

State And Structure of Healthcare in Uzbekistan

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Abstract

- I went to Uzbekistan for the summer after my 1st year of medical school and had a unique first-hand experience exploring oncology in Uzbekistan.
- I was granted access to the outpatient unit of the Republican Specialized Scientific and Practical Medical Center of Oncology and Radiology. I primarily volunteered and shadowed physicians for a total of 5 weeks. This experience helped me gain an insightful perspective on oncological care which I can compare to my future experiences during my rotations.
- In this poster, I would like to describe my experiences and observations about healthcare in Uzbekistan and outline the main differences in cancer epidemiology and oncological care compared to the U.S. Finally, I will discuss the overall state of healthcare in Uzbekistan.

Introduction

- Uzbekistan is a landlocked Post-Soviet country located in Central Asia.
- The Ministry of Health of the Republic of Uzbekistan is the central state health management body within the structure of the government. The Ministry of Health is the major player in planning and managing the Uzbek health system.
- Despite the relatively young population of the country, the cost of healthcare in the country's budget is very significant - 15.3% for 2018.
- The healthcare of Uzbekistan is represented by public and private medical and preventive institutions. The private sector is small and mainly comprises pharmacies and small practices. The public sector is major, and government run and consists of three hierarchical layers – national, regional, and district levels.
- Healthcare is free of charge for citizens if they receive medical treatments in their assigned district/region.
- The government does not control capital or other types of investments in the private health sector.

