. A structured case library was constructed covering CIN1 or below, CIN2, CIN3, and adenocarcinoma in situ (AIS). Prompt engineering defined role, expressive style, core concerns, response rules, medical-logic constraints, and termination criteria. Built on Tencent Hunyuan-2.0, the AI-SP simulated patients with varied clinical profiles, personality types (anxious, skeptical, compliant, dismissive), and expression levels (high, low). Eighteen physicians each completed five consultations, yielding 87 eligible transcripts evaluated on objective metrics (duration, character count, per-turn length) and expert-rated 5-point Likert scales (clinical-information accuracy, role-setting consistency, adequacy of need expression, response appropriateness, and overall performance).

Results: Personality type significantly influenced consultation length and turn structure (median duration: skeptical 1,340 s vs. compliant 496 s; P=0.001), while expression level affected per-turn length (high vs. low: 51 vs. 26 characters; P<0.001). Expert ratings were highest for role-setting consistency (4.10±0.86) and clinical-information accuracy (4.06±0.93), remaining stable across case severity and personality (all P>0.05). Higher expression level was associated with better overall performance scores (3.85 vs. 3.24; P<0.001).

Conclusion: The AI-SP produced heterogeneous, clinically credible simulated patients with stable fidelity and role consistency, demonstrating scalable potential for cervical cancer screening consultation training. Limitations in portraying uncertainty and gradual emotional disclosure appear addressable through refined prompting and dialogue-corpus fine-tuning.

Keywords: Large Language Model, Simulated Patient, Cervical Cancer Screening, Physician Training, Prompt Engineering, Medical Education, Conversational AI

How to Cite: Wu, Y., Shi, S., Chen, M., & Qiao, Y. large language model-driven simulated patient for training in abnormal cervical cancer screening management [77]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0078

Title: Improving Patient Understanding and Reducing Anxiety in Colposcopy Reporting via Large Language Models: A Randomized Controlled Trial

Subject: Health Systems, Universal Health Coverage & Cancer Care

Authors: Yuting Wang[1]*, Youlin Qiao[1], Peng Xue[1], Qianling Dai[2], Victor Yu Cui[3]

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Introduction: Colposcopy occupies a key position between abnormal cervical screening results and pathological diagnosis. However, colposcopy reports are highly specialized, information-dense, and difficult for patients to understand. This may lead to anxiety, uncertainty, and misunderstanding of subsequent management, thereby affecting follow-up care. We developed Colpo-LLM, a Qwen-based specialized system for interpreting colposcopy reports, and conducted a randomized controlled trial to evaluate its effects on cervical cancer-specific health literacy, anxiety-related emotional experience, and report perception.

Methods: A single-center, open-label randomized controlled trial was conducted at Chengdu Women's and Children's Central Hospital from January 1 to March 6, 2026. Women undergoing colposcopy after abnormal cervical cancer screening were randomized 1:1 to the Colpo-LLM-assisted interpretation group or conventional interpretation group. The intervention group received colposcopist-reviewed, personalized Colpo-LLM explanations before completing the questionnaire, whereas controls completed the questionnaire before conventional explanation. The primary outcome was cervical cancer-specific health literacy; secondary outcomes were anxiety-related emotional experience and perception of colposcopy reports.

Results: A total of 284 participants were included, with 142 in each group. The two groups were generally balanced in basic characteristic information, previous cervical cancer screening education, HPV infection status, cytology results, and colposcopic impression. The intervention group had significantly higher cervical cancer-specific health literacy scores than the control group (4.42±1.16 vs. 3.06±1.35, $P < 0.001$). For basic knowledge items and personalized questions related to NILM and LSIL findings, the intervention group also showed higher correct response rates than the control group. The intervention group had significantly higher anxiety-related emotional experience scores than the control group (20.06±3.49 vs. 15.04±2.61, $P < 0.001$), indicating lower report-related anxiety and a more positive emotional experience. The total score for perception of colposcopy reports was also significantly higher in the intervention group than in the control group (21.20±2.87 vs. 15.74±2.46, $P < 0.001$). Improvements were observed in perceived helpfulness, readability, emotional support, and anxiety relief, whereas the difference in perceived professionalism was not statistically significant. Multivariable regression and sensitivity analyses were consistent with the primary findings.

Conclusion: Colpo-LLM, when enhanced with disease-specific knowledge and integrated with physician review, significantly improved patients' understanding of cervical cancer and colposcopy report-related information, enhanced their emotional experience during report reading, and improved their perceived helpfulness, readability, and emotional support of colposcopy reports. The system may serve as a useful clinical tool for patient-oriented colposcopy report explanation and doctor-patient communication under clinical supervision. Further multicenter studies and long-term behavioral outcome assessments are warranted to validate its broader applicability.

Keywords: Large Language Models, Colposcopy Reports, Intelligent Interpretation, Health Literacy, Randomized Controlled Trial

How to Cite: Wang, Y., Qiao, Y., Xue, P., Dai, Q., & Cui, V. Y. improving Patient Understanding and Reducing Anxiety in Colposcopy Reporting via Large Language Models: A Randomized Controlled Trial [78]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0079

Title: Cervical Biopsy and LEEP Pathological Concordance in Young Women: Implications for Optimizing Post-Screening Management and Avoiding Overtreatment

Subject: Screening & Early Detection

Authors: Haiyan Hu[1]*, Chujiao Li[1], Yao Liu[1], Xuemei Luo[1], Xuemei Cai[1], Yuxia Zhang[1], Feng Huang[1], Shengmei Su[1], Kai Liu[1]

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Introduction: Cervical cancer screening programs increasingly detect high-grade lesions in young women of childbearing age, yet the optimal post-screening management strategy remains uncertain. Balancing the risks of underdiagnosis and overtreatment is critical for preserving fertility while ensuring effective disease control. This study evaluated the diagnostic concordance between colposcopy-guided biopsy and loop electrosurgical excision procedure (LEEP) in women aged ≤45 years, to inform evidence-based, age-appropriate post-screening management protocols.

Methods: This retrospective study included women aged ≤45 years with positive HPV and/or abnormal cytology, diagnosed with CIN2/3 or worse by colposcopic biopsy, who subsequently underwent LEEP. Paired biopsy and LEEP specimens were compared for pathological concordance using McNemar's chi-square test.

Results: Among 519 eligible women (median age 34.8 years), paired data from biopsy and LEEP specimens were analyzed. Detection rates of CIN2 (38.2% vs 36.4%), CIN3 (53.4% vs 53.8%), AIS (2.1% vs 1.9%), and invasive cancer (0.4% vs 1.9%) showed no statistically significant difference between biopsy and LEEP (McNemar's χ^2 test, p=0.126). No systematic underdiagnosis was observed for high-grade lesions on biopsy. Biopsy accurately identified high-grade lesions without systematic underdiagnosis, supporting its reliability as a basis for conservative management decisions.

Conclusions: Colposcopy-guided biopsy demonstrates high pathological concordance with LEEP in young women, providing evidence that biopsy alone can reliably guide treatment decisions in this population. These findings support the development of age-appropriate post-screening management strategies that prioritize fertility preservation—enabling conservative follow-up protocols to reduce overtreatment and unnecessary surgical interventions in young women with fertility desires, without compromising disease detection.

Keywords: Colposcopic Diagnosis, Colposcopy-Guided Biopsy, Concordance Rate, High-Grade Squamous Intraepithelial Lesion (HSIL), Cervical Cancer

How to Cite: Hu, H., Li, C., Liu, Y., Luo, X., Cai, X., Zhang, Y., Huang, F., Su, S., & Liu, K. cervical biopsy and LEEP pathological concordance in young women: implications for optimizing post-screening management and avoiding overtreatment [79]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0080

Title: Preliminary Results: Of Mobile-Based Interventions on Smoking Cessation for Lung Cancer Screening Participants: Findings from the Kick-Smart Trial

Subject: Screening & Early Detection

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Introduction: In 2019, Korea established the world's first national lung cancer screening program (KNLCS) for high-risk smokers (≥30 pack-years). KNLCS provides in-person physician counseling on screening results and smoking cessation. The KICK-SMART (Korean trial for Improving Compliance and K(Q)uitting with mobile-based SMART intervention for lung cancer screening participants) was conducted to evaluate mobile-based interventions to improve post-screening follow-up care and smoking cessation.

Methods: Recruitment for the KICK-SMART trial was conducted among KNLCS participants. Participants who were not receiving in-person consultations were randomly assigned to either Group A (control: screening results sent by mail, 23.5%) and Group B (intervention 1: screening results sent by mail and mobile-based educational videos sent to mobile phones, 45.5%). Group C (intervention 2, 31.0%) included participants who were already receiving in-person physician consultation. A 6-month post-screening telephone survey evaluated outcomes among 374 recruited participants. Multivariable logistic regression and pairwise comparisons were conducted to evaluate differences in behavioral outcomes across the three study groups.

Results: Significant differences across groups were observed for overall smoking reduction (p=0.027) and willingness to quit (p=0.019). Rates for smoking reduction (27.3%, 36.5%, 42.2%), willingness to quit (40.9%, 57.6%, 58.6%), and cessation success (11.4%, 12.4%, 16.4%) were reported for Groups A, B, and C, respectively. Multivariable logistic regression revealed that Group B demonstrated a significantly higher willingness to quit smoking (OR=1.86, 95% CI=1.07–3.25) compared to the control. Although non-significant, positive directional trends compared to control were observed for Groups B and C regarding smoking reduction (OR=1.54 and 1.61, respectively) and smoking cessation success (OR=1.15 and 1.30, respectively).

Conclusion: Both mobile-based interventions and in-person physician consultation enhance post-screening smoking behavior compared to standard care. Because the mobile approach performed comparably to physician counseling, mHealth offers a practical, cost-effective model to optimize preventive care and smoking cessation within national lung cancer screening frameworks.

Keywords: Lung Cancer, Screening, Smoking Cessation, Counseling, Mobile Health

How to Cite: Balbedina, J. M., Kim, Y., Kang, J., Kim, J. S., Ra, S. W., Sun, J. S., & Jin, G. Y. pRELIMINARY Results: OF MOBILE-BASED INTERVENTIONS ON SMOKING CESSATION FOR LUNG CANCER SCREENING PARTICIPANTS: FINDINGS FROM THE KICK-SMART TRIAL [80]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0081

Title: Awareness Alone Is Not Enough: Examining Gaps in Cervical Cancer Screening Uptake in Rural Mysore, India

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Cervical cancer remains a major preventable cause of morbidity and mortality in rural India, with low screening uptake despite rising awareness. This study assessed gaps in the screening cascade and factors affecting uptake in rural Mysore, India.

Methods: A community-based program evaluation was conducted across three villages under a Primary Health Center (PHC), covering a population of approximately 14,000. Eligible women were identified using lists provided by ASHAs and further supplemented through door-to-door visits to ensure inclusion of women missed in initial listings. Culturally tailored community education sessions were conducted to improve awareness and address common barriers to cervical cancer screening, including misconceptions, fear, and access-related constraints observed during field implementation. Following this, HPV-based cervical cancer screening using self-sampling was offered to eligible women.

Results: Among 1,513 eligible women, 1,486 (98.2%) received awareness through one-to-one and group education sessions. A total of 117 (7.7%) women who received awareness had undergone a hysterectomy and were excluded from the screening eligibility pool. Of the remaining 1,396 women, 913 (65.4%) underwent HPV-based screening, while 483 (34.6%) remained unscreened, indicating a substantial drop-off between awareness and screening uptake. Field records showed that non-participation among unscreened women was mainly due to low perceived risk for cervical cancer. Other reasons included being unavailable or away during visits (375; 24.8%), menstruating at the time of scheduled screening camps (93; 6.1%), and other situational constraints during outreach. Overall, attrition was largely driven by health-seeking behaviour and timing-related factors rather than deficits in awareness alone.

Conclusion: Large attrition occurred between awareness and HPV screening uptake, with the greatest drop at uptake, showing awareness does not translate into participation. Non-participation was mainly due to behavioural and service barriers, especially low perceived risk and poor access. Improving rural screening requires addressing psychosocial and health system factors beyond awareness.

Keywords: Cervical Cancer, Examining Gaps

How to Cite: N, N., Jayakrishna, P., Muralidhar, K., Somaiya, D., K.r, R., & Madhivanan, P. awareness alone is not enough: examining gaps in cervical cancer screening uptake in rural Mysore, India [81]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0082

Title: Exploration and Achievements of Cervical Cancer Prevention and Control in a Chinese Megacity: The Shenzhen Model

Subject: Screening & Early Detection

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Introduction: China's megacities face unique challenges in cervical cancer control due to large, mobile populations and decentralized screening systems. Shenzhen, a megacity of 18 million residents with a high migrant population, has progressively established a comprehensive cervical cancer prevention and control model over two decades. This study reports the achievements and implementation experience from this city-wide program.

Methods: Since 2001, Shenzhen has established a three-tier cervical cancer prevention network integrating community health centers, district maternal and child health hospitals, and Shenzhen Maternity and Child Healthcare Hospital. Key interventions included: (1) free HPV-based screening for women aged 30-59 since 2017; (2) capacity building through training courses; (3) HPV vaccination for adolescent girls initiated in 2017; and (4) a web-based case information platform for vaccination, screening, referral, and treatment tracking.

