Cancer Statistics in I.R. Iran in 2018

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International Agency for Research on Cancer (IARC), reported cancer incidence, mortality, and prevalence of all cancer types worldwide for 2018. The results were presented in the Global Cancer Observatory (GCO) as an interactive web-based platform to present global cancer statistics[1]. The GCO inform cancer statistics status across the world and support cancer research. These data are the best data available for each country worldwide, including IR. Iran.

According to this global cancer statistics in 2018, about 110,000 cancer cases occurred and about 56,000 patients died of it in Iran in 2018. The prevalence rate of cancer was 248.392 patients (**Table 1**). The age-standardized incidence rate (ASR) of all the cancer types, excluding non-melanoma cancer was 154.8 per 100,000 for males and 127.7 per 100,000 for females.

About 59,000 cancer patients were diagnosed among Iranian males and 51,000 patients among Iranian females. The most common cancer types in males were the stomach, prostate, colorectum, bladder, and lung cancers and the most common cancers among females were breast, colorectum, stomach, thyroid,

Table 1. Summary Cancer Statistics of I.R. Iran in 2018

	Male	Female	Both Sexes
Population	41 233 529	40 778 208	82 011 737
Number of new cancer cases	59 077	51 038	110 115
Age-standardized incidence rate (world)	154.8	127.7	141.6
Risk of developing cancer before the age of 75 years (%)	15.6	12.6	14.1
Number of cancer deaths	32 809	22 976	55 785
Age-standardized Mortality rate (world)	86.4	62.0	74.5
Risk of dying from cancer before the age of 75 years (%)	8.3	6.3	7.3
5-year prevalent cases	121 812	126 580	248 392

and leukaemia cancers (**Figure 1**). The most common prevalent cancer cases were bladder, prostate, colorectal, stomach and leukaemia cancers among Iranian males and were breast, thyroid, colorectal, leukaemia, and brain and central nervous system among females (**Figure 2**).

Age-standardized incidence and mortality rate for top 10 cancers were illustrated in **Figure 3**, and
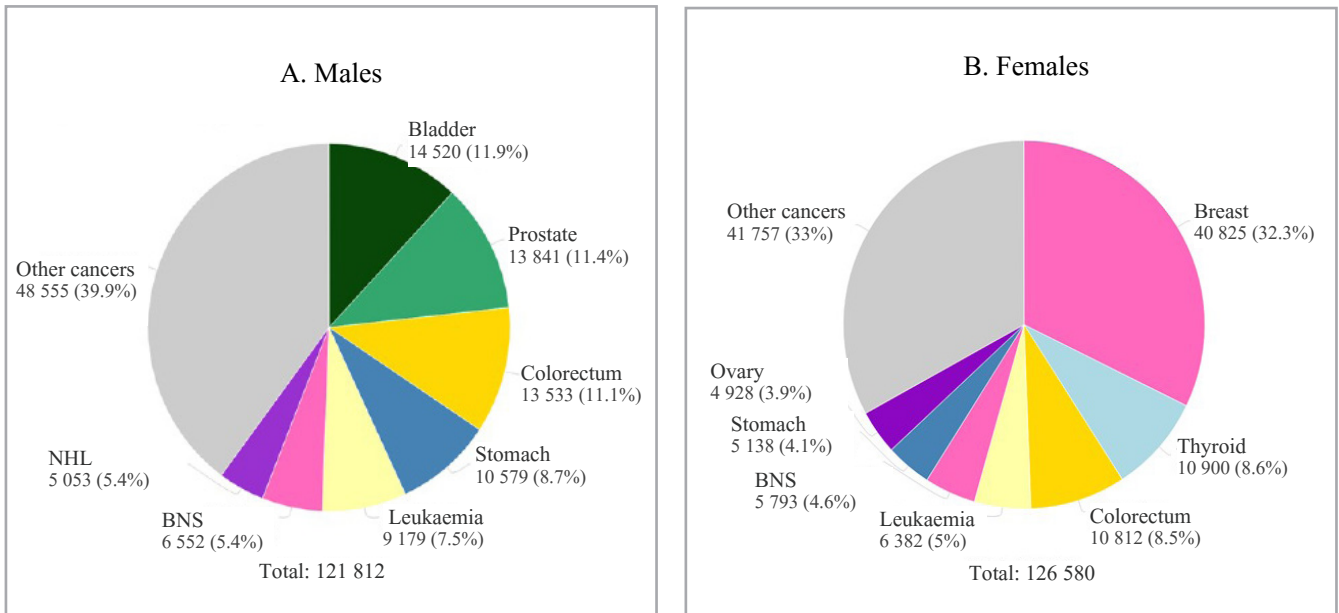