Overview of the health care system

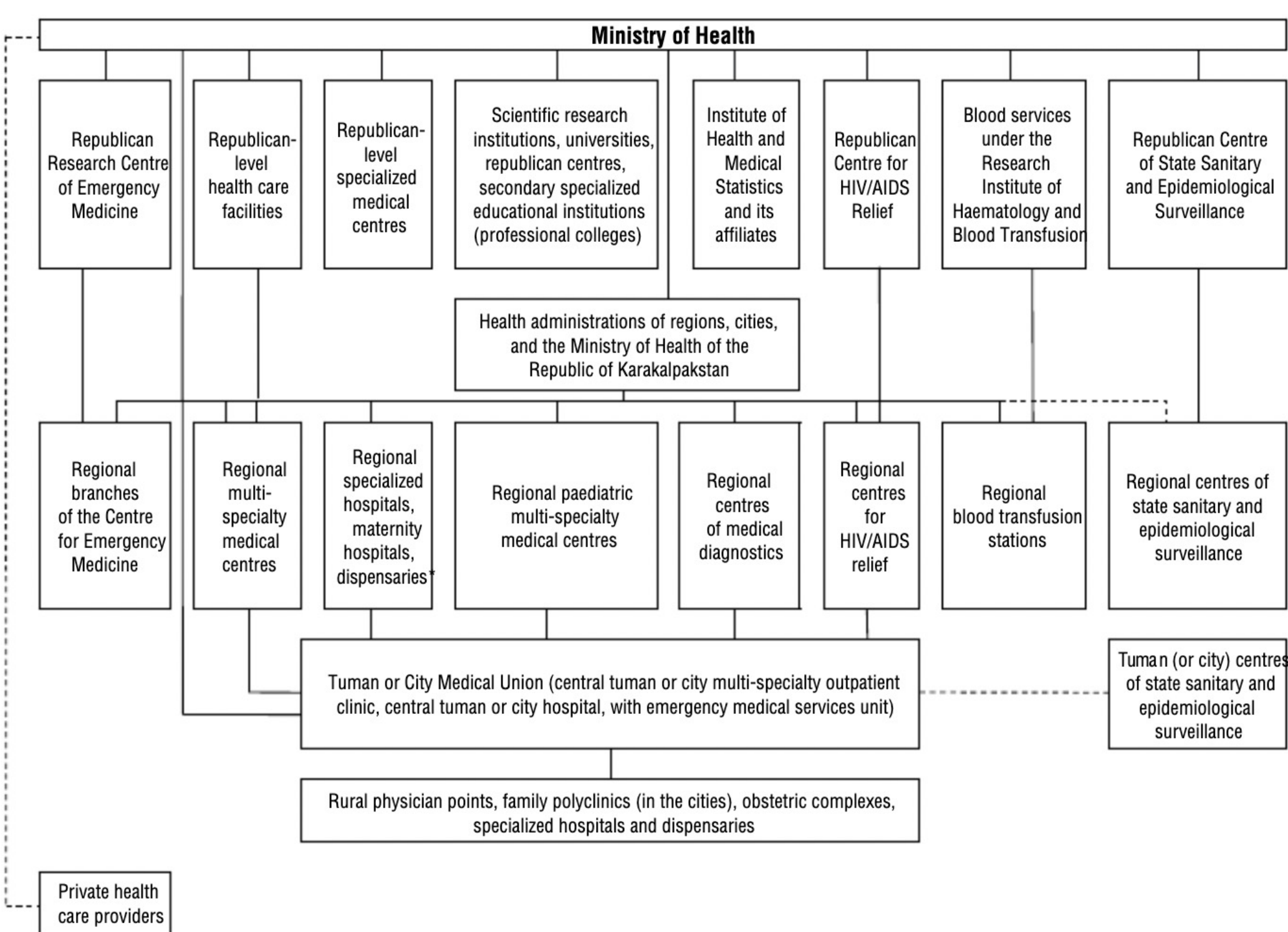


Figure 1. Structure of Ministry of Health

Demographics, Healthcare Financing and Infrastructure

Population pyramid of Uzbekistan