Results: HPV vaccination coverage among first-year junior high school girls reached over 90% in 2022-2024. By 2025, the program achieved a screening rate of 53.04% among target populations. Early diagnosis and treatment rates reached 95.04% and 94.34%, respectively. However, data integration across the screening network remains a critical bottleneck: of 572 screening facilities citywide, only 119 (20.8%) were connected to the municipal data system via automated interfaces, with wide variation across districts (ranging from 5.6% in Longgang to 100.0% in Dapeng), suggesting that physical service coverage is outpacing digital surveillance capacity. The program has been scaled across all 10 districts, with implementation strategies adapted to local contexts.

Conclusion: The Shenzhen model demonstrates that comprehensive, multi-sectoral cervical cancer prevention programs can achieve high screening coverage and early diagnosis in a megacity context. However, strengthening health information systems to close data integration gaps is critical for ensuring equitable, population-level surveillance. This model provides valuable insights for other megacities in the Asia-Pacific region.

Keywords: Cervical Cancer, Prevention And Control, Screening, Megacity, Health Policy, Health Information Systems, Implementation Science

How to Cite: Zhang, Y., Yang, T., Lei, Y., Cai, X., Huang, F., Liu, K., Hu, H., & Qiao, Y. exploration and achievements of cervical cancer prevention and control in a Chinese megacity: the Shenzhen model [82]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0083

Title: From Diagnosis to Palliative Care: A Deaf Malaysian's Experience of Cancer Care

Subject: The Human Experience of Cancer

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Introduction: Communication accessibility is essential to person-centred cancer care, yet the experiences of Deaf individuals remain largely absent from cancer research in Malaysia. This narrative case study explores the experience of a Deaf Malaysian with recurrent head and neck cancer across diagnosis, treatment, recurrence, palliative care, and end-of-life care.

Methods: A qualitative narrative case study was conducted using an in-depth interview in Malaysian Sign Language (BIM) with a Deaf adult diagnosed with recurrent head and neck cancer. The interview explored his experiences of diagnosis, treatment, interactions with healthcare professionals, sources of support, and coping throughout his illness. The interview was analysed using narrative analysis to explore how the participant made sense of living with cancer and the meanings he attached to his experiences.

Results: The participant described cancer as a life-changing experience marked by fear, uncertainty, and the need to gradually adjust to a new reality. Communication barriers limited his direct access to information and often required a family member to interpret medical consultations. However, these challenges did not diminish his trust in healthcare professionals. He consistently expressed confidence in his oncology specialist and later the palliative care team, while appreciating healthcare staff who communicated through writing. Throughout his illness, family members, church friends, colleagues, and friends became important sources of emotional, spiritual, and practical support. He remained engaged in his care, continued activities that brought meaning to his daily life, and maintained hope even as his illness progressed.

Conclusions: This narrative illustrates that the experience of cancer among Deaf individuals is shaped not only by communication accessibility but also by trust in healthcare professionals and supportive relationships with family and community. Improving communication-accessible and person-centred cancer care, while recognising the strengths and resilience of Deaf patients, can enhance the quality of cancer and palliative care for underserved populations.

Keywords: Cancer Care, Deaf, Health Equity, Communication Accessibility, Palliative Care

How to Cite: Sim, J. J. J. from diagnosis to palliative care: a deaf Malaysian's experience of cancer care [83]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0084

Title: Unmet Supportive Care Needs and Quality of Life among Cancer Patients in India: Preliminary Findings

Subject: The Human Experience of Cancer

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Introduction: Evidence on unmet supportive care needs and their impact on quality of life (QoL) remains limited in India, particularly in routine oncology settings. This study examined the prevalence and pattern of unmet supportive care needs, their relationship with QoL, and clinical factors associated with greater supportive care burden among patients with cancer in Hyderabad, India.

Methods: Using a cross-sectional design, 50 cancer patients (breast 56%, ovarian 14%, colorectal and head and neck 12% each, cervical 6%) were recruited from a tertiary oncology centre in Hyderabad. Participants completed the Needs Assessment Tool for Cancer (NeAT-C) and the EORTC QLQ-C30 questionnaires. Data were analysed using non-parametric statistical tests following assessment of distributional assumptions, including Spearman correlations and Kruskal-Wallis tests.

Results: Participants had a mean age of 43.3 years and were predominantly female (98%), married (94%), and from low-income households (72% earning below ₹2 lakh annually). Global health/QoL scores were moderate (median=50/100), while emotional functioning emerged as the most impaired functional domain (median=66.7). Pain and financial difficulties were the most burdensome symptoms (both median = 33.33/100, IQR = 66.67), followed by fatigue (median = 27.78, IQR = 41.67). Although overall unmet supportive care needs were low (median=0.91/3), practical and daily living concerns represented the greatest area of need. Higher unmet needs were significantly associated with poorer QoL across all domains ($\rho=-0.59$, $p<0.001$), with the strongest relationship observed between emotional/psychological needs and emotional functioning ($\rho= -0.65$, $p<0.001$). Patients receiving multimodal treatment reported significantly greater unmet needs and poorer QoL than those receiving single-modality treatment.

Conclusion: Despite relatively low overall unmet needs, specific practical, emotional, and treatment-related concerns were closely linked to poorer quality of life. These findings highlight the value of routine supportive care needs, screening and targeted psychosocial interventions within oncology services. These preliminary findings provide a foundation for a larger multicentre mixed-methods investigation in India.

Keywords: Supportive Care Needs, Quality Of Life, Psychosocial Oncology

How to Cite: Ghuge, V., Chittem, M., Shaikh, M., & Pathy, N. B. unmet supportive care needs and quality of life among cancer patients in India: preliminary findings [84]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0085

Title: Time Toxicity in Patients with Advanced Malignancies Receiving Palliative Intravenous Systemic Therapy: A Multicentre Qualitative Study (GiveMeTime)

Subject: Cancer Burden, Inequities & Priority Setting

Authors: Shraddha Namjoshi[1]*, Mahati Chittem[2], Sharada Mailankody[3], Prasanth Ganesan[4], Arathi P Rao[5], Rakshitha Naik[6], Madhuvarshini S[7], Priya S K[6], Kartika Bala[8]

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Introduction: Time toxicity; the cumulative burden of time invested in cancer treatment, remains an underrecognized dimension of oncological care. For patients with advanced malignancies and limited life expectancy, time spent coordinating care, traveling to healthcare facilities, waiting, managing side effects, and navigating hospitalizations significantly diminishes quality of life. This study aimed to explore the lived experiences of Indian patients and caregivers with a focus on their perceptions of time utilization.

Methods: Patients (n=14) with advanced cancer receiving palliative systemic therapy at two tertiary cancer centers in South India and their caregivers (n=6) were interviewed. The semi-structured interviews explored individual perceptions of time within the context of oncology care, how their time was utilized in relation to oncology care, and their thoughts on what ways their time could be better spent. All interviews were audio-recorded, transcribed verbatim, translated into English where necessary, and analysed using ATLAS.ti with Interpretative Phenomenological Analysis (IPA).

Results: Five major themes emerged: (1) disruption of daily life, whereby time consumed by oncology care directly displaced household responsibilities, employment, and social engagement; (2) logistical burden of treatment-related travel, prolonged waiting times, and frequent visits; (3) emotional distress and social impairment stemming from diagnosis, fear of disease progression, and recurrent setbacks causing greater time-burden; (4) dependence on family for logistical, financial, and emotional support, itself a consequence of the time demands of treatment; and (5) the psychological engagement with illness and existential challenges consuming patient and caregiver time.

Conclusion: Time toxicity in advanced cancer extends well beyond hours spent in hospital due totime consumed by logistical navigation, treatment, and care coordination. Thiscreates a cascading effect that permeates patients' emotional well-being, family dynamics, and everyday functioning. Reducing travel burden, minimizing waiting times, and streamlining treatment pathways are actionable steps toward optimization of patients' and caregivers' time in India.

Keywords: Time Toxicity, Cancer Care, Advanced Cancer, Burden Of Cancer, India, Palliative Care

How to Cite: Namjoshi, S., Chittem, M., Mailankody, S., Ganesan, P., Rao, A. P., Naik, R., S, M., K, P. S., & Bala, K. time toxicity in patients with advanced malignancies receiving palliative intravenous systemic therapy: a multicenter qualitative study (givemetime) [85]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0086

Title: Barriers and Facilitators to Drug Repurposing in Malaysia: A Multi-Stakeholder Qualitative Study

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: Drug repurposing represents a strategic opportunity to improve equitable access to affordable therapies by identifying new indications for existing medicines, offering advantages in cost-efficiency, reduced development timelines, and established safety profiles. While policy and regulatory challenges have been described in high-income settings, there is limited evidence to inform context-specific policy development in low- and middle-income countries (LMICs). The International Affordable Diagnostics and Therapeutics Alliance (IA-DATA) was recently established in Malaysia to support development of a drug repurposing ecosystem for Malaysia and ASEAN. This study aimed to examine the barriers and facilitators to drug repurposing in Malaysia and identify policy-relevant opportunities aligned with emerging global frameworks, including IA-DATA, to support national implementation.

Methods: A national multistakeholder policy roundtable was convened followed by in-depth semi-structured interviews with 30 stakeholders across Malaysia's drug development and healthcare ecosystem. These included representatives from government, academia, industry, healthcare institutions, patient advocacy organisations, and ecosystem enablers. Interviews were audio-recorded, transcribed verbatim, and analysed using thematic analysis in NVivo 15. An iterative approach incorporating coding, constant comparison, and interpretative synthesis was used to generate policy-relevant insights from convergent and divergent stakeholder perspectives.

Results: Four cross-cutting emerging themes were identified. Stakeholders recognise drug repurposing as a policy-relevant strategy to address unmet health needs and improve access to cost-effective therapies. While Malaysia possesses foundational capabilities, including scientific expertise and institutional infrastructure, translation into clinical practice is constrained by fragmented governance, limited funding pathways, and regulatory uncertainty. Participants emphasised the need for strengthened cross-sector coordination, development of structured evidence-generation frameworks aligned with IA-DATA principles, and policy mechanisms to support regulatory clarity, reimbursement, and sustainable financing. There was strong consensus on the importance of establishing a coordinated national strategy to integrate drug repurposing into existing health and innovation systems.

Conclusion: Drug repurposing is a feasible and policy-relevant approach to advancing equitable access to therapies in Malaysia. Realising its potential will require coherent national governance, dedicated funding mechanisms, regulatory alignment, and multi-stakeholder collaboration, supported by structured frameworks to enable systematic evidence generation and sustainable implementation.

Keywords: Drug Repurposing, Qualitative Research, Health Policy, Stakeholder Engagement, Access To Medicines, Malaysia

How to Cite: Zain, H., Chung, I., Krishna, S., Augustin, Y., Ali, N. M., Lim, C. H., Mohamed, A. F. S., Keat, C. H., Jin, C. O., Vasanthan, R. P. A. S., Sani, N. M., Seen, J. L. L., & Baharudin, S. N. F. barriers and facilitators to drug repurposing in Malaysia: a multi-stakeholder qualitative study [86]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0087

Title: Machine Learning-Based Lung Cancer Risk Stratification in Never-Smoking Chinese Women in Singapore

Subject: Screening & Early Detection

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Introduction: Lung cancer among never-smoking Asian women represents an important but underserved cancer control challenge. Existing low-dose computed tomography screening criteria remain largely smoking-based, despite the increasing lung cancer incidence among never-smoking women in Asia. We developed machine learning models for smoking-independent lung cancer risk stratification among Chinese women in Singapore.

Methods: We analyzed data from the Genes and Environment in Lung Cancer (GEL) study, a hospital-based case-control study of Chinese women in Singapore (2005-2008). The primary analysis included never-smokers only (n=956; 253 cases, 703 controls), with the full study population (n=1,214; 399 cases, 815 controls) as a sensitivity analysis. Predictors included age, body mass index, housing type, employment, number of children, family history of cancer, respiratory comorbidities, dietary intake, and indoor air pollution indicators. Extra Trees, Random Forest, and logistic regression models were compared using 10-fold cross-validation, with discrimination assessed by area under the receiver operating characteristic curve (AUC).

Results: In never-smokers, model discrimination was modest and similar across methods (AUC: Random Forest 0.668, logistic regression 0.664, Extra Trees 0.652), without using smoking-related predictors. Feature-importance analysis suggested that body mass index and dietary variables, including meat, fruit, vegetable, and tea consumption, were among the top contributors, collectively accounting for over 60% of relative importance. In the full study population, model performance was only modestly higher (AUC range: 0.696–0.701), suggesting that non-smoking predictors retained discriminatory value. Given the case-control design, absolute calibration was not assessed and would require validation in cohort data.

Conclusion: Questionnaire-based risk stratification for lung cancer shows potential among never-smoking Chinese women in Singapore. These findings suggest that smoking-independent models may help extend early detection to Asian women currently excluded by smoking-based screening criteria. Given the case-control design and modest model performance, future work should externally validate these findings in prospective cohorts and electronic medical record datasets to assess generalizability.

Keywords: Lung Cancer, Singapore, Never-Smoking Women, Risk Stratification, Machine Learning

How to Cite: Huang, X., Juang, Y. R., Seow, A., & Seow, W. J. machine learning-based lung cancer risk stratification in never-smoking Chinese women in Singapore [87]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0088

Title: Feasibility of Multimodal Large Language Models for Cervical Lesion Diagnosis at Colposcopy

Subject: Screening & Early Detection

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Introduction: Accurate colposcopic identification of cervical cancer and high-grade precancer remains difficult, particularly where expert interpretation is limited. We evaluated whether GPT-4o, a general multimodal large language model, could identify CIN2+ from cervical images and clinical screening information, and whether prompt engineering and few-shot learning improved performance.

