

## The future of cancer care: health system sustainability in The Middle East and North Africa (MENA)



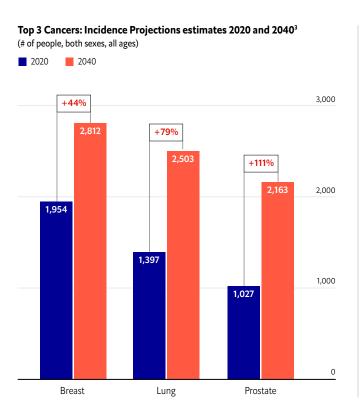


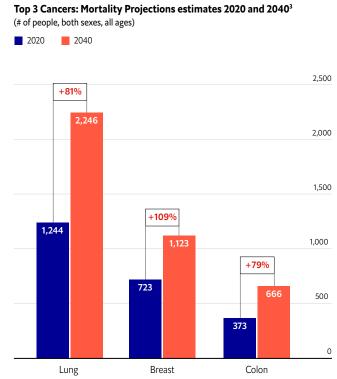
# **Key trends**

## The 2018 Health Care Access and Quality Index ranked Lebanon 33 in the world and first in the Middle East.

However, since 2019, the unprecedented economic decline, compounded by the covid-19 pandemic and the 2020 Beirut port explosion, has adversely affected healthcare delivery and the lives of cancer patients.

Population over 65 years <sup>2</sup>	538k 934k (2022) (2040)	A 70	
			<b>↑ 72</b> %
Total cancer incidence <sup>3</sup>	11.5k	18.6k	<b>↑</b> 61%
	(2020)	(2040)	<b>T</b> 01%
Total cancer mortality <sup>3</sup>	6.4k	11.2k	<b>↑</b> 75%
	(2020)	(2040)	T /5%
Probability of premature death from cancer per year in 2030 <sup>4</sup>	3.5%	3.6%	Projected to reach SDG target
	(2020)	(SDG target)	





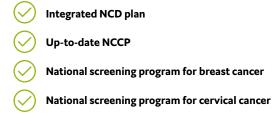
## **Policy**

Early-stage detection and screening programmes are available for breast, colon and cervical cancer.<sup>4</sup> There is also a screening programme for lung cancer but with limited availability.5 Lebanon announced a 5-year National Cancer Plan in 2023. While still in the preparation phase, the plan will serve as a blueprint for oncology care in Lebanon and aims to improve prevention, diagnosis, and palliative care and facilitate sustainable financing solutions for cancer patients and their families.<sup>6</sup>



Early detection programme/ guidelines for 4 cancers (breast, cervix, colon, childhood)





<sup>\*</sup> MPOWER: Monitor tobacco use and prevention policies, Protect people from tobacco smoke, Offer help to quit tobacco use, Warn about the dangers of tobacco, Enforce bans on tobacco advertising, promotion and sponsorship, and Raise taxes on tobacco. Source: WHO. Cancer Country Profile 2020. Lebanon<sup>4</sup>

## **Health System**

While Lebanon has good hospital infrastructure and well-trained healthcare personnel, the challenges of the last three years have left the health system fragile and fragmented, leading to increased privatisation and reduced access for some of the most vulnerable in the population.<sup>7</sup> There is an urgent need to strengthen preventive care and the provision of palliative care.

### **Primary prevention & risk factors**





Alcohol consumption per capita<sup>8</sup> (2018)



Prevalence of tobacco use (% of adults)9(2020)



**WHO** target of girls fully vaccinated with the HPV vaccine by the age of 15



Prevalence of obesity among adults<sup>10</sup> (2017)



Measures taken to reduce an unhealthy diet<sup>4</sup> (2020)





Awareness campaign for diet and physical activity done every 5 years4 (2020)

#### Infrastructure

8.647

**376** Patient / RT unit

**130**% Radiotherapy

Number of patients who need radiotherapy per year



Availability of palliative care in the public health system<sup>4</sup>

(Approximately 50% of cancer patients require RT) (2013)

#### **Health workforce**



Physicians<sup>12</sup> 2.2 per 1,000 people (2019)