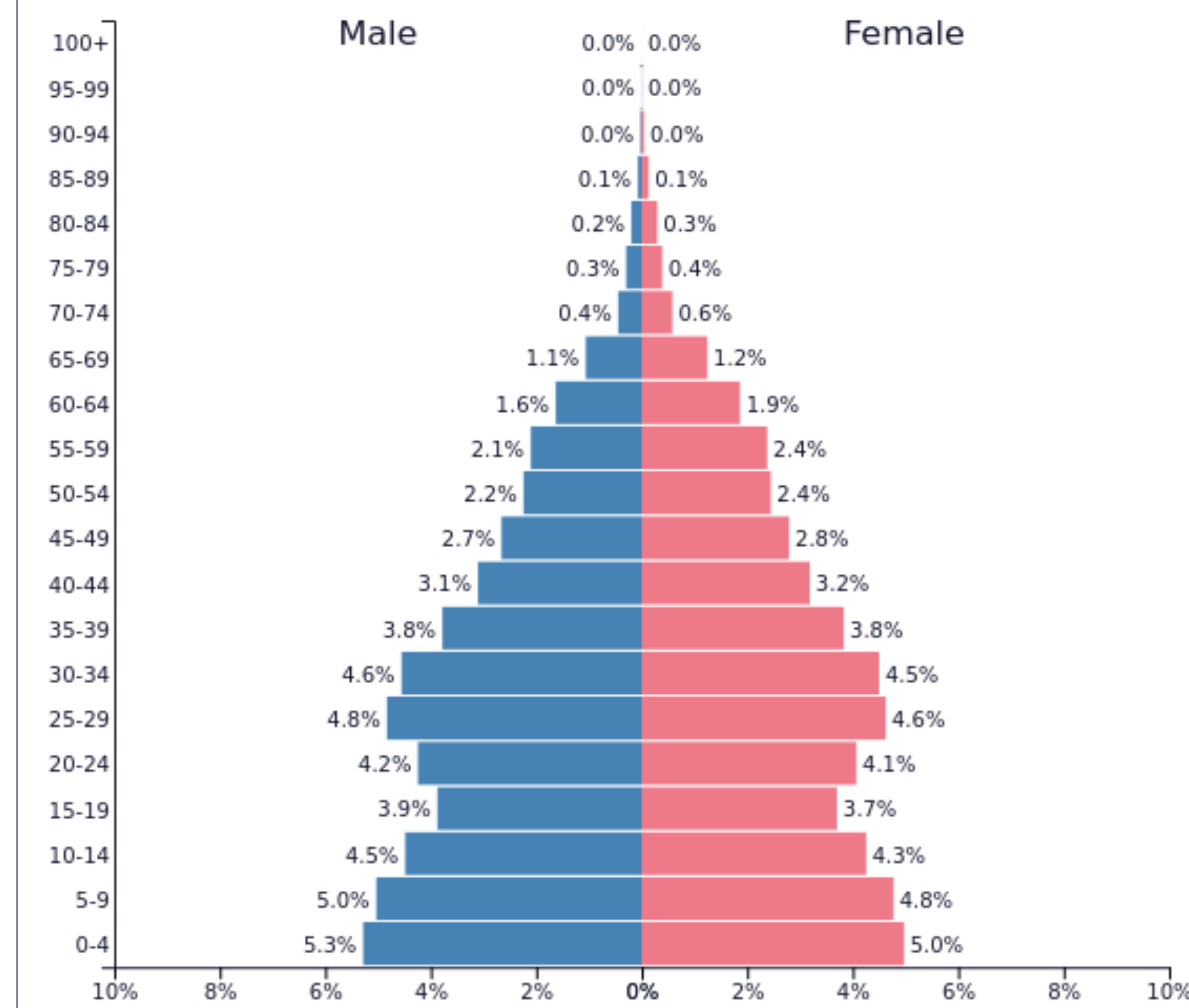


Figure 2. Population pyramid of Uzbekistan. Average life expectancy in Uzbekistan is 72.0 years. Combined median age in Uzbekistan is 30.1 years. Population: 33,469,199