Methods: We retrospectively analysed 144 women who underwent colposcopy at three maternal and child health hospitals in Ordos, China. Each case included an acetic-acid image, an iodine-stained image, HPV/TCT screening information, and histopathology as the reference standard. Four input strategies were compared: standard zero-shot diagnosis with HPV/TCT information and images; image-only zero-shot diagnosis; prompt-augmented few-shot diagnosis with HPV/TCT information, images, structured prompts, and ten exemplar cases; and image-only prompt-augmented few-shot diagnosis. Diagnostic accuracy, sensitivity, specificity, F1 score, and agreement with histopathology were evaluated.

Results: Prompt-augmented few-shot diagnosis performed best, achieving accuracy of 0.854, sensitivity of 0.820, specificity of 0.872, F1 score of 0.796, and substantial agreement with histopathology (κ=0.683). This performance exceeded standard zero-shot and image-only zero-shot approaches, which had accuracies of 0.542 and 0.521, respectively. Removing HPV/TCT information while retaining prompts and examples reduced accuracy to 0.660, suggesting that clinical context and structured reasoning contributed meaningfully to model performance. Compared with senior colposcopists, prompt-augmented few-shot diagnosis showed similar accuracy (0.854 versus 0.840) and higher sensitivity (0.820 versus 0.620), although differences were not statistically significant. Confidence scores correlated weakly with pathological outcomes and should not be interpreted as calibrated probabilities.

Conclusion: GPT-4o demonstrated feasibility for assisting CIN2+ recognition when cervical images were combined with screening data, structured prompts, and exemplar cases. Multimodal large language models may support colposcopy-based triage and decision-making, but larger prospective studies across diverse devices, populations, and clinical settings are needed before clinical deployment. External validation should also assess privacy, workflow integration, clinician oversight, safety, and equity in routine practice.

Keywords: Cervical Cancer, Colposcopy, Large Language Models, GPT, Prompt Engineering, Cervical Precancer

How to Cite: Cui, V., Wang, Y., Xue, P., & Qiao, Y. feasibility of multimodal large language models for cervical lesion diagnosis at colposcopy [88]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0090

Title: The Effectiveness of Psychosocial Interventions on Sexual Health-Related Outcomes among Women Cancer Survivors in Low-Income and Lower Middle-Income Countries: A Systematic Review

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Advances in cancer treatment have improved survival worldwide, increasing attention to survivorship issues among women. Sexual health is a critical yet often neglected aspect of survivorship. Despite growing recognition of psychosocial interventions in oncology care, evidence from low- and lower middle-income countries (LMICs) remains limited and fragmented. Objective: To evaluate the effectiveness of psychosocial interventions on sexual health-related outcomes among women cancer survivors in LMICs.

Methods: A systematic review was conducted according to PRISMA 2020 guidelines. Studies involving women cancer survivors receiving psychosocial interventions compared with usual care or other approaches were identified from PubMed, Scopus, Web of Science, Cochrane Library, and EMBASE between January 2010 and July 2025. Methodological quality was assessed using the Critical Appraisal Skills Programme (CASP), and findings were synthesized narratively.

Results: Of 9,403 records identified, three studies conducted in Ethiopia, Pakistan, and India met the inclusion criteria. All involved women with breast cancer. Due to substantial heterogeneity in intervention characteristics, outcome measures, and follow-up periods, meta-analysis was not feasible. Sexual health outcomes, including body image, sexual functioning, and sexual well-being, were assessed either directly or indirectly through broader quality-of-life (QOL) measures. Psychosocial interventions improved QOL, body image, emotional well-being, and coping abilities. However, evidence for direct improvements in sexual functioning was limited. Study quality ranged from moderate to high. Overall, the findings provide context-specific evidence supporting the feasibility and psychosocial benefits of such interventions in resource-constrained settings.

Conclusion: Evidence on psychosocial interventions targeting sexual health among women cancer survivors in LMICs remains scarce. Existing studies suggest potential benefits for sexual health-related QOL and psychosocial well-being among women with breast cancer, although direct evidence of improved sexual functioning is limited. Further research is needed to develop and evaluate culturally sensitive interventions that explicitly address sexual health outcomes across diverse cancer populations in low-resource settings.

Keywords: Psychosocial Interventions, Sexual Health, Women Cancer Survivors, Low And Lower Middle-Income Countries

How to Cite: Islam, T., Wyk, B. V., Eusufzai, S. Z., Kabir, M. S., & Shirin, L. the effectiveness of psychosocial interventions on sexual health-related outcomes among women cancer survivors in low-income and lower middle-income countries: a systematic review [90]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0091

Title: Polygenic Risk Scores for Breast Cancer Risk Assessment in Asian BRCA1 and BRCA2 Carriers

Subject: Screening & Early Detection

Authors: Mei-Chee Tai[1]*, Joe Dennis[2], Sue K. Park[3], CIMBA Investigators[4], Nur Aishah Mohd Taib[5], Cheng-Har Yip[6], Douglas F. Easton[2], Georgia Chenevix-Trench[7], Antonis C. Antoniou[2], Soo-Hwang Teo[1], Weang-Kee Ho[8]

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Introduction: Polygenic risk scores (PRS) have been shown to improve breast cancer (BC) risk prediction among BRCA1 and BRCA2 pathogenic variant (PV) carriers of European ancestry. However, the utility of PRS in Asian PV carriers remains unclear. We evaluated the performance of Asian- and European-derived PRS for predicting breast cancer risk among Asian BRCA1 and BRCA2 PV carriers.

Methods: Using weighted Cox regression analyses adjusted for birth cohort and ancestry principal components, we evaluated the association of two breast cancer PGS developed for the East Asian general population (331 single-nucleotide polymorphisms (SNPs) and ~1million SNPs and three versions of a PGS developed for the European general population (313SNPs with different weight) on breast cancer risk in 604 BRCA1 (390 affected by breast cancer) and 785 BRCA2 (552 affected by breast cancer) PV carriers of self-reported Asian ancestry from Malaysia, Singapore, Hong Kong and Korea.

Results: Among the PRS evaluated, Only the Asian-based PGS, constructed using approximately one million SNPs, showed a significant association with breast cancer risk (Hazard Ratio (HR) per standard deviation (95% Confidence Interval (CI) is 1.47 (1.10-1.95) for BRCA1 and 1.43 (1.04-1.95) for BRCA2). Consistent with findings in the general population, this PGS exhibited a stronger association compared with the European ancestry derived PGS, albeit with lower HR estimates than those observed in the general population (1.43 - 1.47 vs 1.62).

Conclusion: An Asian-derived PRS was associated with breast cancer risk among Asian BRCA1 and BRCA2 PV carriers, whereas European-derived PRS demonstrated limited predictive utility. Incorporating population-specific PRS into risk prediction models may improve personalised risk assessment and support equitable implementation of risk-stratified breast cancer prevention and early detection strategies in Asian populations.

Keywords: Breast Cancer, PRS, Risk Prediction, BRCA PTV Carrier

How to Cite: Tai, M. C., Dennis, J., Park, S. K., Investigators, C., Taib, N. A. M., Yip, C. H., Easton, D. F., Chenevix-Trench, G., Antoniou, A. C., Teo, S. H., & Ho, W. K. polygenic risk scores for breast cancer risk assessment in Asian BRCA1 and BRCA2 carriers [91]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0092

Title: A Nationwide Multicenter Survey of Knowledge, Willingness, and Uptake of Human Papillomavirus Vaccination among Women Aged 45–64 Years in China

Subject: Screening & Early Detection

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Introduction: HPV vaccination is an important primary prevention strategy for cervical cancer, yet evidence among Chinese women beyond routine vaccination ages is limited. We assessed HPV vaccine knowledge, willingness, and uptake among women aged 45-64 years and examined urban-rural inequalities and associated factors.

Methods: This nationwide multicenter cross-sectional study recruited women aged 45–64 years across seven Chinese regions. Questionnaire data included sociodemographic characteristics, obstetric/gynecological information, medical history, HPV awareness, vaccination willingness, and uptake. Distribution characteristics were described, and associated factors were identified using multivariable logistic regression.

Results: Among 14,773 participants, 7,502 (50.8%) were urban and 7,271 (49.2%) were rural. Awareness of HPV, HPV-related diseases, and HPV vaccines was 50.8%, 87.9%, and 60.9%, respectively. Previous HPV vaccine uptake was only 6.0%, whereas 64.3% were willing to be vaccinated. Urban women had higher HPV awareness (55.8% vs 45.6%, P<0.05), vaccine awareness (62.9% vs 58.8%, P<0.05), and uptake (6.6% vs 5.3%, P<0.05), but lower willingness (60.5% vs 68.3%, P<0.05). The main reasons for unwillingness were insufficient vaccine knowledge (50.7%), perceived low cervical-cancer risk (34.6%), and cost (19.3%). Multivariable analysis showed that higher educational level and higher household income were positively associated with HPV vaccination awareness and willingness among both urban and rural women, whereas older age and higher parity were associated with lower awareness and lower willingness. Higher educational level was positively associated with HPV vaccination behavior, while older age was negatively associated with vaccination behavior.

Conclusion: HPV vaccine uptake among Chinese women aged 45–64 years was low despite high willingness, indicating unmet vaccination demand in China. These findings support evaluating age-extension or catch-up vaccination strategies, with targeted education, provider recommendation, and affordable access for rural and lower-income women.

Keywords: HPV Vaccine, Knowledge, Willingness, Uptake, Middle-Aged Women, China

How to Cite: Sun, R., Wang, H., & Qiao, Y. a nationwide multicenter survey of knowledge, willingness, and uptake of human papillomavirus vaccination among women aged 45–64 years in China [92]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0093

Title: Mortality Burden and Indirect Economic Costs of Chronic Lymphocytic Leukemia in China, 2013 - 2023

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Chronic lymphocytic leukemia (CLL) is a hematologic malignancy contributing to China's rising cancer burden, driven by demographic aging and increasing premature mortality. Indirect costs representing productivity losses due to premature death carry significant financial consequences for society and are recognized as a key cost component in the China and International Guidelines for Pharmacoeconomic Evaluations. Despite this, the indirect economic costs attributable to premature CLL mortality have not been systematically quantified at a national level. This study estimates the mortality driven indirect costs of CLL in China from 2013 to 2023 using years of life lost (YLL) and the Human Capital Approach (HCA).

Methods: CLL specific YLL and mortality for China (all ages, both sexes) were extracted from the Global Burden of Disease (GBD) 2023 Study. Indirect costs were estimated by multiplying annual YLL by China's Gross Domestic Product (GDP) per capita at current prices (CNY), sourced from the National Bureau of Statistics of China. A sensitivity analysis applied constant 2023 GDP per capita to all years to isolate the pure epidemiological mortality trend from economic growth effects.

Results: CLL deaths rose 24.6% from 7,394 in 2013 to 9,211 in 2023, peaking at 9,914 in 2022 (+34.1%). Cumulative YLL reached approximately 2.76 million, increasing from 231,843 in 2013 to a peak of 276,270 in 2022 (+19.2%), before declining to 254,924 in 2023. Annual YLL based indirect costs peaked at CNY 23.68 billion in 2022. Cumulative indirect costs 2013–2023 reached CNY 182.3 billion.

Conclusion: Premature mortality from CLL imposes a substantial and escalating indirect economic burden in China, exceeding CNY 23 billion annually at peak. These mortality focused findings provide a robust evidence base for policymakers and payers advocating for access to novel targeted therapies and greater resource allocation toward CLL within China's national health strategy.

Keywords: Chronic Lymphocytic Leukemia, Indirect Cost, Years Of Life Lost (YLL), Premature Mortality

How to Cite: Bencina, G., Guardalben, E., Deol, J., Oliver, E., Yi, Y., Meiwald, A., & Zhang, X. mortality burden and indirect economic costs of chronic lymphocytic leukemia in China, 2013 - 2023 [93]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0094

Title: Foods Used to Alleviate Chemotherapy-Related Adverse Effects: A Network Analysis of Korean Online Cancer Community Data

Subject: The Human Experience of Cancer

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Introduction: Patients with cancer experience various adverse effects during chemotherapy that can worsen nutritional status and quality of life. Online communities provide patient-generated information on treatment experiences and adverse-effect management. This study aimed to identify foods used to alleviate major chemotherapy-related adverse effects and examine their network links using Korean online cancer community data.

Methods: Data were obtained from two Korean online cancer communities through web crawling conducted in July 2022 and November 2023, respectively. Following data cleaning and synonym harmonization, adverse effects were matched with foods, yielding 8,414 adverse effect–food pairs. Finally, network analysis was performed on these pairs.

Results: Decreased neutrophil counts were strongly connected to traditionally restorative animal-source foods, particularly chicken feet broth and beef. Nausea, vomiting, and decreased appetite were closely linked to easily consumed foods, particularly porridge and water kimchi, as well as snack foods. Constipation showed prominent links to fiber-rich foods, such as prunes and sweet potatoes.

Conclusion: This study mapped adverse effect–food link patterns using Korean online cancer community data. Although the observed links do not establish clinical effectiveness, the findings suggest that dietary self-management practices differ by adverse effect and may provide foundational data for future research on patient-centered dietary support and the development of nutritional guidance during chemotherapy. Acknowledgement: This research was supported by Main Research Program (E0210400-06) of the Korea Food Research Institute (KFRI) funded by the Ministry of Science and ICT, Republic of Korea.

