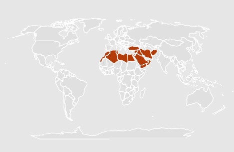

Women's cancers in the Middle East and North Africa

Total women (2024): 310 million
Life expectancy (2023): 74 years
Women's cancer cases (2022): 425,360
Women's cancer deaths (2022): 219,531
Sources: World Bank, IARC

Disease burden

Breast cancer
Most common cancer among women in the region, representing 32% of new cases and 21% of cancer deaths. Five-year survival rates range between 75% and 80% in countries such as Türkiye and Kuwait, while higher survival has been reported in Jordan (84%) and Israel (88%). Lower survival was observed in Qatar at 72%.

Cervical cancer
It represents 3% of new cancer cases and 3% of cancer deaths among women. Five-year survival remains below 60% across much of the region.

Ovarian cancer
It accounts for 4% of new cancer cases and 5% of deaths from women. In many countries of the region, such as Kuwait, five-year survival is around 30-39%, which is lower than in most high-income Western countries.

Endometrial cancer
It accounts for 4% of new cancer cases and 2% of cancer deaths among women. While robust data for the Middle East and North Africa are lacking, evidence from the United States (US) indicates that survival rates have declined since the 1970s.

Economic burden

Direct costs

Early detection, timely diagnosis, and effective treatment reduce costs. For example, a pooled global estimate (including studies from Iran, US, UK) show that breast cancer treatment costs are ~109% higher in stage IV than in stage I. In Egypt, a breast cancer downstaging program using clinical breast exams reduced late-stage diagnoses by 13.7%, which lowered the average treatment cost per patient from USD 58,170 (unscreened) to USD 28,632 (screened).

Global breast cancer treatment costs relative to stage I

Stage	Cost relative to stage I
I	Baseline (median)
II	32%
III	95%
IV	109%

Indirect costs

There is limited region-specific, comparable economic data, but available evidence shows substantial indirect costs from lost productivity. In high-income countries, indirect costs compose 32% to 70% of the total economic burden of women's cancers.

The case for investing in women's cancers

High returns

- A 2024 WHO analysis in the region found that achieving 90% HPV vaccination coverage could cut cervical cancer incidence by ~81%, with returns of $2.20-$6.20 for every $1 invested. Comprehensive interventions combining early diagnosis and timely treatment of cervical cancer yields returns ranging from $1.5 in high-income countries to $11.5 in low-income countries per $1 invested.
- The same 2024 WHO analysis found that early diagnosis and multimodal breast cancer treatment could yield high returns, with each $1 invested generating $6.4-$7.8 in economic benefits over 2020-2040.

Workforce and productivity impact

- In the Middle East and Africa, where women are diagnosed with cancer at younger ages due to a relatively young population structure, investments in prevention and treatment reduce premature deaths and disability during the most productive years of life.
- This means more women remain active in the workforce, driving economic growth, while lowering social protection costs and avoiding the high expenses of late-stage care.

Strategic value of early investment

- Prevention through HPV vaccination requires decades before benefits fully emerge in terms of cancer reduction, but immediate benefits include preventing genital warts and precancerous lesions.
- Screening and early treatment lead to significant short- and medium-term cost savings, avoiding costly late-stage interventions.

Evidence gap

- Investment cases overwhelmingly focus on breast and cervical cancer, while endometrial and ovarian cancer are under-studied.
- In the Middle East and North Africa, this underinvestment risks perpetuating disparities and missed opportunities for cost-effective interventions.

Recommendations

Foundational enablers for women's cancer policy include universal health coverage, gender equity, a well-trained workforce, and robust data systems. These cross-cutting elements exhibit critical gaps in many countries in the Middle East and North Africa and are essential for effective, equitable cancer care. Building on these foundations, countries in the region should:

Advocate for women's cancers as a health priority

Strengthen and streamline cancer care delivery & workforce capacity

Focus on prevention and early detection efforts

Leverage innovation across the women's cancer care continuum

Prevention challenges

- **Low HPV vaccination rates**: Most countries in the region remain well below the 90% WHO target. Vaccination coverage in 2024 was 55% in Israel, 37% in the UAE, and 26% in Mauritania, while countries such as Algeria, Egypt, Iraq, Lebanon, Türkiye, and Yemen have yet to implement national HPV vaccination programs.
- **Misconceptions and stigma surrounding HPV**: Vaccination against sexually transmitted infections such as HPV is often stigmatized, leading to hesitancy and lower acceptance rates.
- **Lack of genetic testing**: In most countries, genetic testing is often not covered by public/private insurance. There is also a shortage of genetic counselors, limiting access.
- **Rising overweight/obesity rates**: More and more women are overweight/obese, which are important risk factors for breast, ovarian, and uterine cancers.