Financial flows in the Uzbek health care system

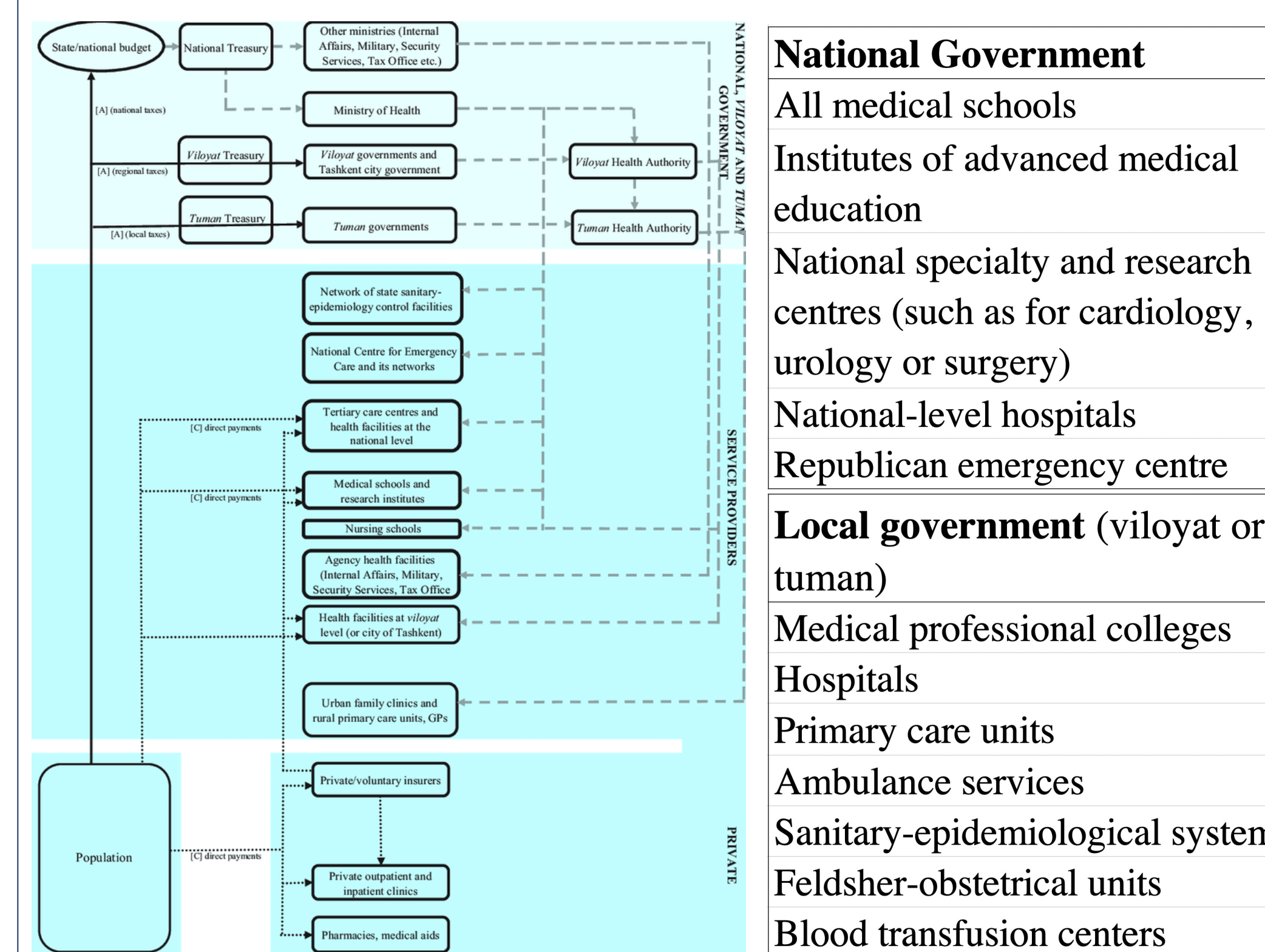


Figure 3. Sources of finance

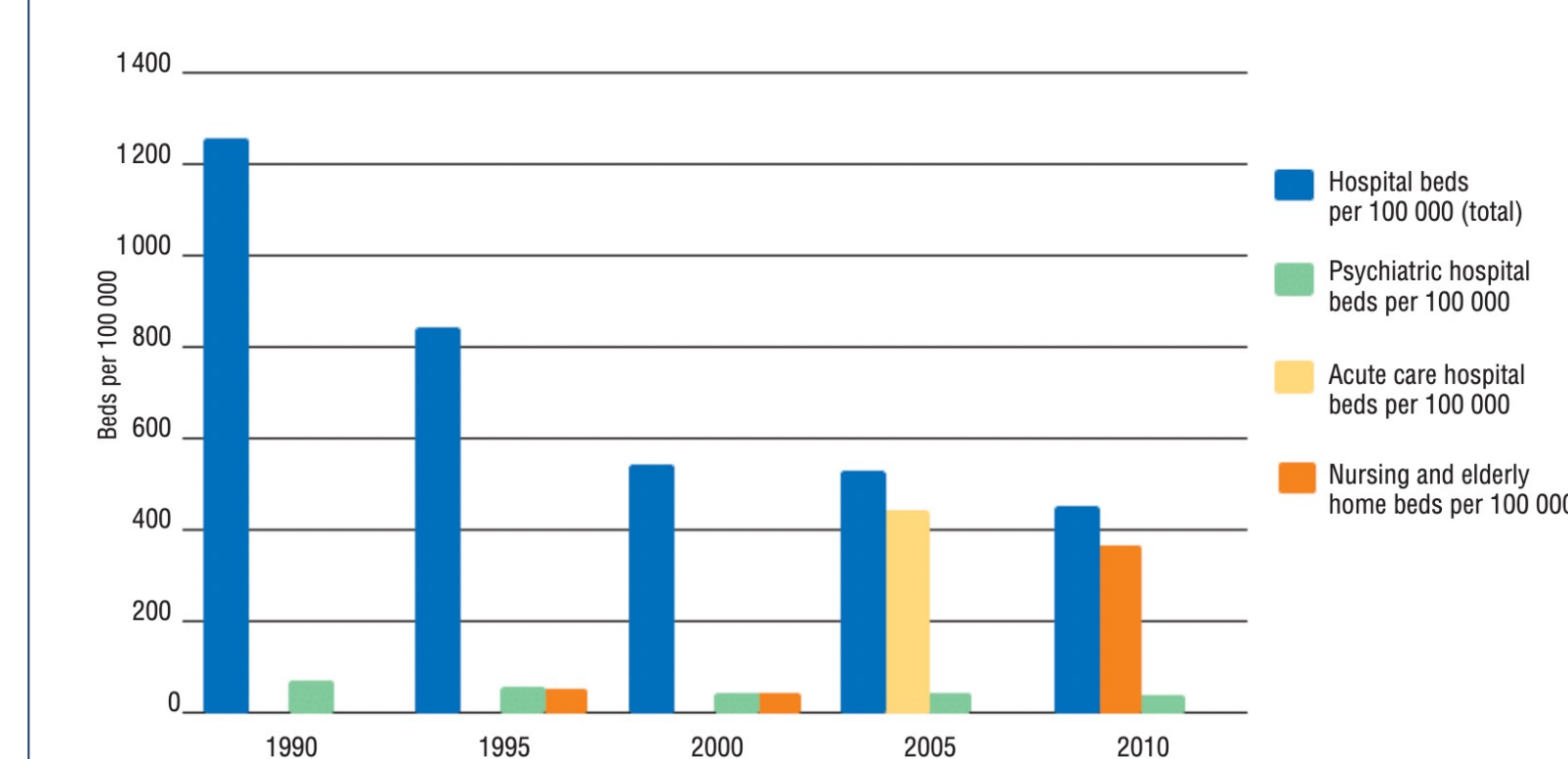