Keywords: Food, Cancer, Network Analysis, Adverse Effect

How to Cite: Lee, H. J., Park, S. J., Jeong, M., & Hong, H. foods used to alleviate chemotherapy-related adverse effects: a network analysis of Korean online cancer community data [94]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0095

Title: Effectiveness of Focused Health Education for Breast Cancer Awareness and Breast Self-Examination Related KAP among Rural Women: Evidence from Karnataka

Subject: Screening & Early Detection

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Introduction: Breast cancer is the most common cancer among Indian women, accounting for 13.5% of all cancer cases, with rural women disproportionately affected by late-stage diagnosis due to poor awareness, cultural stigma, and limited access to screening. Breast self-examination (BSE) remains one of the most accessible early detection tools in low-resource settings, yet practice rates among rural Indian women are consistently below 10%. Focused community-level health education presents a feasible, scalable strategy — but evidence from Karnataka remains sparse.

Methods: A community-based quasi-experimental study was conducted among women aged 18 years and above across matched rural villages of Karnataka. An intervention group (n=85) received a structured, multimodal focused health education session — including interactive demonstrations, flipcharts, breast models, and IARC-endorsed videos — while a control group (n=85) received no intervention. Baseline and three-month follow-up assessments used a validated semi-structured questionnaire derived from the Breast Cancer Awareness Measure (BCAM) and Toronto Breast Self-Examination Instrument (TBSEI). Difference-in-difference (DID) analysis was applied to isolate net intervention effects.

Results: Both groups were comparable at baseline across all domains. Post-intervention, the intervention group showed significant improvements: breast cancer knowledge of risk factors (86.7%), signs and symptoms (87.5%), and screening (78.2%); BSE knowledge (47.1%→85.6%), attitude (38.7%→68.7%), and practice (33.0%→60.1%) — all $p<0.001$. DID analysis confirmed significant net gains across all domains. No meaningful change was observed in the control group.

Conclusion: A single, low-cost, culturally tailored health education session substantially improved breast cancer awareness and BSE practice among rural Karnataka women. These findings support the integration of structured BSE promotion into existing frontline health worker platforms — particularly ASHAs and ANMs under NP-NCD — as a scalable, equity-driven early detection strategy for rural India and similar LMIC contexts across Asia-Pacific.

Keywords: Breast Self-Examination, Health Education, Breast Cancer, Rural Women, KAP Study

How to Cite: Soppimath, A., Rajan, B., K, L., & S, S. N. effectiveness of focused health education for breast cancer awareness and breast self-examination related KAP among rural women: evidence from Karnataka [95]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0096

Title: Beyond Knowledge: A Mixed-Methods Study of the BSE Intention-Behaviour Gap among Rural Karnataka Women

Subject: The Human Experience of Cancer

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Introduction: Health education interventions can significantly improve breast self-examination (BSE) knowledge, yet practice often lags behind — a phenomenon known as the intention-behaviour gap. A preceding quasi-experimental study in rural Karnataka (n=170) demonstrated significant BSE knowledge gains post-intervention (47.1%→85.6%, p<0.001) alongside only partial practice improvement (33.0%→60.1%). Critically, no sociodemographic variable explained persistent non-practice, pointing toward deeper psychological, social, and systemic determinants. This study investigated those determinants across three voices simultaneously — women, frontline workers, and the primary health system.

Methods: A convergent parallel mixed-methods design was employed alongside the parent quasi-experimental study. In-depth interviews (IDIs) were conducted with women who remained non-practitioners following the intervention (n=10). Key informant interviews (KIIs) were conducted with ASHAs (n=4, from both intervention and control areas) and the primary health centre Medical Officer (n=1). Data were analysed using thematic analysis, with findings from all three voices integrated at the interpretation stage.

Results: Three themes emerged consistently across voices. First, a multilevel self-efficacy deficit: women doubted their ability to perform BSE correctly and feared misinterpreting findings; ASHAs reported variable confidence — a mix of training gaps, personal discomfort initiating breast health conversations, and women's non-responsiveness; the Medical Officer, though personally supportive, identified the absence of systemic prioritisation as the binding constraint. Second, social normalisation uncertainty: women repeatedly questioned whether BSE was something others practiced, reflecting absent community role models. Third, fear as paralysis: heightened cancer awareness functioned as a deterrent rather than a prompt among non-practitioners. The system was not unaware — it was unsupported.

Conclusion: The BSE intention-behaviour gap is not a knowledge deficit — it is a simultaneous self-efficacy failure at individual, provider, and institutional levels. Closing this gap requires structured ASHA capacity-building, community normalisation strategies, and institutional prioritisation of BSE within existing health programmes — not more knowledge delivery alone.

Keywords: Intention-Behaviour Gap, Mixed Methods, Breast Self-Examination, Rural Women

How to Cite: Soppimath, A., Rajan, B., K, L., & S, S. N. bEYOND KNOWLEDGE: A MIXED-METHODS STUDY OF THE BSE INTENTION-BEHAVIOUR GAP AMONG RURAL KARNATAKA WOMEN [96]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0097

Title: Incidence Trends of Prostate Cancer in Sarawak, Malaysia: A 20-Year Population-Based Analysis

Subject: Cancer Burden, Inequities & Priority Setting

Authors: Samuel Chuo Yew Ting[1]*, Emmanuel Joseph Fong[2], Kung Yee Wong[3], Diana Jawa[4], Abdullah Hamdan[5], Mastulu Wahab[6], Azizah Azhar[7], Eunice Melissa Joseph[7], Johnny Pangkas[8], Choo Huck Ooi[9]

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Introduction: Prostate cancer is a rising public health concern in the Asia-Pacific region. This study examined the 20-year incidence rates, temporal trends, and demographic disparities of prostate cancer within the unique population of Sarawak, Malaysia, to provide baseline data for equitable healthcare planning.

Methods: A retrospective population-based study was conducted using secondary anonymized data from the Sarawak Cancer Registry (1996–2015). Age-standardized rates (ASR) per 100,000 population were direct-standardized to the WHO world standard. Temporal trends were evaluated using Joinpoint regression to compute the annual percent change (APC) and average annual percent change (AAPC). Negative binomial regression estimated incidence rate ratios (IRRs) across demographic and geographic groups.

Results: A total of 945 cases were analyzed; 87.5% occurred in men aged ≥60. The overall ASR was 6.1 per 100,000. Ethnic Chinese had the highest incidence (ASR 10.5), with a significant over-4-fold higher risk compared to Melanau (IRR=4.06, 95% CI: 1.86–8.87, $p<0.001$). Joinpoint regression showed a significant overall increase in incidence with an APC of 3.86 (95% CI: 1.3, 7.2). Significant upward inflection trends emerged post-2005 for indigenous groups: Bidayuh (APC=13.17, 2006–2015), Iban (APC=18.9, 2009–2015), and Melanau (APC=11.76, 2010–2015). Concurrently, the overall mean age at diagnosis significantly trended downwards (AAPC = -0.31, 95% CI: -0.5, -0.1).

Conclusion: Prostate cancer incidence in Sarawak is rising significantly, accompanied by a younger mean age at diagnosis. The rapid escalation among rural-indigenous populations post-2005 likely reflects improved healthcare access, urbanization, and targeted screening campaigns. These findings underscore the critical need for decentralized diagnostic capabilities, capacity building, and equitable health promotion beyond tertiary centers to manage the expanding disease burden.

Keywords: Prostate Cancer, Incidence Trends, Epidemiology, Sarawak, Health Equity

How to Cite: Ting, S. C. Y., Fong, E. J., Wong, K. Y., Jawa, D., Hamdan, A., Wahab, M., Azhar, A., Joseph, E. M., Pangkas, J., & Ooi, C. H. incidence trends of prostate cancer in Sarawak, Malaysia: a 20-year population-based analysis [97]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0098

Title: Digital Population Management and Risk-Stratified Triage for Cervical Cancer Screening in Low-Resource Rural China: A Five-Year Real-World Study

Subject: Screening & Early Detection

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Introduction: Cervical cancer is largely preventable, yet incidence and mortality keep rising in rural China. In real-world low-resource programmes, screening is undermined by over-screening, loss to follow-up, and fragmented records. Whether digital population management can improve the screening process, and whether individual risk prediction can guide who needs colposcopy, remains unclear.

Methods: We studied nine rural counties over five years (2021–2025; 293,716 screens). First, we deployed a digital platform that used the national identity card for unique identification, optical character recognition for de-duplication, and task-based follow-up, and compared screening quality before and after deployment (104,221 women, 2023–2024). Second, we built stage-specific CIN2+ risk models at three decision points, compared LASSO with gradient-boosting models, trained on 2023, and validated externally on 2024 and 2025, with calibration, random-effects meta-analysis across sites, and decision-curve analysis.

Results: After deployment, over-screening fell from 12.6% to 0.17%, colposcopy completion rose from 64% to 85%, CIN2+ detection rose from 0.35% to 0.67%, and case management rose from 56% to 76% (all $P<0.001$). At the triage step, the risk model reached an AUROC of about 0.70 in both validation years and was well calibrated. Performance varied across counties (pooled 0.699, $I^2=54\%$) and depended on whether HPV-positive women received cytology triage (0.72 with versus 0.66 without; cytology added 0.18 AUROC). A simple LASSO performed as well as gradient-boosting models, and decision-curve analysis suggested about 30% fewer colposcopies at a 20% risk threshold.

Conclusion: In low-resource rural China, digital population management improved the screening process, and a simple risk model transplanted to real-world HPV screening. Cytology triage of HPV-positive women was decisive, supporting HPV screening followed by cytology triage. Together they form a deployable data-to-decision loop.

Keywords: Cervical Cancer Screening, Risk Stratification, Digital Health, Real-World Evidence

How to Cite: Jia, X., Da, X., Gao, C., & Qiao, Y. digital population management and risk-stratified triage for cervical cancer screening in low-resource rural China: a five-year real-world study [98]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0099

Title: Development of a Cancer Care Emergency Preparedness Action Plan in Malaysia: Insights from COVID-19 to Inform Future Health Crises

Subject: Policy, Capacity Building & Sustainable Cancer Control

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Introduction: The COVID-19 pandemic exposed major vulnerabilities in Malaysia's ability to maintain essential cancer services during health system shocks. This study aimed to develop a cancer-specific emergency preparedness plan for Malaysia that is locally appropriate, resource-sensitive and relevant beyond the pandemic period.

Method: Using Malaysia as a case study of an upper-middle-income country with a mixed public–private system, the study adopted a multi-phase, mixed-methods design. First, in-depth interviews were conducted with policymakers, healthcare providers, non-governmental organisations and patients to explore barriers and facilitators to accessing and delivering cancer care during COVID-19. Second, document analysis of COVID-19 cancer care guidelines from low- and middle-income countries examined the availability, scope and priorities of existing emergency responses. Finally, a modified e-Delphi process with a multidisciplinary Malaysian expert panel was used to refine and prioritise CCEP components.

Results: Thematic analysis identified disruptions across policy, organisational, community and interpersonal levels, including lack of clear emergency plans, resource constraints, deprioritisation of cancer services, disrupted NGO support, fear of infection, psychosocial distress, financial hardship and unmet caregiver needs, alongside adaptive responses such as outsourcing, service reconfiguration and community support. A review of COVID-19 cancer care guidelines from low- and middle-income countries highlighted large variation and limited formal planning for oncology within broader preparedness efforts. These findings informed the development of candidate items for a CCEP plan. The modified e-Delphi process achieved expert consensus on 73 measures for inclusion in the CCEP plan. The resulting action plan integrates surge capacity principles (staff, stuff, structure, systems) with chronic care and person-centred perspectives to safeguard continuity and quality of cancer care during crises.

Conclusion: By combining stakeholder insights, document review and expert consensus, the CCEP action plan offers a pragmatic tool to strengthen national cancer control planning in Malaysia with potential relevance for similar middle-income settings.

Keywords: Cancer Care, Emergency Preparedness, Upper Middle-Income Country, COVID-19

How to Cite: Teoh, S., Bhoo-Pathy, N., & Farid, N. D. N. development of a cancer care emergency preparedness action plan in Malaysia: insights from COVID-19 to inform future health crises [99]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0100

Title: Behavioural Issues in Paediatric Cancer Patients during Treatment

Subject: The Human Experience of Cancer

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Introduction: Paediatric cancer diagnosis and treatment can lead to a range of behavioral issues among pediatric patients during treatment. Identifying these issues and providing timely intervention is important as it can have a ripple effect into their survivorship. While previous researches have often assessed behavioral issues at a single time point, limited studies have explored changes across the treatment trajectory. The present study aimed to understand the behavioral issues of paediatric cancer patients during their treatment.

Methods: This study used a QUAN- QUAL mixed method design with a prospective quantitative component and a descriptive qualitative component. The study was conducted at a Regional Cancer Centre in Chennai, India between February 2023 and May 2024. Child Behavioral Checklist (CBCL) was used to assess behavioral issues among pediatric cancer patients aged 6- and 15-years. Assessment was carried out at four time points: baseline (before initiation of active treatment) (A1), and at one (A2), three (A3), and six-months (A4) from their primary caregiver. Data was analyzed using descriptive and inferential statistics (chi-square and Repeated Measures ANOVA with Bonferroni). In Depth Interviews (IDI's) were conducted with the primary caregivers (n=8) and healthcare professionals (n=8). Clarke and Braun thematic analysis framework was used to analyze the data.