OECD average - 3.6



**Nuclear medicine** physicians4

8.7 per 10,000 cancer patients (2019)



Nurses<sup>13</sup> 1.7 per 1,000 people

(2018)OECD average - 8.8





Radiologists<sup>4</sup> 231.3 per 10,000 cancer patients (2019)

## **Innovation & Data**

While data on R&D expenditure is unavailable, research output per physician or scientist and the number of clinical trials conducted are among the highest in the MENA region.<sup>5</sup> Lebanon has a population-based cancer registry (PBCR), however, there is limited coverage of cancer mortalities.<sup>4</sup>



Individuals using the Internet<sup>11</sup> (2021)



Research and development (R&D)



Number of mobile phone subscriptions (per 100 people)<sup>15</sup> (2021)



expenditure (% of GDP)16

Total number of clinical trials for oncology<sup>17</sup> (2022)

Number of clinical trials (1999-2022)18 (2022)

<sup>^</sup>Total alcohol consumption per capita (liters of pure alcohol, projected estimates, 15+ years of age)

## **Health Financing**

Private healthcare and out-of-pocket (OOP) spending are the main funding sources in the Lebanese healthcare system.<sup>19</sup> With high inflation, currency devaluation and job losses, the economic crisis is affecting the capacity to pay for healthcare. Hospitals are also facing financial difficulties due to the decrease in government funding, a shortage of essential medicines and the inability to collect payments from insurance companies.<sup>20</sup> While registration timelines for new medicines are comparable with regional averages, political instability and budget constraints have contributed to delays in the launch of new medicines.<sup>21</sup>

#### Health Budget<sup>19</sup>

Current health expenditure (CHE) as % of GDP

**8**% (2020) 13.9% OECD average

Current health expenditure (CHE) per capita
US\$994 (2020)

\$5,292 OECD average

General government health expenditure as % CHE

**33**% (2020) 66% OECD average

Private health expenditure as % CHE

**66%** (2020) 34% OECD average

#### Value Assessment<sup>22,23</sup>

While it is recommended to submit an economic analysis for the evaluation of new innovations, the healthcare sector in Lebanon does not have an independent HTA

The 2016 Health Strategic Plan includes a focus on establishing HTA systems and procedures

#### **Barriers to HTA implementation**

- Awareness/advocacy of the importance of HTA
- · Mandata from policy authority
- · Institutionalisation of HTA
- · Oualified human resources
- · Political support

### **Accessibility**



73/100

Progress towards Universal Health Coverage (UHC) - up from 63 in 2005<sup>24</sup> (2019)

9 months

Average time to local registration for new medicines<sup>21</sup> (2022)

#### **Economic Burden**



\$884 million

Total macroeconomic cost attributable to cancers between 2020-2050<sup>25</sup> (2023)

(Total macroeconomic burden attributable to cancers in 2020–2050 using a discount rate of 3%)

#### Affordability<sup>19</sup>

Out-of-pocket (OOP) spending as % of current health expenditure (CHE)

44% (2023)

12% OECD average

Out-of-Pocket (OOP) spending per capita in USD

**\$440** (2023)

\$653 OECD average

# **Opportunities for Improvement**

# 1 Keep cancer at the centre of health reform plans

While the recently launched National Cancer Plan 2023-2028 provides long-term direction to enhance and adapt the overall system, immediate action plans are needed to mitigate disruption in the face of current challenges. As Lebanon establishes future healthcare reform plans. providing access to cancer care and minimising disruption to cancer care must be a priority. Reform plans should involve all stakeholders providing care to cancer patients, including the private sector, NGOs and refugee organisations.

# Pocus on cost effective cancer control measures

In light of the current economic situation and pressure on the existing cancer infrastructure and workforce, cost-effective interventions such as maintaining access to existing early detection and screening programmes should be a priority. Expanding the use of telemedicine could also help reduce pressure on an overburdened healthcare system.

# 3 Explore alternative funding sources

High inflation and a shortage of medicine continue to limit the accessibility and affordability of cancer treatment for patients. There is a need for rapid intervention as OOP spending and medicines shortages escalate. Alternative funding sources, such as partnerships with international organisations and the private sector, should also be explored.

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