Figure 4. Number of beds in hospitals, per 100 000 population

Cancer Epidemiology

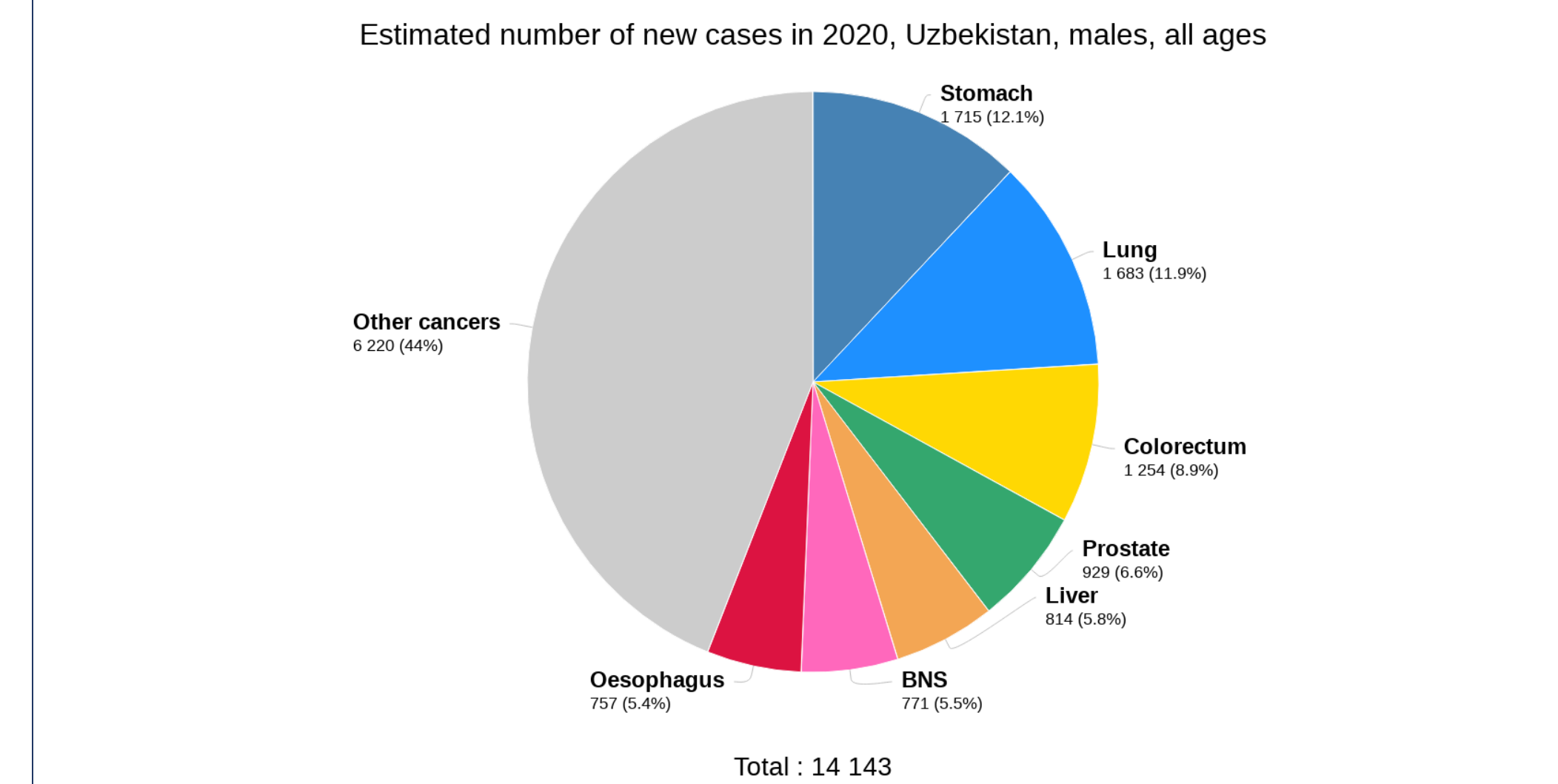