Results: Among the 180 pediatric children who were diagnosed with cancer for the year February 2023 and May 2024, 139 of them met the inclusion criteria and were included for the study, Majority were boys (64.5%) and aged between 11 and 15 years (61.2%). The repeated measures analysis revealed significant difference in the internalizing behavior between A1 and A3($p<0.05$), externalizing behavior between A1 and A3($p<0.05$) and the total scores between A1 and A2 ($p<0.05$), A1 and A3 ($p<0.01$), A1 and A4 ($p<0.05$). In the qualitative analysis four major themes emerged related to behavioural issues exhibited by paediatric cancer patients during treatment.

Conclusion: Behavioural issues among paediatric patients are evidently common and require immediate and structured intervention to enable a hassle-free treatment process with improved adherence.

Keywords: Behaviour, Pediatric Cancer

How to Cite: Gopalakrishnan, V., Veeraiah, S., Sudhakar, R., Rajkumar, D., & Radhakrishnan, V. behavioural issues in paediatric cancer patients during treatment [100]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0101

Title: Bringing Breast Cancer Screening to the Community: Clinical Breast Examination and iBreastExam (iBE) for Early Detection among Rural Women in Southern India

Subject: Screening & Early Detection

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Introduction: Breast cancer is the leading cancer among women globally and in India. Community-based screening programs using point-of-care devices facilitate early detection, particularly in resource-limited settings. Objectives: Assess the prevalence of breast-related symptoms and abnormal breast findings using clinical breast examination (CBE) and iBreastExam (iBE) among women participating in a community-based breast cancer screening program in rural areas of a coastal district in southern Karnataka, India.

Methods: A retrospective record-based study was conducted in 2026 and records of 2,605 women who attended the community-based cancer screening program in the last 2 years were analysed. Information on socio-demographic characteristics, lifestyle factors, reproductive history, family history of cancer, and breast-related symptoms were collected from the proforma. All participants underwent CBE by trained healthcare personnel, followed by iBE and details were also obtained from the proforma. Descriptive statistics were used to summarise participant characteristics and screening outcomes.

Results: The mean age of participants was 45.5±9.1 years. Most women were married (95.4%), homemakers (43.6%), and had at least a primary education. Breast lump was reported by 3.1%, breast pain by 0.9%, nipple discharge by 0.2%, and skin changes by 0.1% of participants. CBE identified breast lumps in 46 (1.8%) women, while nipple retraction, nipple discharge, and axillary swelling were each observed in 0.2% of participants. The iBE yielded positive findings in 75 (2.9%) women. A family history of malignancy in first-degree relatives was reported by 10.7% of participants. Women with positive screening findings were referred to a tertiary care hospital for confirmation and further management.

Conclusion: Community-based breast cancer screening using CBE supplemented by iBE or iBE as a standalone screening technology is feasible and effective in identifying women with suspicious breast abnormalities. This facilitates timely referral and diagnosis, supporting the integration of breast cancer screening into primary healthcare settings in India.

Keywords: Breast Cancer, Clinical Breast Examination, Community-Based, IBreastExam, Point-Of-Care Device, Screening

How to Cite: Shetty, R. & Salins, N. bringing breast cancer screening to the community: clinical breast examination and iBreastExam (iBE) for early detection among rural women in southern India [101]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0102

Title: Suicidal Ideation and Psychological Morbidity among Individuals Diagnosed with Acute Leukemia, in a Tertiary Medical Centre in South India- a Pilot Study

Subject: The Human Experience of Cancer

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Introduction: Suicide is the result of unmitigated distress and is a complex global phenomenon. Haematological malignancies can cause high levels of distress and increased risk of suicide. Suicide in cancer often stems from anxiety, pain, loss of perspectives and lack of adaptive coping strategies, treatment-related adverse events, fatigue or in the context of severe depressive symptoms. There is a dearth of Indian literature that explores the relationship between suicide and clinically common Acute Leukemia.

Methods: The single centre cross-sectional pilot study aimed to assess the influence of coping strategies, personality traits, social and clinical variables on psychological morbidity, Suicidal ideation and quality of life among patients (> 18 years) with Acute Leukaemia. Of the 40 patients who met the inclusion criteria,17 patients (The median age = 32years; range 19-51 years), who consented, were provided with self-report standardized questionnaires. The questionnaires included, Modified Kuppuswamy socioeconomic scale (2023), Depression, Anxiety and Stress Scale (DASS 21), Beck Scale for Suicide Ideation (BSS ®), Brief COPE and WHO-QOLBREF. Data were analyzed using descriptive and inferential statistics using IBM SPSS® Statistics version 20.0.

Results: 11.8% of participants were found to have suicidal ideation which was significantly associated with presence of psychological morbidity($p<0.05$), and lower QoL in psychological and physical domains($p<0.05$). Use of denial, low socio-economic background and chemotherapy side effects such as mood changes and decreased concentration were found to be associated with presence of psychological morbidity($p<0.05$). Instrumental support was found to be a protective factor for depression($p<0.05$)

Conclusion: The results indicate the risk and protective factors for suicidal ideation and psychological morbidity among Acute Leukemia patients, in India. Early detection of risk factors will enable the development of appropriate preventive strategies and improve quality of life, adherence to treatment and reduce suicidal ideation.

Keywords: Suicidal Ideation, Psychological Morbidity, Quality Of Life, Acute Leukaemia

How to Cite: Jacob, A., Selvarajan, S., & Kattula, D. suicidal ideation and psychological morbidity among individuals diagnosed with acute leukemia, in a tertiary medical centre in south India- a pilot study [102]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0103

Title: Mental Health and Quality of Life among Oncology Nursing Professionals during Unprecedented Global Crises.

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: Pandemics have a lasting impression on the psychological well-being of healthcare workers. The present study highlights the unmet psychosocial needs of oncology nursing professionals in a time of global unrest. Through the lens of Covid -19, this study brings forth the mental health concerns and work-related quality of life of oncology nursing professionals.

Methods: The cross-sectional study aimed to assess the influence of mental concerns on the quality of life (QoL) of oncology nursing professional during Covid-19 pandemic. Using Purposive sampling technique, 34 Oncology nursing professionals (> 18 years, median age=24 years, range 22-50 years), from cancer centres in Chennai, Bangalore and Cochin, were provided with self-report measures in person or via Google forms. The self-report measures included DASS 21 and WHO-QOLBREF. Data were analysed using descriptive and inferential statistics using IBM SPSS® 20.0.

Results: Below average QoL was indicated among more than half of the oncology nursing professionals in the physical (55.9%), psychological (61.8%), social (55.9%) domains. Statistically significant relationship exists between stress (R= 0.542, $p<0.05$), anxiety (R=-0.0414, $p<0.05$), depression (R=-0.425, $p<0.05$) and the environmental domain of QoL. Greater stress was significantly associated with lower QoL in the physical domain ((R= 0.542, $p<0.05$). Presence of depressive ($x2=7.\ 213.df=2.\ p<0.05$) and anxiety symptoms ($x2=14.442$, $df=2$, $p<0.05$) were associated with below average physical QoL. Absence of symptoms of stress (61.8%) was associated with above average QoL in the environmental domain ($x2=6.606$, $df=2$, $p>0.05$). Married participants ($x2=9.188$, $df=1$, $p<0.05$) and participants with children ($x2=0.047$, $df=1$, $p<0.05$). were found to have better social QoL.

Conclusion: This study highlights the need for organisational support and mental health services for oncology nursing professionals during unprecedented crisis Healthcare policymakers and governments can utilize these findings to better support the nursing workforce in a future pandemic.

Keywords: Oncology Nursing Professionals, Quality Of Life, Symptoms Of Mental Health Concerns.

How to Cite: Jacob, A. & Veeraiah, S. mental health and quality of life among oncology nursing professionals during unprecedented global crises. [103]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0104

Title: Prevalence, Determinants, and Lived Experiences of Women Transitioning from Beedi Rolling

Subject: Policy, Capacity Building & Sustainable Cancer Control

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Introduction: Beedi rolling is a widespread home-based occupation among women in India, that poses substantial health risks and perpetuates socio-economic vulnerability. This study aimed to assess prevalence, determinants of willingness to shift from beedi rolling, effectiveness of stage-based behavioural intervention, explore lived experiences, and barriers in transition to alternative livelihoods.

Methods: A mixed-methods study was conducted in Tirunelveli district, Tamil Nadu. A household survey covered 4,724 households (12,942 individuals) to estimate beedi rolling prevalence, awareness of health risks, and willingness to shift; 200 beedi workers were randomly selected to receive a 6-month Transtheoretical Model-based behavioural intervention; Pre- and post-intervention stages of change, quit status, and psychological well-being using WHO-5 Well-Being Index were assessed. In-depth interviews were carried out with 28 women trained under an alternative skill-development program. Associations with willingness to shift were analysed using chi-square tests and multivariate logistic regression. Transcripts were analysed using Braun and Clarke's thematic framework.

Results: The prevalence of beedi rolling was 21.6%, with high burden among women (41.0%). Most workers depended exclusively on beedi income (71.2%) despite high awareness of health hazards (88.9%). Overall, 77% expressed willingness to shift; independent predictors included younger age (OR=5.09), health-risk awareness (OR=2.00), occupational dissatisfaction (OR=1.80), and perceived social activity restriction (OR=1.97). Following the behavioural intervention, 42.5% reported quitting beedi rolling and psychological well-being improved significantly ($p<0.01$). Five themes emerged: Structural and gendered constraints; Health awareness as a catalyst; Skill acquisition and agency building; Social support and collective efficacy, and Gradual economic transition and future orientation.

Conclusion: Beedi rolling remains a prevalent, gendered livelihood sustained by economic dependency despite known health harms. Gender-responsive approaches pairing health awareness, skills training, social support, and staged behavioural support can facilitate transitions from beedi rolling.

Keywords: Bidi Rolling, Alternative Livelihood, FCTC Article 17

How to Cite: Veeraiah, S., Subramani, D., & Easvaradoss, V. prevalence, Determinants, and Lived Experiences of Women Transitioning from Beedi Rolling [104]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0105

Title: Psychosocial Factors Associated with Health-Related Quality of Life among Adult Brain Tumor Survivors: Preliminary Findings

Subject: The Human Experience of Cancer

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Introduction: Brain tumor survivors frequently experience persistent neurocognitive, psychological, and functional impairments that adversely affect health-related quality of life (HRQoL). Despite HRQoL being a key survivorship outcome in neuro-oncology, evidence from low- and middle-income countries, particularly India, remains limited. This study aims to examine psychosocial factors associated with HRQoL among adult brain tumor survivors using patient-reported outcome measures (PROMs).

Methods: A hospital-based cross-sectional study is currently being conducted at the Cancer Institute (WIA), Chennai, India. This preliminary analysis includes 30 adult brain tumor survivors (mean age 41.37 years; range 19–65 years; 58% male) who had completed primary treatment at least three months before enrolment. Participants completed validated measures of psychological distress, fatigue, cognitive functioning, resilience, work ability, disability, and HRQoL using the Depression Anxiety Stress Scale-21 (DASS-21), Cancer-Related Fatigue Scale (CI-SAFE), Addenbrooke's Cognitive Examination-III (ACE-III), Connor-Davidson Resilience Scale-10 (CD-RISC-10), Work Ability Index (WAI), World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0), and the European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire Core-30 with the Brain Neoplasm Module (EORTC QLQ-C30/BN20). Descriptive statistics and Spearman's correlation analyses were performed.

Results: Moderate-to-severe fatigue was reported by 54.2% of participants for fatigue extent and 41.7% for fatigue impact. Moderate-to-severe symptoms of depression, anxiety, and stress were observed in 21.0%, 29.2%, and 21.0% of participants, respectively. Low resilience was identified in 42.0% of survivors, while 16.7% reported significant disability. Probable cognitive impairment was observed in 62.7% of participants, and 75.0% reported poor HRQoL. Spearman's correlation analysis demonstrated significant negative associations between fatigue, disability, and global health status, indicating that greater fatigue and disability were associated with poorer HRQoL ($p<0.05$).

Conclusion: Preliminary findings suggest that fatigue and disability are key correlates of poorer HRQoL among adult brain tumor survivors. A substantial proportion of survivors also experience cognitive impairment, psychological distress, and reduced resilience, underscoring the need for multidisciplinary survivorship care incorporating psychosocial assessment, cognitive evaluation, and rehabilitation. Ongoing recruitment and future analyses with a larger sample will provide more robust evidence to guide supportive care interventions.

Keywords: Brain Tumor, Survivor, Psychosocial Problems, Quality Of Life

How to Cite: Chidambaram, S. C., V, S. V., S, B., & R, V. R. psychosocial factors associated with health-related quality of life among adult brain tumor survivors: preliminary findings [105]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0106

Title: Global Cancer Research Priorities, Capacity Gaps, and Collaboration Needs: Real-World Data from an International Online Survey

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: The global cancer burden is rising, with the greatest proportional increase projected in low-and-middle income countries (LMICs)[1]. This study aimed to identify cancer research priorities, capacity gaps, and collaboration needs among global cancer stakeholders.