Figure 1(A-B). Estimated Number of Prevalent Cases (5-years) in 2018 in IR. Iran, Males, Females, all Ages
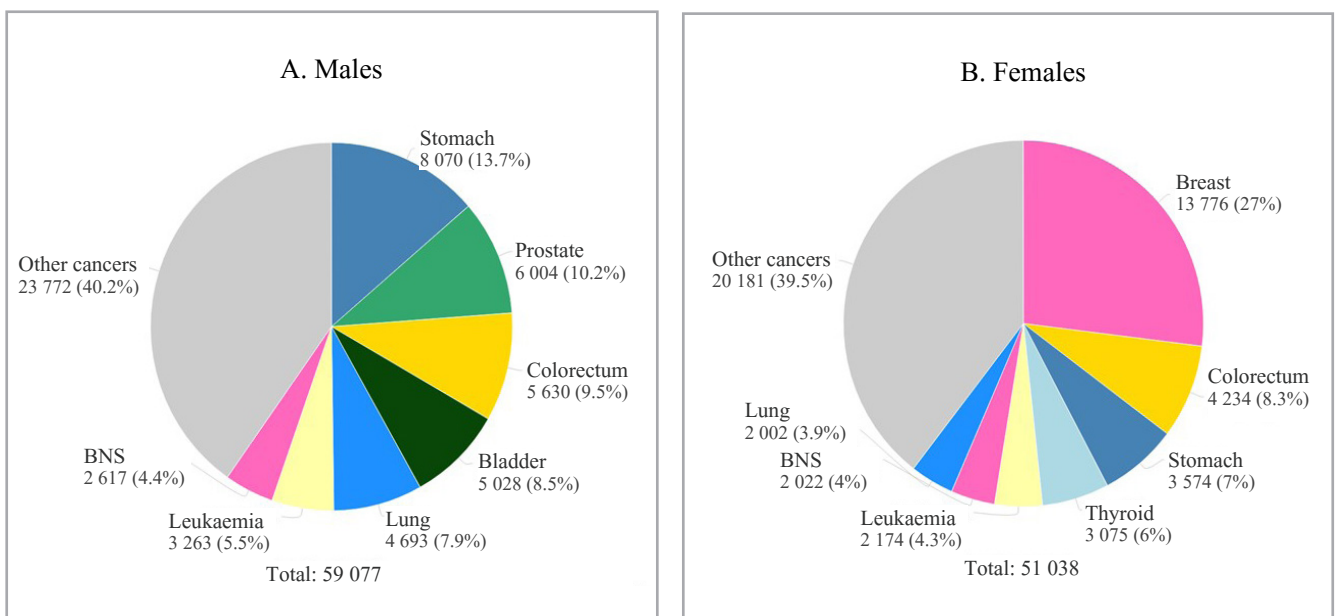

Figure 2 (A-B). Estimated Number of New Cancers in 2018 in IR. Iran, Males, Females, all Ages

Figure 4. The highest incidence rates per 100,000 were observed for stomach (ASR=21.6), prostate (ASR=16.6), and colorectal (ASR=14.6) cancers in males and for breast (ASR=31.0), colorectal (11.1), and stomach (ASR-9.8) cancers in females. In addition, the highest mortality rates were observed for stomach (ASMR=11.3), lung (ASMR=8.3), and colorectal (ASMR=5.6) cancers.
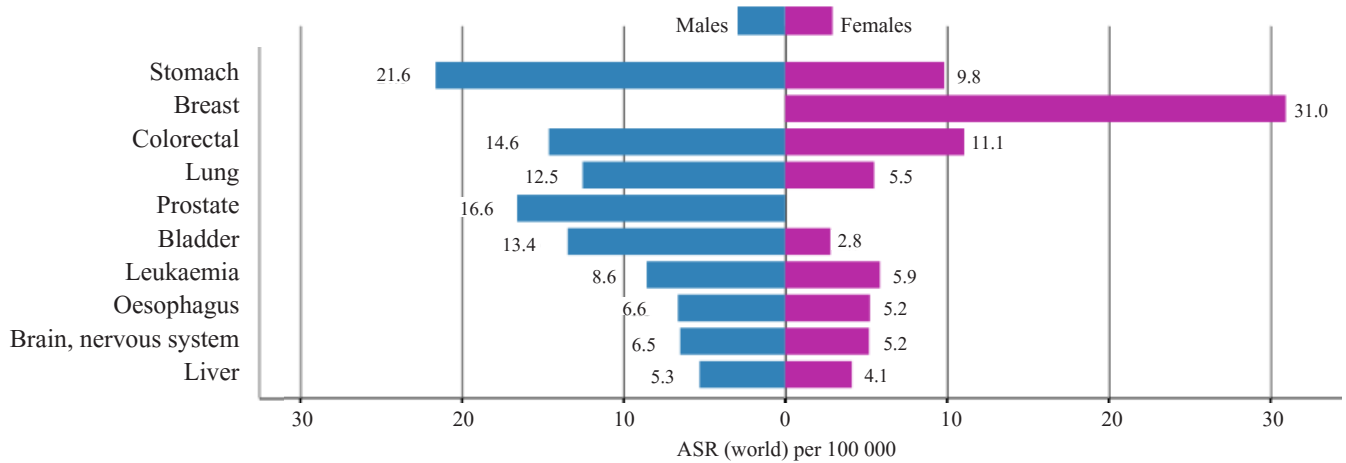