Figure 5. Incidence of cancer in males, Uzbekistan, 2020

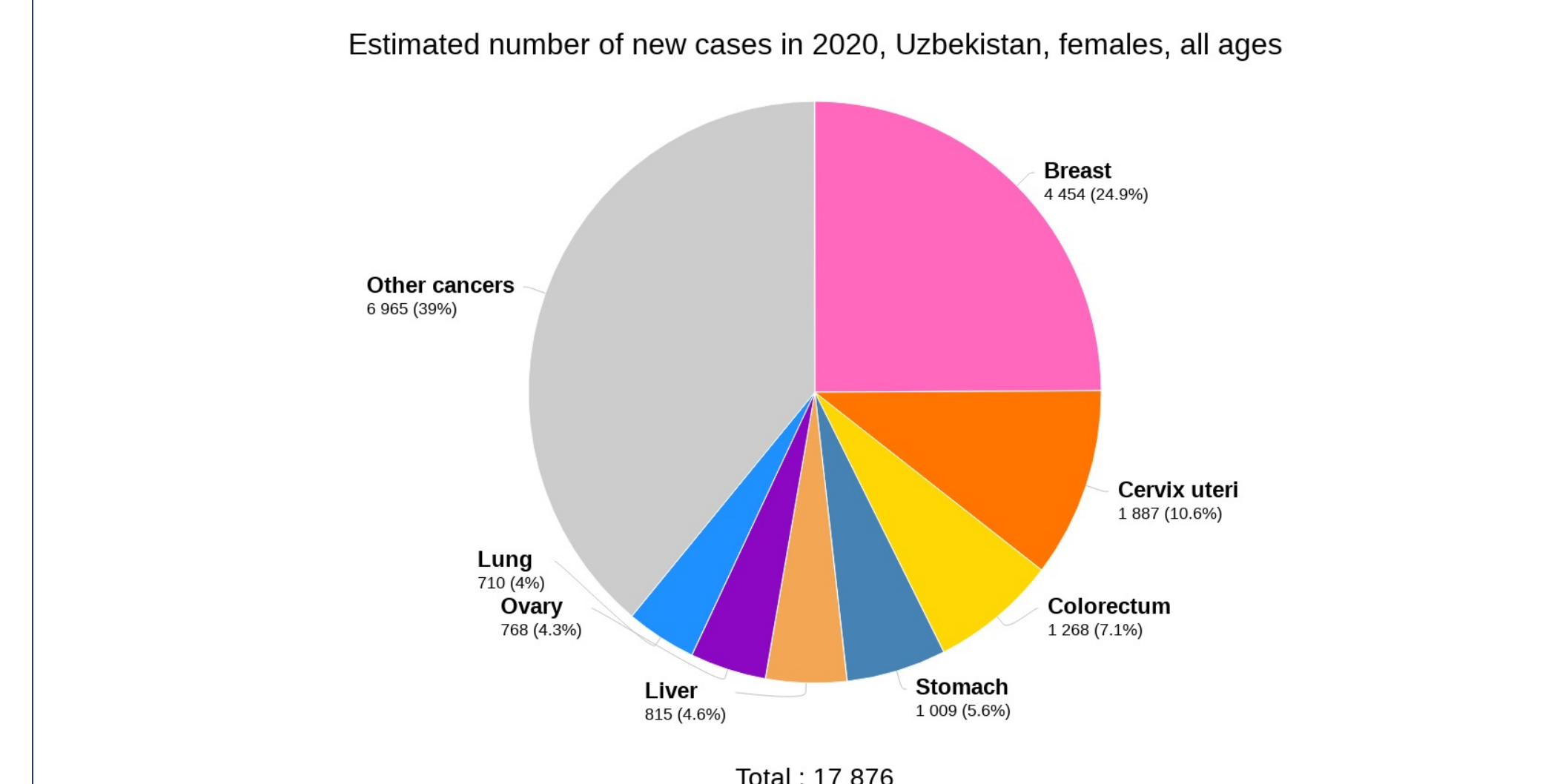


Figure 6. Incidence of cancer in females, Uzbekistan, 2020