Methods: A cross-sectional, online survey hosted by the University of Oxford, was disseminated via The Global Health Network (TGHN) between February and May 2026 following the "Connect and Collaborate" webinar. The webinar attracted 561 registrants from 89 countries, and the survey was distributed to attendees and through TGHN newsletter. The survey explored research priorities, barriers across cancer care, research, data and capacity needs and opportunities for international collaboration. Quantitative data were analysed descriptively, and free-text responses underwent thematic analysis.

Results: A total of 107 respondents from 43 countries participated; 86% were based in LMICs, including Africa (43.9%), Latin America and the Caribbean (24.3%), and Asia (17.8%). The most frequently identified cancer research priorities by tumour type were breast cancer (n=39), cervical cancer (n=36), lung cancer (n=19), childhood cancers (n=16), and prostate cancer (n=15). Priority research areas included cancer prevention and vaccination (n=24) alongside early detection and screening (n=22) Respondents highlighted the need for research aligned with local disease burden, focusing on cancer prevention, diagnostics, implementation science and health-system strengthening. Key barriers included limited funding, weak data and registry systems, workforce shortages, poor coordination and regulatory constrains. International collaboration was reported by 77% of respondents. Additionally, over 1,500 professionals from 120 countries registered on the Global Cancer Research Hub, all of whom expressed interest to collaborate with other TGHN participants.

Conclusion: There is a strong demand for LMIC-responsive cancer research prioritising breast and cervical cancers, prevention, early diagnosis and health system strengthening. These findings will inform targeted training, data system support, stakeholder engagement and equitable international collaborations through The Global Health Network's Global Cancer Research Hub.

[1] Bray F, Laversanne M, Sung H, Ferlay J, Siegel RL, Soerjomataram I, Jemal A. Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA: A Cancer Journal for Clinicians. 2024;74(3):229–263. doi:10.3322/caac.21834.

Keywords: Global Cancer, Research, Capacity Building, Collaboration Needs, Survey

How to Cite: Abdalmohsen, M., Dale, A., Rasheed, F., Augustin, Y., Balogun, B. A., Lodge, M., Stanway, S., & Lang, T. global Cancer Research Priorities, Capacity Gaps, and Collaboration Needs: Real-World Data from an International Online Survey [106]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0107

Title: Readiness for Lung Cancer Screening among High-Risk Tobacco Users in Chennai Communities

Subject: Screening & Early Detection

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Introduction: Majority of lung cancers are detected at an advanced stage in which treatments have limited efficacy and survival rates are low. Detection of lung cancer at an early stage has the possibility of significantly reducing mortality with a greater chance of cure. Considering the enormous number of highly vulnerable population like tobacco users in India and the lack of scientific data on screening for lung cancers, this study proposes to identify smokers and assess the readiness to undergo lung cancer screening.

Methods: This door-to-door survey identified tobacco users aged between 40-75 years, smoking more than 10 cigarettes a day for more than 20 years in Chennai. A structured case record form was used to collect and document the demographic details of the clients and their willingness to undergo lung screening using Low-dose CT, following which the tobacco eligible tobacco users were screened.

Results: A total of 6781 households were reached in the enlisted communities, among which 2529 (37.3%) responded, 277 (4.1%) refused to participate, and 3975 households were locked. Of these, 513 (20.3%) households were identified with tobacco usage, among which 320 responded to the tobacco-use survey. Of all, 205 (64.1%) were smokers, 53 (16.6%) used smokeless tobacco, and 62 (19.3%) used both forms. Among the identified, 100 were eligible for lung screening; 68 expressed interest towards the same, while 32 reported otherwise. The common challenges emerged in facilitating lung screening in the communities included fear of cancer, past or family history with cancer, attitude and knowledge towards tobacco use and health effects, stigma and social concerns.

Conclusion: High prevalence of long-term tobacco use and moderate screening willingness among smokers suggest that implementing targeted awareness campaigns, stigma-reduction interventions, and community-based referral systems could substantially enable earlier lung-cancer detection in high-risk Indian populations.

Keywords: Lung Cancer, Early Detection, Cancer Screening

How to Cite: Veeraiah, S., Krishnamurthy, A., Subramani, D. P., Rani, U., Ramakrishnan, S., & Ruban, A. readiness for Lung Cancer Screening Among High-Risk Tobacco Users in Chennai Communities [107]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0108

Title: Enhancing the Awareness on Tobacco Control Laws: A Public Health Intervention for Shopkeepers.

Subject: Policy, Capacity Building & Sustainable Cancer Control

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Introduction: India initiated various tobacco control measures such as ban on public smoking, promotion of tobacco, sale of tobacco to and by those less than 18 years and sale near educational institutions as per Section, 4, 5, 6a and 6b of Cigarettes and Other Tobacco Product Act (COTPA, 2003). In a mission for 'Tobacco Free Community', an intervention was designed to enhance awareness among shopkeepers on tobacco control laws.

Methods: A total of 307 tobacco selling shops from 45 communities across Chennai were included. A structured proforma was used to obtain data on compliance to Section-4, 5, 6a&b. The shopkeepers were educated on tobacco control laws, and significance of the sections followed the intervention a post assessment, was conducted two years from the baseline. Descriptive statistics were used to summarize the findings.

Results: At baseline, 17.9% of the shops were within 100 metres of education institutions, 8.8% had warning boards, 3 had warning board for prohibition of sale to less than 18 years; 4.2% had minors (<18 years) selling tobacco products, while 45.3% reported selling tobacco to those less than 18 years; 61.2% had displayed matchboxes/lighters, while 52.8% had tobacco products displayed visibly; 69 shops had received warning to stop selling tobacco. Post intervention, shopkeepers reported being aware of laws against smoking in public place (91.5%), advertising tobacco products (66.4%), sale of tobacco products near educational institutions (80.5%), sale of tobacco products to those less than 18 years (88.6%), display of matchbox (78.2%), and sale of smokeless tobacco products (89.6%). Overall, 78.5% of the shopkeepers supported ban of tobacco products.

Conclusion: The intervention program aided in making shopkeepers more aware on tobacco control measures. However, the compliance to COTPA remains a challenge. Such intervention models can be developed and implemented at the policy levels to enhance tobacco control measures effectively.

Keywords: COTPA, Awareness, Tobacco Control, Intervention

How to Cite: Arumugam, U. A., V, S. V., C, S., & R, D. R. enhancing the awareness on tobacco control laws: a public health intervention for shopkeepers. [108]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0109

Title: Integrating AI-Enabled Point-of-Care Screening and Referral for Oral Potentially Malignant Disorders (OPMDs) into Primary Healthcare Settings: An Implementation Research Study Protocol

Subject: Screening & Early Detection

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Introduction: Oral cancer burden constitutes a major public health challenge in India, with alarming five-year mortality rate of 50%. Almost 30% of oral cancer patients delay seeking medical care for >3 months post signs and symptoms. Early diagnosis in absence of metastasis is strongly associated with improved survival and reduced treatment-related morbidity. With this background present study aims to understand care-seeking pathways, healthcare utilization patterns, and barriers to definitive diagnosis and treatment among individuals with oral cancer and develop and integrate an AI-Enabled Point-of-Care Screening and Referral System for OPMDs at primary care settings.

Methods: This implementation research comprises hospital based and community-based components. Using in-depth interviews patients admitted with oral cancer to tertiary care facility will be interviewed to map health seeking behavior and barriers to seek care. Community-based component involves recruiting participants (adults ≥18 years) from selected subcentre area using universal sampling method. During house-to-house visit sociodemographic, behavioral and environmental risk factors will be assessed followed by oral visual examination and re-examination using VELscope, a non-invasive point of care testing device. Screen positives will be referred to higher centre for definitive diagnosis. Through key stakeholder interviews, feasibility of integrating POCT at PHC will be assessed. AI assisted decision algorithm based on VELscope images and risk factors identified clinically will be designed and validated for risk stratification and referral linkage.

Results: Population level prevalence and predictors of OPMDs; Secondary delays in definitive diagnosis; Integration of POCT devices for OPMD screening at primary care settings; AI enabled decision algorithms for risk stratification and guided care pathways.

Conclusion: Present study is expected to provide evidence on feasibility of integrating AI-enabled point-of-care screening and referral for OPMDs into primary healthcare to facilitate early detection and management of oral cancer.

Keywords: Artificial Intelligence (AI), Barriers, Facilitators, OPMDs, Oral Cancer, Point Of Care Testing (POCT), VELscope

How to Cite: K, E., Shetty, R., K, D., Prabhakar, R. V., S, R., & Kunder, M. A. integrating AI-enabled point-of-care screening and referral for oral potentially malignant disorders (OPMDs) into primary healthcare settings: an implementation research study protocol [109]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0110

Title: Understanding Public Responses to Colorectal Cancer Risk Poster

Subject: The Human Experience of Cancer

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Introduction: This study examined how people react to a poster about the risk of colorectal cancer (CRC). Participants: Researchers interviewed 10 adults aged 18 and above living in Kota Samarahan and Kuching in Sarawak state. Personal history was not an exclusion criteria.

Methods: Semi-structured interviews were conducted before and after exposure to a CRC poster to determine the impact of the risk poster on the participants' awareness, threat and efficacy appraisals. Data collection: The interviews (15-20 minutes) were conducted in English, Malay, or Iban language either face-to-face or online. Data analysis: Analysis of fear and danger control were based on the Extended Parallel Process Model.

Results: Danger control was reflected in threat acknowledgement and efficacy recognition. Fear control was reflected in defensive avoidance, cognitive avoidance and seeking social support. Danger control themes at pre-stimulus stage revolved around severity (9/10), with one mentioning recurrence and five highlighting social and psychological challenges. Susceptibility focused on unhealthy diet, family history, and sedentary lifestyle (7/10). Response efficacy reflected confidence in treatment effectiveness (10/10), while three participants expressed confidence in adopting preventive behaviours. Danger control at post-stimulus stage did not touch on severity but was maintained for susceptibility (8/10 participants), and strong self-efficacy (10/10 participants) and response efficacy (6/10 participants). As for fear control at pre-stimulus stage, participants showed cognitive avoidance of risk information or thoughts (3/10 participants) and defensive avoidance of risk information (4/10 participants).

Conclusion: Fear control decreased at post-stimulus stage, but there were still two participants who denied their risk for colorectal cancer although they had experienced some of the symptoms before (cognitive avoidance) but there was no defensive avoidance. Actionability and self-efficacy: Focus should be on the importance, accessibility, and urgency of regular colorectal cancer screening, rather than merely providing information on CRC symptoms.

Keywords: Colorectal Cancer, Responses, Risk, Poster, Danger Control, Fear Control, Screening

How to Cite: Ting, S. H. & Felix, P. L. understanding public responses to colorectal cancer risk poster [110]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0111

Title: Global Evidence on Hormonal, Environmental, and Genetic Risk Factors for Breast and Lung Cancer: A Systematic Review and Meta-Analysis

Subject: Screening & Early Detection

Authors: Edmund Ui Hang Sim[1]*, Fui-Ling Voon[1], Hui-Wen Tang[1]

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Introduction: Identifying modifiable and non-modifiable cancer risk factors is fundamental to strengthening prevention, risk stratification, and early detection strategies. This study synthesizes contemporary evidence on hormonal, environmental, and genetic determinants of breast and lung cancer, focusing on early menarche, incense burning, and CYP2A13 polymorphisms.

Methods: Three systematic reviews and meta-analyses of observational case–control studies were conducted following comprehensive searches of PubMed, Scopus, ScienceDirect, and Google Scholar. Studies published up to January 2024, November 2024, and February 2025 were identified for incense burning, CYP2A13 polymorphisms, and age at menarche, respectively. Pooled odds ratios (ORs) with 95% confidence intervals (CIs) were calculated using fixed-, common-, or random-effects models according to heterogeneity. Subgroup analyses examined geographic region, smoking status, and study design where appropriate.

Results: Early menarche (<13 years) was associated with increased breast cancer risk (OR=1.15, 95% CI: 1.08–1.24), with stronger associations observed for menarche before 12 years and in West Asian, European, North American, and Oceanian populations. Incense burning was associated with an elevated lung cancer risk among Asians (OR=1.33, 95% CI: 1.20–1.48), with higher risks observed in ever-smokers and across both hospital- and population-based studies. CYP2A13 polymorphisms were associated with increased lung cancer susceptibility in East Asian populations (OR=1.37, 95% CI: 1.13–1.66), with stronger associations among smokers in East Asia and Europe, indicating smoking as an important effect modifier.

Conclusion: These findings demonstrate that cancer susceptibility arises from the interplay of hormonal, environmental, and genetic factors that vary across populations. Integrating established reproductive history, environmental exposures, and emerging genetic markers into risk assessment models may improve identification of individuals at elevated risk and support more targeted prevention, screening, and early detection strategies. Further prospective studies are needed to validate these associations and refine population-specific risk prediction.

Keywords: Cancer Risk, Breast Cancer, Lung Cancer, Early Menarche, Incense Burning, CYP2A13 Polymorphism

How to Cite: Sim, E. U. H., Voon, F. L., & Tang, H. W. global evidence on hormonal, environmental, and genetic risk factors for breast and lung cancer: a systematic review and meta-analysis [111]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0112

Title: Integrative Multi-Omics and Clinical Validation Reveal PAX6 as an HPV-Associated Biomarker of Relapse-Prone Cervical Cancer in an Indian Cohort

Subject: Health Systems, Universal Health Coverage & Cancer Care

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Introduction: Cervical cancer remains a major cause of cancer-related mortality among women, particularly in low- and middle-income countries. Although persistent high-risk human papillomavirus (HPV) infection is the principal driver of cervical carcinogenesis, biomarkers associated with disease progression and recurrence remain limited. We investigated the clinical and biological significance of PAX6, a developmental transcription factor, through an integrative multi-omics and clinical validation approach.

