
Shailja C. Shah1,2, Fox Underwood3, Wee Khoon Ng4, Wai Yin Chan5, Daniel Castaneda1, N. Vicky Riyat6, Hassan Azhari3, Siew Ng5, Gilaad Kaplan3
1Mount Sinai Hospital, New York, NY; 2Vanderbilt University Medical Center, Nashville, TN; 3University of Calgary, Calgary, AB; 4Tan Tock Seng Hospital, Singapore, Singapore; 5Chinese University of Hong Kong, Hong Kong, HK; 6University of Tennessee HSC, Memphis, TN

BACKGROUND

- Gastric cancer: 5th most common cancer & 3rd most common cause of cancer-related mortality
- Disease incidence varies among regions within countries and among ethnicities.
- Risk factor: Helicobacter pylori - infects > 4.4 billion people/responsible of 80% of GC
- Sanitation and effective antibiotic therapy against H. pylori have changed the incident rate of gastric cancer over time

AIM: To determine the global incidence of gastric cancer in the current era.

METHODS

- Systematic literature search: EMBASE and MEDLINE
  - population-based studies
  - incidence rates of gastric cancer reported for 2007-2017
- Choropleth maps generated using QGIS software

RESULTS (con’t)

- 11,781 reports screened, 565 full text articles reviewed and 130 studies reporting gastric cancer incidence rates during or after 2007 were included for analysis.
- Data from 114 distinct countries were included. (Figure 1 and 2).
- The highest overall incidence rates of gastric cancer were in Iran, Japan, and China (40.1-61.7 per 100,000 person-years).
  - Males: China, S. Korea, Iran (59.1-193.4 per 100,000 person-years)
  - Females: Colombia, S. Korea, Iran (27.3-107 per 100,000 person-years)
- The lowest overall gastric cancer rates were in Gambia, Pakistan, Laos, and Timor-Liste (1.3-2.3 per 100,000 person-years).
  - Males: Ghana, Nepal, and Algeria (0.7-1.8 100,000 person-years)
  - Females: Ghana, Maldives, and Sudan (0.1-0.9 100,000 person-years).
- North America: incidence rates ranged from 8.7 to 25 per 100,000 person-years

CONCLUSIONS

- There is marked global variation in disease incidence with identifiable populations at very high risk for gastric cancer even in the current era.
- Preferential targeting of high risk populations and development of preventive strategies or early detection offer the highest potential for cancer alleviation.

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