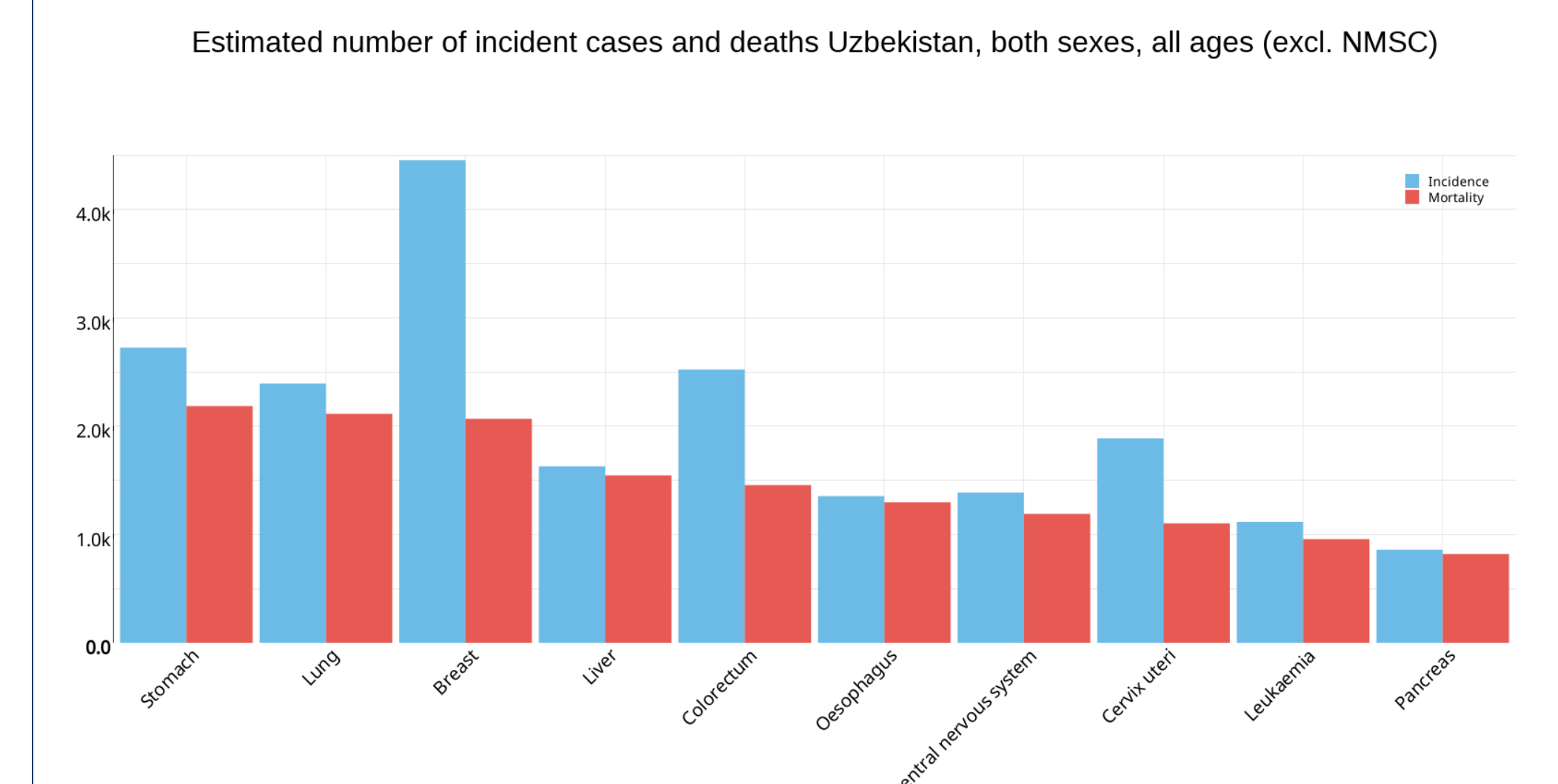


Figure 7. Incidence and mortality rates of cancer in both sexes, Uzbekistan, 2020