Methods: PAX6 expression, HPV association, protein abundance, genomic alterations, survival outcomes, molecular interaction networks, and functional pathways were evaluated using TCGA-CESC and multiple public resources, including GEPIA3, UALCAN, OncoDB, Human Protein Atlas, KM-Plotter, cBioPortal, STRING, and Enrichr. Findings were validated by quantitative real-time PCR in an independent cohort comprising 103 cervical cancer patients and 108 healthy controls.

Results: PAX6 was consistently overexpressed in cervical cancer across independent transcriptomic datasets. GEPIA3 analysis demonstrated significantly elevated expression in cervical tumors compared with normal cervical tissues ($p=0.000542$), with concordant findings across UALCAN and OncoDB. HPV16-positive tumors exhibited significantly higher PAX6 expression than HPV16-negative tumors ($p=2.2\times10^{-7}$), indicating a strong association with HPV-driven disease biology. Human Protein Atlas data confirmed increased PAX6 protein expression in cervical carcinoma tissues. Elevated PAX6 expression was associated with poorer relapse-free survival (HR=2.62, $p=0.011$) and recurrence risk. Genomic alterations were rare (<1%), suggesting transcriptional rather than mutation-driven activation. Functional enrichment analyses linked PAX6-associated networks to developmental regulation, stem-cell pluripotency, differentiation, and transcriptional control pathways. Clinical validation confirmed significant PAX6 upregulation in 81.6% of cervical cancer patients ($p=0.001$) and an association with patient vital status (OR=3.56, $p=0.023$), although no association with immediate chemoradiotherapy response was observed.

Conclusion: PAX6 is a recurrently activated developmental transcription factor associated with HPV16-positive disease and relapse-related outcomes in cervical cancer. Integrative multi-omics and clinical validation support PAX6 as a promising biomarker for risk stratification and surveillance of biologically aggressive cervical cancer.

Keywords: PAX6, Cervical Cancer, HPV16, Biomarker, Relapse-Free Survival, Multi-Omics, Risk Stratification, Cervical Carcinogenesis

How to Cite: Kushwah, A. S., Srivastava, M., Srivastava, K., Mishra, R., & Banerjee, M. integrative multi-omics and clinical validation reveal PAX6 as an HPV-associated biomarker of relapse-prone cervical cancer in an Indian cohort [112]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0113

Title: Development of PREDICT (Prognostic Risk Evaluation through Digital Informatics for Cancer Treatment) for Identification of Prognostic Biomarkers Correlation with the Immunotherapy of Patients with Lung Adenocarcinoma.

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Aberrant DNA methylation plays a critical role in the pathogenesis of lung adenocarcinoma (LUAD). While systematic screening of DNA damage-repair-related genes (DDRGs) holds promise for precision medicine, the prognostic potential of methylated DDRGs remains largely unexplored. This study aimed to identify a methylated DDRG-based biomarker signature to improve LUAD prognosis and treatment strategies.

Methods: LUAD datasets were retrieved from public databases, including TCGA-LUAD. Differential expression analysis identified differentially expressed genes (DEGs) and methylated genes (DE-MGs). Overlapping up-regulated DEGs with demethylated DE-MGs, and downregulated DEGs with hypermethylated DE-MGs, yielded methylated DE-DDRGs. Univariate and multivariate Cox regression analyses identified independent prognostic biomarkers to construct a risk-prognostic model. A predictive nomogram was developed by integrating risk scores with clinical features. Finally, the Tumor Immune Dysfunction and Exclusion (TIDE) algorithm evaluated the model's utility in predicting immunotherapy responses.

Results: We identified one hypermethylated/hyperexpressed gene (CLU) and eight hypomethylated/highly expressed genes (BUB1B, SHCBP1, RRM2, RPL39L, TRIP13, GAPDH, ENO1, and CENPM). Among these, RRM2 and GAPDH correlated significantly with shorter overall survival. The derived risk score served as an independent prognostic factor for LUAD. High-risk patients exhibited lower immune/stromal scores and suppressed immune infiltration. Conversely, TIDE analysis indicated that the low-risk cohort demonstrated significantly higher sensitivity to immune checkpoint inhibitor (ICI) therapy.

Conclusion: This study establishes a novel, methylated DDRG-based risk signature for LUAD. Notably, RRM2 and GAPDH emerge as high-confidence prognostic and immunotherapeutic biomarkers. These findings offer valuable insights for patient stratification, precision prevention, and the development of targeted, epigenetic-based therapeutic strategies in lung adenocarcinoma.

Keywords: Lung Adenocarcinoma, DNA Methylation, DNA Damage Repair, Prognosis, Immune Checkpoint, Immunotherapy

How to Cite: Fong, I. L., Mao, X., Fong, I. L., Saad, S. E., & Lee, N. K. development of predict (prognostic risk evaluation through digital informatics for cancer treatment) for identification of prognostic biomarkers correlation with the immunotherapy of patients with lung adenocarcinoma. [113]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0114

Title: Methanolic Extracts of Sarawak Bajong Rice (Oryza Sativa Var Bajong) Triggered Antiproliferation and Triggered Apoptosis Pathway in Human Colorectal Cancer Cell Lines HCT116.

Subject: Screening & Early Detection

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Introduction: Colorectal Cancer (CRC) is the third most common cancer, that has high mortality globally in 2022. It develops over a duration of ten to fifteen years. With this long-term window of malignancy development, natural products can be good, chemopreventive, therapeutic and treatment candidates. Pigmented rice contains antioxidants and phenolic components that exert anti-inflammatory and anticancer properties. To decrease the mortality rate of CRC, Bajong, a fragrant dark purple rice grain harvested from Lubok Nibong (LN), Sarawak was assessed for its phytochemical characterization and anticancer properties.

Methods: Bajong rice was extracted 24-,48- and 72-hr with ethanol solvent. The extract was evaluated for total phenolic content and total flavonoid content, as well as its antioxidant properties. The 3-(4,5-dimethylthiazol-2-yl)-2,5diphenyltetrazolium (MTT) antiproliferation assay, apoptosis assay, and Western blot were also conducted to determine the ability to induce apoptosis in HCT-116 cells.

Results: The results showed Bajong was rich in total phenolic and flavonoid contents, exhibited strong free-radical scavenging activity, efficacious in promoting antiproliferation and triggering apoptosis in HCT-116 cells in dose-dependent and time-dependent manner respectively. The 72-hour Bajong extract exhibited the strongest growth inhibition in HCT-116 cells than those of 48-hour extract. Additionally, it significantly triggered high population of HCT-116 cells (21.52%) apoptosis and exhibits the highest levels of TNFR1 and FAS expression after 72-hour treatment. Presently, Bajong has not been tested for its phytochemical characterization and anticancer properties against CRC, which highlights the importance of this research. This study demonstrates that Bajong is rich in polyphenols and flavonoids, as evidenced by its strong antioxidant activity. It also inhibits CRC cell proliferation, induces apoptosis and activates the significant apoptotic signalling pathway.

Conclusion: These findings showed Bajong possessed high potential as a nutraceutical crop and a promising chemopreventive agent against colorectal cancer.

Keywords: Oryza Sativa Var Bajong, Phenolics, Flavonoids, Antioxidant, Anticancer, Chemoprevention

How to Cite: Fong, I. L., Lam, X. Q., Fong, I. L., Khong, K., & Tay, S. P. methanolic extracts of Sarawak bajong rice (Oryza sativa var bajong) triggered antiproliferation and triggered apoptosis pathway in human colorectal cancer cell lines HCT116. [114]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0115

Title: Pentamethoxyflavone (PMF) as a Potent Colorectal Cancer Chemopreventive Agent: Efficacy, Mechanistic Pathways, and Biomarker Validation

Subject: Screening & Early Detection

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Introduction: Colorectal cancer (CRC) remains a major contributor to non-communicable disease mortality globally, highlighting an urgent need for safe, effective chemopreventive agents. Plant-derived flavonoids are promising dietary candidates, but the exact structural modifications dictating their molecular potencies require further characterization.

Methods: This study evaluated the anti-carcinogenic properties and underlying mechanistic pathways of the fully methoxylated flavone 3',4',5',5,7-pentamethoxyflavone (PMF) in comparison to its structurally related congeners, tricin and apigenin. Efficacy was monitored in vitro through cell proliferation, cell cycle kinetics, and apoptosis assays using murine adenoma (APC10.1) and human CRC (HCT116) cell models. Global transcriptomic profiles were evaluated via dual-colour mRNA microarrays and validated using RT-PCR and Western blotting. Translation to an in vivo setting was established using the APCMin/+ mouse model, tracking adenoma frequency and tumor burden following dietary supplementation with 0.2% w/w flavones.

Results: In cell culture, PMF demonstrated superior growth inhibitory potency (IC50 ≈ 5 μμM) over tricin and apigenin across both cell lines. PMF mediated a highly sustained cell cycle arrest at the G1 and G2/M phases and triggered apoptosis via the caspase cascade. Microarray analysis revealed that PMF altered the largest volume of distinct genes, actively suppressing oncogenic signaling cascades, including the Wnt, Hedgehog, and Toll-like receptor pathways. Concurrently, PMF dramatically down-regulated the key DNA replication licensing factor MCM7 both in vitro and in vivo. Long-term dietary administration of PMF significantly decreased total tumor incidence from 28 to 15 adenomas per mouse and successfully halved the overall intestinal tumor burden. Ring directed O-methylation provides PMF with higher metabolic stability and enhanced multi-pathway suppressive capabilities compared to its hydroxylated analogues.

Conclusion: These findings establish PMF as a robust candidate for clinical CRC prevention and present MCM7 as a functional biomolecular marker of therapeutic efficacy.

Keywords: Colorectal Cancer, Chemoprevention, Pentamethoxyflavone (PMF), Wnt Signaling, MCM7, APCMin/+ Mouse Model, APC10.1, HCT116

How to Cite: Fong, I. L., Fong, I. L., Cai, H., Gescher, A. J., Gant, T. W., & Brown, K. pentamethoxyflavone (PMF) as a potent colorectal cancer chemopreventive agent: efficacy, mechanistic pathways, and biomarker validation [115]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0116

Title: Understanding the Knowledge, Beliefs, Values and Barriers towards Cervical and Breast Screening amongst Community Women in Sarawak: An In-Depth Qualitative Study

Subject: Screening & Early Detection

Authors: Yolanda Augustin[1]*, Nafeesa Mat Ali[2], Henry M Staines[2], Melissa Siaw Han Lim[3], Pei Jye Voon[4], Izzati Wan Maharuddin[4], Nuraishah Mohd Taib[5], Sanjeev Krishna[2]

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Introduction: Breast and cervical cancers remain important causes of morbidity and mortality in Sarawak, Malaysia, with rural and indigenous women facing disproportionate barriers to screening. Understanding local knowledge, beliefs, values, and access barriers is essential to designing acceptable interventions.

Methods: We conducted an in-depth qualitative study among indigenous and community women in Sarawak, Malaysia, using focus group interviews in English, Malay, and local indigenous languages including Iban, Bidayuh, and Orang Ulu languages when necessary. A piloted topic guide was used, developed in consultation with local community participants. The guide followed a narrative chronological approach, with sensitivity to culturally and linguistically diverse populations. Participants were recruited through community networks and community healthcare champions. Interviews were audio-recorded, transcribed verbatim, and analysed thematically using NVivo.

Results: Thirty women participated, including 25 community participants and 5 community healthcare champions, from multiple districts across Sarawak including Puncak Borneo, Belaga, Bintulu, Miri and Lawas between March and June 2022. This geographical diversity ensured a comprehensive understanding of perspectives across different community settings in Sarawak. Ethnic composition included Bidayuh (4/30;13%), Iban (7/30;23%), Kayan (5/30;16%), Kedayan (2/30;6%), Lun Bawang (5/30;16%), Melanau (4/30;13%), Murut (1/30;3%) and Malay (3/30;10%). The median age was 43 years (range 19-65 years). Four major themes emerged: knowledge gaps; lack of agency; barriers to equitable access; and the facilitatory role of community healthcare champions and peer support. Many participants were unaware that screening is intended for asymptomatic women, and misconceptions about cervical screening, sexual activity, and symptom status were common. Fear, embarrassment, and concerns about pain reduced acceptability of cervical screening, although Human Papillomavirus (HPV) self-sampling was viewed positively by many women. Cost, distance, travel time, and limited transport infrastructure were major barriers to accessing mammography and cervical screening services, particularly in remote areas. Community healthcare champions, trusted local women, and peer encouragement improved acceptability and uptake by providing culturally appropriate explanations in local languages.

Conclusion: Screening uptake among women in rural Sarawak is shaped by limited health literacy, sociocultural concerns, and major geographic and financial access barriers. Community-tailored education, locally delivered outreach, HPV self-sampling, and mobile screening services may improve participation and reduce inequities in breast and cervical cancer prevention.