Figure 3. Age-Standardized Incidence Rates (ASR) per 100,000 for Top 10 Cancer Sites in I.R. Iran by Sex
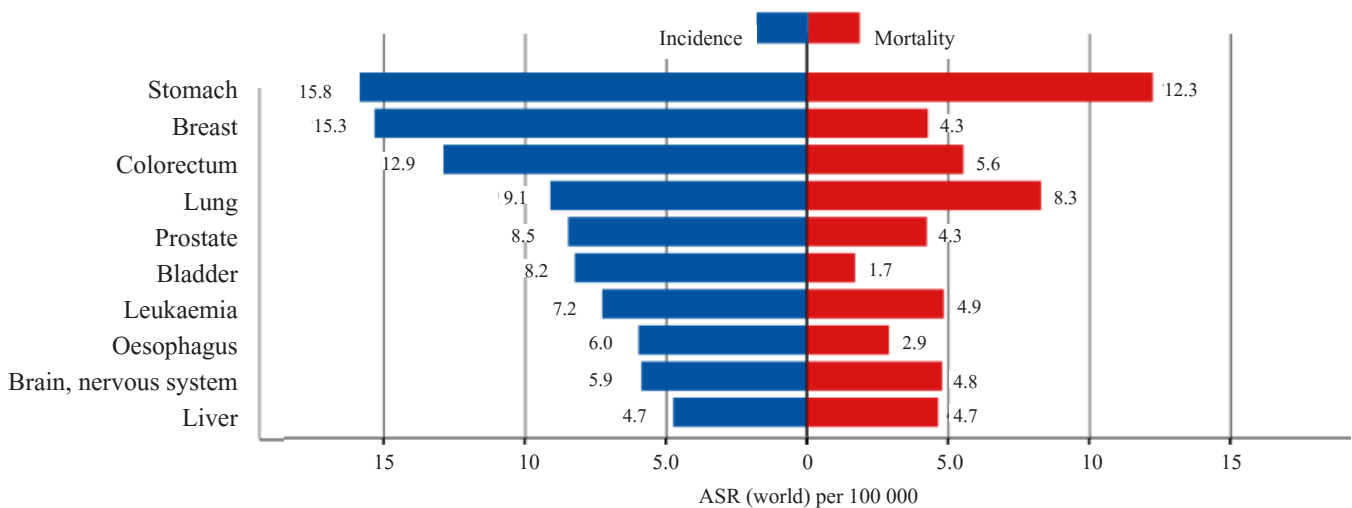

Figure 4. Age-Standardized Mortality Rates (ASMR) per 100,000 for Top 10 Cancer Sites in I.R. Iran by Sex
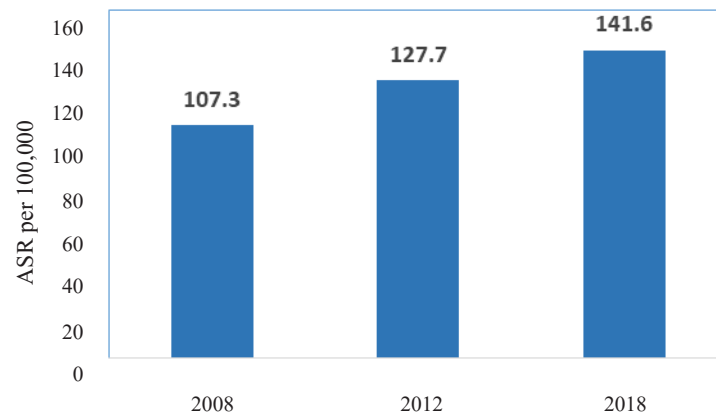
Figure 5. Increasing Trend in the Age-Standardized Incidence Rate (ASR) per 100,000
for All Cancer Sites from 2018 to 2018 (Excluding Non-Melanoma Skin Cancer)

The incidence and mortality rates of cancer has increased slightly during the last decades[2]. the ASR of all cancer sites, excluding non-melanoma skin cancer increased from 107.3 in 2008 to 141.6 per 100,000 in 2018 (**Figure 5**).

These statistics provide important insight for cancer control program in Iran. In addition, it will be the basis for the cancer research priorities. However, it is important to note that Iran inhibits more than 80,000,000 population and the ethnicity and lifestyle varies in different part of the country.

For instance, incidence rate of stomach cancer was reported to be higher in the northwestern and northern part of Iran compared to the southern part of the country[3], while bladder cancer is high in the southern part of Iran[4]. In addition, risk factor profile varies in different parts of Iran, while prevalence of cigarette smoking is high in the north and northwestern part of Iran, men and women who live in the southern part of Iran smoke water-pipe[5]. We expect a higher incidence of tobacco related cancers in these regions. The research priorities and cancer control programs need to be tailored based on a local status of cancer incidence and mortality and profile of risk factors in each province.

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