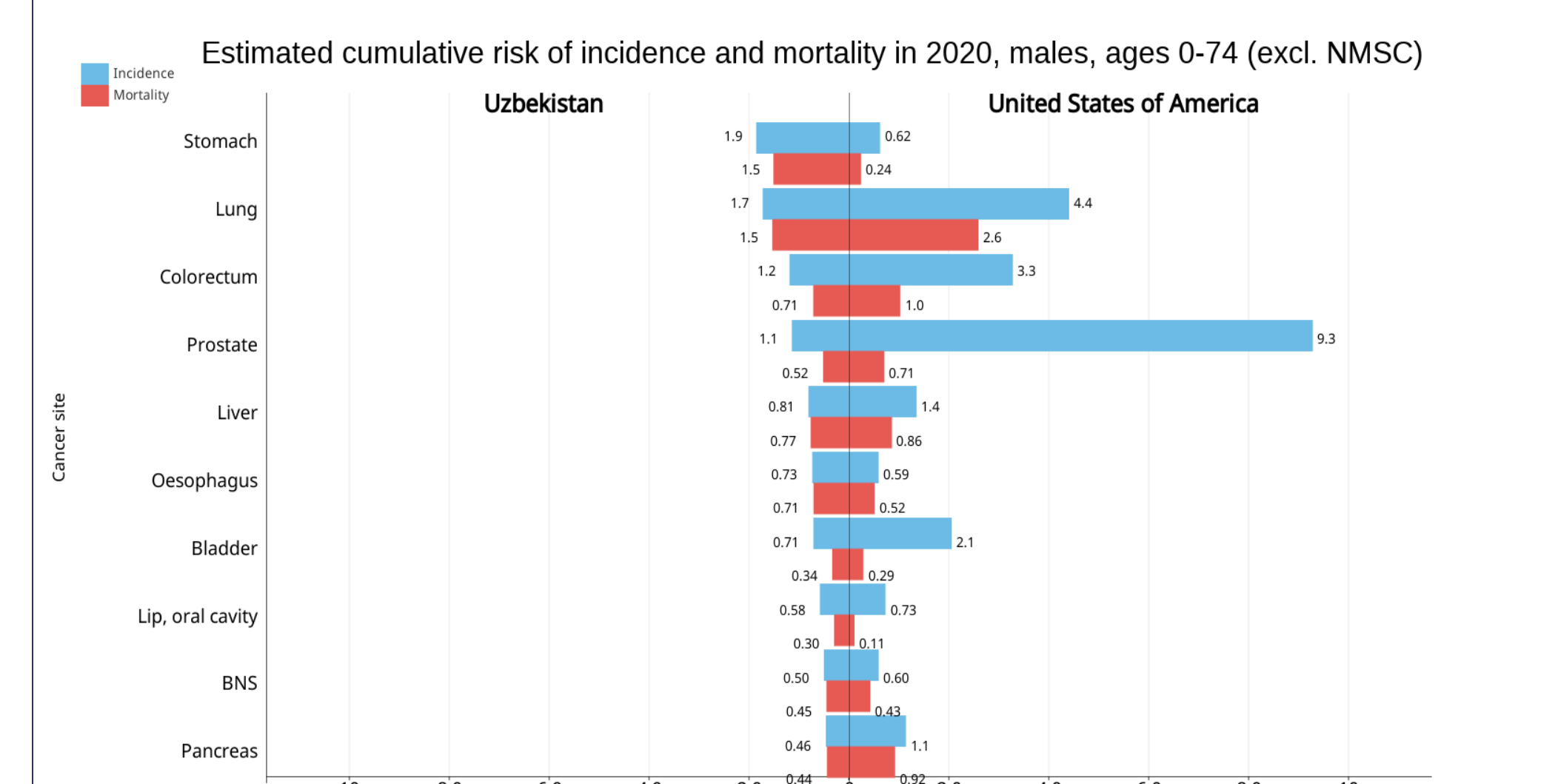


Figure 8. Cumulative risk of incidence and mortality, Uzbekistan vs. USA, 2020

Discussion

- Average life expectancy and combined median age in Uzbekistan is 72.0 years and 30.1 years respectively. There was a population decline which can be seen in population pyramid. This decline corresponds to the period right after the fall of the Soviet Union.
- Health care in Uzbekistan is mainly financed through taxation and out of pocket payments. The government is responsible for pooling and allocating all financial resources. Each level of government (national, regional, district) is responsible for financing certain healthcare institutions which can be seen in table 1.
- In period from 1990 – 2010, the number of hospital beds gradually declined. The number of psychiatric hospital beds remained low and steady.
- Lung cancer is the leading cause of cancer related death worldwide. However, in Uzbekistan the leading cause of cancer related death is stomach cancer which is a little bit higher than lung cancer's mortality rate in the country. The likelihood of developing stomach cancer is three times greater in Uzbekistan compared to the USA and likelihood of dying from stomach cancer is seven times greater in Uzbekistan compared to the USA. Based on my experiences, I think there are several factors that might lead to this increased incidence and mortality rates of stomach cancer. For example, Uzbeks drink very hot teas throughout the year, even during hot summer days. Compared to the USA, usual diet is very heavy in fats and salts.

My Observations

- I volunteered/shadowed a physician in the outpatient unit of the cancer center. They call it "polyclinic." It was a two-story building with approximately 20 exam rooms. Each room specialized in specific cancer type (pediatric, musculoskeletal, head and neck, skin, urology etc.). Average patient load was around 20 patients/day. The pediatric oncologist had the highest patient load with close to 40 patients/day.
- The cancer center had a medical tourism department. According to physicians from this department – in Central Asia, oncological care/treatments is most advanced in Uzbekistan and there are significant flow of patients from Central Asian countries.
- First major difference in oncological care was that there are no medical oncologist in Uzbekistan. Every physician in cancer center where I worked was a surgical oncologist. Consequently, preferred treatment was radical surgical resections of tumors.
- There are no hospices in Uzbekistan. However, some hospitals do have palliative care units. End of life care for terminal cancer patients is done at home. Government provides morphine and nursing care at home for terminally ill patients for free of charge.

- Patients presented with advanced stages of cancer.

- There is an acute shortage of physicians in rural areas. The government is trying to fix this issue by opening new clinics and incentivizing physicians by increasing their salaries and offering various benefits if they work in underserved areas.

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