Keywords: Breast Screening, Cervical Screening, Qualitative Research, Sarawak, Indigenous Women, Community Health Champions

How to Cite: Augustin, Y., Ali, N. M., Staines, H. M., Lim, M. S. H., Voon, P. J., Maharuddin, I. W., Taib, N. M., & Krishna, S. understanding the knowledge, beliefs, values and barriers towards cervical and breast screening amongst community women in Sarawak: An In-depth qualitative study [116]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0117

Title: HPV Self-Sampling as a Last-Mile Scale-Up Strategy to Increase Cervical Cancer Screening Coverage: A Real-World Implementation Evaluation in Two Rural Chinese Counties

Subject: Screening & Early Detection

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Introduction: The final stage of organized cervical cancer screening is often the most difficult, because women remaining unscreened after routine mobilization are harder to reach. We conducted a real-world implementation evaluation of a scale-up HPV self-sampling intervention in two rural Chinese counties to assess whether it could rapidly increase coverage among these last unscreened women.

Methods: HPV self-sampling was implemented in 2025 in Xinping, a southwestern ethnic minority county, and Jingtai, a northwestern low-resource rural county. The implementation strategy was locally co-designed and previously evaluated through a cluster randomized controlled trial. Trained village doctors used standardized mobilization to invite women to routine clinician-based sampling; refusers were offered HPV self-sampling. We assessed county- and village-level coverage gains among remaining unscreened women, implementation speed, participant characteristics, and HPV yield. Generalized linear mixed models accounted for township and village clustering.

Results: A total of 12,095 women completed self-sampling. In Xinping and Jingtai, estimated coverage increased from 24.4% to 45.0% and from 65.3% to 89.9%, representing gains of 20.6 and 24.7 percentage points, respectively; the latter exceeded the 70% target. Village-level coverage gains were 19.4% and 33.4%, respectively. Time-course models showed acceleration after mobilization but slowing in the final phase; in Xinping, final-phase daily sampling was about half that of rapid expansion phase (RR=0.52; 95% CI, 0.29–0.91). Participants were predominantly rural and low-education women. In mixed-effects models, low education and minority status were associated with higher odds of previous non-screening.

Conclusion: HPV self-sampling was effective as a real-world last-mile scale-up strategy for rapidly increasing coverage among hard-to-reach women left unscreened after routine delivery. Rather than replacing organized screening, it provides a short, intensive, evidence-informed coverage boost near the end of a screening cycle through village doctor-led mobilization and self-sampling for women refusing routine sampling. Diminishing final-phase efficiency and HPV-positive follow-up challenges should be anticipated during scale-up.

Keywords: HPV Self-Sampling, Cervical Cancer Screening, Screening Coverage, Implementation Evaluation

How to Cite: Wang, Q., Qiao, Y., & Wang, H. HPV Self-Sampling as a Last-Mile Scale-Up Strategy to Increase Cervical Cancer Screening Coverage: A Real-World Implementation Evaluation in Two Rural Chinese Counties [117]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0118

Title: Development and Validation for an AI-Coach Evaluation Framework for Cervical Cancer Screening Management Training

Subject: Screening & Early Detection

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Introduction: Large language model–based AI-Coaches are increasingly used in clinical communication and decision-making training. However, their feedback depends on evaluation criteria that are clinically specific, behaviorally observable, and suitable for automated scoring. Generic communication scales do not adequately address cervical cancer screening management, which requires risk assessment, interpretation of screening results, follow-up recommendations, patient concern management, and shared decision-making. This study aimed to develop and preliminarily validate an evaluation framework for AI-Coach training in cervical cancer screening management.

Methods: Focus group discussions were conducted with domain experts to identify core competencies in cervical cancer screening consultations. Competencies were organized into two domains: clinical decision-making quality and doctor–patient communication quality. Expert consensus was translated into behaviorally anchored quantitative scoring items linked to observable dialogue behaviors. The framework was applied by expert raters to simulated doctor–patient dialogues. Inter-rater reliability, discriminative validity, and agreement between AI-Coach automated scores and expert scores were assessed.

Results: The framework included decision-making indicators, such as risk information gathering, guideline adherence, result interpretation, and management recommendations, and communication indicators, such as empathy, concern exploration, clarity, shared decision-making, and consultation summary. Preliminary validation showed good overall inter-rater reliability, with stronger agreement for decision-making items than communication items. Risk information gathering showed high agreement between AI-Coach and expert scores, with an intraclass correlation coefficient of 0.84. Lower agreement was observed for communication tasks requiring interpretation of implicit context, emotional cues, and interactive responsiveness. Decision-making scores were associated with years of clinical experience, whereas communication scores were related to educational level.

Conclusion: This disease-specific framework provides a behaviorally anchored and AI-compatible basis for evaluating cervical cancer screening management training. It appears most reliable for structured clinical decision-making assessment, while expert judgment remains necessary for complex communication skills.

Keywords: AI-Coach, Large Language Model, Cervical Cancer Screening, Medical Education, Focus Group

How to Cite: Shi, S., Shi, S., Wu, Y., Chen, M., & Qiao, Y. development and validation for an AI-coach evaluation framework for cervical cancer screening management training [118]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0119

Title: Supportive Care Policy Gaps for Head and Neck Cancer Survivors in Malaysia: A Comparative Analysis across Asian Countries

Subject: Policy, Capacity Building & Sustainable Cancer Control

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Introduction: Head and neck cancer (HNC) ranked as the seventh most common cancer globally in 2024. Across Asia, research has primarily focused on clinical outcomes, with comparatively limited attention given to survivorship and supportive care policies. HNC survivors often experience persistent physical, psychological, social, and financial challenges, which may be exacerbated by inadequate access to supportive care. This study aimed to examine and compare HNC survivorship policies across 15 Asian countries, identify policy gaps, and propose strategies to strengthen survivorship care in Malaysia.

Methods: A qualitative document analysis was conducted using the READ framework, comprising Ready materials, Extract data, analyze data, and Distill findings. Relevant policy documents were reviewed, and key information was extracted into a comparative cross-country matrix. The findings were synthesized to identify similarities, differences, and gaps in existing survivorship policies.

Results: Among 121 policy documents reviewed, 82 fulfilled the inclusion criteria. Comparative analysis showed that 86.7% countries had cancer control and/or survivorship policies. Four major themes emerged: financial protection, legal and community support, palliative care, and rehabilitation. Universal health insurance was provided in 80.6% of the countries. Malaysia provides subsidised healthcare, whereas Japan and Singapore offer comprehensive lifelong health coverage. Legal and community support remained limited, with the Philippines being the only country to implement anti-discrimination legislation for cancer survivors. Palliative care services were predominantly hospital-based, with limited availability of home-based care. Rehabilitation services were available in 86.7% of the countries. However, structured survivorship care plans were mainly observed in high-income settings.

Conclusion: HNC survivorship policies vary considerably across Asian countries, with important gaps in financial protection, legal and community support, palliative care, and rehabilitation. These findings highlight priority areas for strengthening supportive care policies and survivorship services in Malaysia.

Keywords: Head And Neck Cancer, Cancer Survivorship, Supportive Care, Health Policy, Asia

How to Cite: Shapiee, N. I. & Anuwar, A. H. K. supportive care policy gaps for head and neck cancer survivors in Malaysia: a comparative analysis across Asian countries [119]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0120

Title: Strengthening Cancer Care in Malaysia: Insights from a Policy Assessment across the Care Continuum

Subject: Policy, Capacity Building & Sustainable Cancer Control

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Introduction: Cancer is a growing public health challenge in Southeast Asia, placing increasing demand on health systems. Malaysia has made significant policy commitments, integrating cancer into the national health agenda through strategies that span prevention, early detection, treatment, survivorship, and palliative care. This study assessed Malaysia's cancer policy landscape to identify strengths, gaps, and opportunities for improvement. To examine how existing cancer policies are being implemented, identify where gaps in coherence and equity persist, and understand how stakeholders perceive opportunities for building a more integrated and resilient cancer care system.

Methods: A structured policy assessment was conducted using the Policy Assessment Toolkit in Cancer Care developed by City Cancer Challenge (C/Can). The assessment focused on cancer care policies and stakeholders to identify key policy barriers and enablers as well as key stakeholders in the policy-making process. The analysis comprised three phases: (1) review of health sector and disease-specific health policies across five domains (governance and leadership, service delivery, health workforce, health financing, and health information systems); (2) stakeholder mapping to assess influence and involvement in cancer policy making; and (3) stakeholder interviews to validate findings.

Results: Malaysia has established a strong governance foundation and alignment with global cancer control strategies. Policies emphasise prevention, early detection, and treatment, with notable progress in service delivery through multidisciplinary teams and gradual expansion of the oncology workforce. Palliative care has been integrated into national strategies, signalling recognition of its importance. However, survivorship is less well developed, with limited integration of long-term psychosocial and rehabilitation support. Financing policies provide some protection but require strengthening to ensure continuity of care, while health information systems are gradually moving towards digitalisation but remain fragmented. Stakeholders highlighted the need to build on these foundations through greater cross-sectoral collaboration and sustained investment.

Conclusion: Malaysia's cancer policies reflect important achievements in governance, service delivery, treatment, and the recognition of palliative care within the health system. Future efforts should prioritise strengthening survivorship, sustainable financing, and integrated health information systems. By building on existing foundations and fostering inclusive partnerships, Malaysia can further advance equitable and patient-centred cancer care, offering valuable lessons for other middle-income settings.

Keywords: Cancer Care Policy, Care Continuum, Health Financing, Survivorship, Palliative Care, Health Information Systems, Governance And Leadership, Health Equity, Stakeholder Mapping., Malaysia

How to Cite: Chan, Z. X. C. D., Pathy, N. B., Rajah, H. D. A., Chandran, A., Kong, Y. C., & Khizanishvili, G. strengthening cancer care in Malaysia: insights from a policy assessment across the care continuum [120]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1

Abstract Code: APOCP-27-0121

Title: Impact of Pelvic Sepsis on Oncological Outcomes Following Total Mesorectal Excision after Neoadjuvant Chemoradiotherapy for Locally Advanced Rectal Cancer

Subject: Cancer Burden, Inequities & Priority Setting

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Introduction: Pelvic sepsis, including anastomotic leakage and pelvic abscess formation, is among the most serious complications following Total Mesorectal Excision (TME) for rectal cancer. These complications may occur after both sphincter-preserving procedures for mid to low rectal tumours and sphincter-resecting procedures for anorectal tumours. However, their impact on long-term oncological outcomes remains controversial. This study aimed to evaluate the association between postoperative pelvic sepsis and oncological outcomes, including local recurrence, systemic recurrence, disease-free survival (DFS), and overall survival (OS) at 2 years in patients with locally advanced rectal cancer (LARC) who underwent neoadjuvant chemoradiotherapy (Neo-CCRT) followed by TME at a single tertiary referral centre.

Methods: A retrospective review was conducted of consecutive patients diagnosed with colorectal cancer at Sarawak General Hospital between 1 January 2021 and 31 December 2024. Patients with LARC who underwent Neo-CCRT followed by TME were included in the analysis. The incidence of postoperative pelvic sepsis, defined as grade II or III anastomotic leakage, pelvic abscess, or perineal abscess, was determined. Oncological outcomes assessed included local recurrence, systemic recurrence, DFS, and OS at 24 months. Associations between pelvic sepsis and recurrence outcomes were analysed using the chi-square test of independence.

Results: A total of 345 new cases of colorectal cancer were registered during the study period. Of these, 145 patients were diagnosed with LARC and underwent Neo-CCRT followed by TME. Seventy-nine percent underwent sphincter-preserving TME, while 21% underwent TME with sphincter resection. In the sphincter-preserving group, the incidence of grade II and III anastomotic leakage was 20.9%. In the sphincter-resection group, the incidence of pelvic or perineal abscess was 20.0%. The overall 2-year OS and DFS rates were 93.8% and 55.2%, respectively. Patients who developed pelvic sepsis had significantly higher rates of local recurrence compared with those without pelvic sepsis (46.7% vs. 8.7%; $p < 0.001$; OR 9.19). Similarly, systemic recurrence was significantly higher in the pelvic sepsis group (46.7% vs. 22.6%; $p = 0.009$; OR 3.00). However, subgroup analysis of patients who underwent sphincter-resecting TME demonstrated no significant association between pelvic sepsis and either local recurrence ($p = 0.329$) or systemic recurrence ($p = 0.184$).

Conclusion: Patients with locally advanced mid to low rectal cancer achieved favourable overall survival outcomes following contemporary multimodality treatment. Nevertheless, disease-free survival remains a major challenge, likely reflecting the high proportion of patients presenting with advanced-stage disease in Sarawak. Pelvic sepsis was associated with significantly increased rates of both local and systemic recurrence, underscoring the importance of prevention, early recognition, and optimal management of postoperative septic complications. Ongoing efforts to improve surgical techniques, prehabilitation programmes, and postoperative care pathways may help reduce pelvic sepsis and improve oncological outcomes. However, very low rectal cancers continue to demonstrate high recurrence rates regardless of the presence of pelvic sepsis. Early detection remains essential for improving long-term outcomes.

Keywords: Pelvic Sepsis, Locally Advanced Rectal Cancer, Local Recurrence, Systemic Recurrence

How to Cite: Voon, K. & Tan, A. S. Y. impact of Pelvic Sepsis on Oncological Outcomes Following Total Mesorectal Excision After Neoadjuvant Chemoradiotherapy for Locally Advanced Rectal Cancer [121]. Asian Pacific Journal of Cancer Prevention, 2026, 27(S1):[Page]. https://doi.org/10.31557/APJCP.2026.27.S1.1