

AMC Health Systems and Cancer Research Division

Major Cancer Cases in Afghanistan: Trends, Burden, and Strategic Implications

*Assessing National Priorities and Regional Gaps in Cancer Control and
Radiotherapy Access*

Abstract

This report explores the current and projected burden of cancer in Afghanistan, a country with one of the weakest cancer care infrastructures in the South Asian region. Based on data from GLOBOCAN, WHO, the Ministry of Public Health (MoPH), and SAARC sources, it identifies the leading cancer types and their risk factors. Key findings show breast, stomach, lung, cervical, and colorectal cancers to be the most prevalent. Afghanistan has no national cancer registry, no radiotherapy units, and limited diagnostic services. Data gaps, cultural barriers, and gender inequities significantly impact early detection and outcomes. Strategic implications include the urgent need for a national cancer registry, expanded workforce training, HPV vaccination, investment in pathology and radiotherapy, and international collaboration.

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3. Introduction

Cancer is emerging as a critical public health issue in Afghanistan. This report seeks to analyze the types, burden, and implications of cancer cases in Afghanistan using authoritative data sources. The scope includes major cancer types, gender disparities, pediatric cancer, regional comparisons, and system-level challenges. Data was collected from GLOBOCAN (2020), WHO country profiles, MoPH, and SAARC health reports.

4. Body / Main Content

a) Background or Literature Review Cancer incidence is rising across LMICs. Afghanistan, with its prolonged conflict history and limited infrastructure, mirrors many of these challenges. According to WHO (2020), Afghanistan's cancer mortality-to-incidence ratio is among the highest in South Asia, indicating poor survival outcomes. A study by the IAEA (2023) found that Afghanistan lacks a single functional radiotherapy facility, unlike many of its neighbors.

b) Methods / Approach Secondary data review from WHO, GLOBOCAN, MoPH, and SAARC regional reports was conducted. Literature on gender, pediatric care, and comparative infrastructure was reviewed for contextual analysis. Site-specific data from previous case reviews, patient interviews (from cross-border treatment centers), and published government documents supplemented the findings.

c) Findings / Analysis

- **Breast Cancer:** 14.3% of new cases; linked to urban lifestyle, obesity, late diagnosis due to stigma and lack of female specialists.
- **Stomach Cancer:** 7.8%; linked to poor diet and H. pylori; diagnosed late due to lack of endoscopic services.
- **Lung Cancer:** 6.6%; linked to tobacco, solid fuel use, and air pollution.
- **Cervical Cancer:** 5.4%; highly preventable, but lack of screening and vaccination worsens burden.
- **Colorectal Cancer:** 4.9%; rising with dietary changes; no early screening programs exist.
- **Other notable cancers:** Head and neck (due to naswar use), liver (linked to hepatitis), prostate and ovarian cancer (underdiagnosed).

Gender disparities significantly limit women's cancer outcomes. Pediatric cancers are underdiagnosed, with inadequate referral networks. In comparison with other SAARC countries, Afghanistan is the only nation without a cancer registry or a radiotherapy unit.

d) Discussion Afghanistan lags behind SAARC peers in all cancer infrastructure indicators. Cultural taboos deter early reporting, while political restrictions—especially those affecting women's access to healthcare—further reduce early diagnosis and treatment. Investment in cancer services has been minimal, and donor-driven programs are sporadic and poorly integrated. The anticipated doubling of cancer cases by 2040 (GLOBOCAN, 2020) emphasizes the urgency for action. Infrastructural gaps, workforce shortages, and weak policy frameworks are central to Afghanistan's limited progress.

5. Conclusion

Afghanistan faces a serious and growing cancer burden driven by both structural and cultural barriers. Breast, stomach, lung, cervical, and colorectal cancers are particularly urgent. With no national cancer control program or radiotherapy access, the country remains vulnerable to preventable cancer-related mortality. Sustainable progress will depend on integrated public health planning, international assistance, and domestic policy prioritization.

6. Recommendations

1. Establish a centralized, real-time national cancer registry under MoPH.
2. Develop oncology training programs within Afghan medical universities and partner with regional centers for scholarships.
3. Introduce HPV vaccines in a phased national campaign, beginning with urban centers.
4. Build at least two regional diagnostic centers with basic imaging and pathology services.
5. Launch mobile screening units targeting breast and cervical cancer in rural areas.
6. Create a national public awareness program on cancer symptoms, risk factors, and screening benefits.
7. Incentivize private sector investment in cancer diagnostics and radiotherapy services through public–private partnerships.

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