Opportunities

Gender-neutral HPV vaccination and catch-up programs

School- & pharmacy-based HPV vaccination

Population-based genetic testing

New prevention strategies for gynecologic cancers

Detection and screening challenges

- **Weak referral pathways**: Primary-care overload and limited provider training slow movement from symptom/screen detection to timely diagnosis and treatment.
- **Disconnect between awareness and preventive screening**: High awareness does not translate into practice. In a study across six countries in the region, 87% of women knew about breast self-exams but only 72% practiced them; while 62% knew about clinical breast exams (CBEs) and 68% about mammography, just half underwent CBEs and 57% had mammograms. Many got to screening only when symptomatic.
- **Lack of organized population-based screening programs for breast and cervical cancer**: Most countries still rely on opportunistic screening (women must actively seek it themselves).
- **Low screening participation**: Between 85% and 91% of women aged 30-49 in the region have never been screened for cervical cancer. This is far below the WHO target of at least 70% of women screened by ages 35 and 45. For breast cancer, participation rates are generally low, at 10-30% in Algeria, Jordan, Saudi Arabia, and Türkiye. An exception is Egypt, where the Presidential Women's Health Initiative (2019-2021) achieved around 57% participation.

Opportunities

Mobile screening

HPV self-sampling

Patient navigation

Integration of maternal health programs with screening programs

Leverage trusted voices

Egypt

Success story: In 2019, the Women's Health Initiative was launched by the president and aimed to provide early detection and treatment of breast cancer, along with other health services, free of charge. As a result, the median diagnostic time decreased from over 120 days to 49 days, shorter than the WHO target of 60 days. The proportion of advanced-stage cases fell from 70% to 20% and over 22 million women had been screened.

Diagnosis challenges

- **Low availability of gynecologists**: In some countries, such as Türkiye, availability of gynecologists remains low, with 12 per 100,000 respectively, limiting timely diagnosis.
- **Limited availability of pathologists**: Workforce shortages affect both general pathology and subspecialties critical for women's cancers. Reported shortages exist in Algeria (including breast pathology subspecialists), as well as in Israel, Morocco, and Saudi Arabia.
- **Treatment start before full diagnosis**: In Morocco, biomarker data (ER, PR, HER2) are frequently incomplete when treatment begins, limiting the possibility to administer effective treatments.

Opportunities

Task-shifting in diagnostics by AI

Scaling diagnosis with telemedicine and telepathology

New molecular classifications

AI prediction of biomarker status

Treatment challenges

- **Fragmented care**: This leads to delays, higher costs, poor coordination, worse patient experience, and poorer cancer survival in LMICs.
- **Shortage of oncologists and gynecologic oncologists**: Workforce gaps are reported across the region, with, e.g., Morocco facing oncologist shortages that may delay treatment. In many countries in the region, gynecologic oncology is not formally recognized as a subspecialty, limiting training and standardization of care.
- **Low use of multidisciplinary teams (MDTs)**: MDTs are essential for coordinated treatment decisions but are unevenly implemented in the region. In Egypt, MDTs are increasingly recognized, but wider adoption is limited by financial and technical constraints.
- **High out-of-pocket costs**: Access varies by income level, in wealthier Gulf states (Saudi Arabia, UAE, Qatar), patients generally receive free or subsidized care. Whereas in LMICs women frequently face high treatment expenses, creating financial hardship and limiting access.
- **Limited access to new medicines**: Access to novel cancer medicines is highly unequal. By the end of 2020, only 24-43% of US FDA-approved medicines (2017-2020) were reimbursed in Gulf countries, while none were reimbursed in Algeria, Egypt, or Morocco.
- **Few oncofertility options**: Fertility preservation services in the region focus on general infertility rather than cancer, resulting in low uptake of oncofertility options.

Opportunities

Minimally invasive surgeries

More efficient use of radiation therapy

New cancer medicines

Link accessibility of medicines to clinical benefit

Patient-centered rehabilitation pathways

Gender-sensitive care