

## Evaluation of Cancer Management in Iran

Ardeshir Ghavamzadeh<sup>1</sup>, Kamran Alimoghaddam<sup>2</sup>, Babak Bahar<sup>2</sup>,  
 Mohammad Jahani<sup>1</sup>, Seyed Asadollah Mousavi<sup>1</sup>,  
 Masood Iravani<sup>1</sup>, Amir Ali Hamidieh<sup>1</sup>,  
 Ali Khodabandeh<sup>1</sup>, Farnaz Khatami<sup>1</sup>

<sup>1</sup>Tehran Univ. of Medical Sciences, Iran,  
<sup>2</sup>Hematology-Oncology and Stem Cell Transplantation  
 Research Center, Tehran University of Medical Sciences,  
 Islamic Republic of Iran



Ardeshir  
Ghavamzadeh

The first documented cancer registry in Iran was established in 1967 in Babul city (North of Iran). The strategic plan of the “National Cancer Registry” was written in 1986 by the Ministry of Health. The Cancer Research Center of the Cancer Institute has registered people with cancers in the city of Tehran (the capital of Iran) since 1998. Since the limitations for the budget and a population based cancer registry were not practical throughout the country a method was designed entitled “Pathologic-Based Cancer Registry”: All pathologic records of various cancers are gathered from all pathological laboratories. During the years 1986, 1990, 2003, and 2006 over 20.000, 17.000, 38.000, and 59786 new cases of cancer were registered, respectively. The incidence rate of cancers is estimated about 100 cases per 100.000 populations. It is estimated that about 70.000 new cases occur in Iran annually. Five common cancers among women in Iran are breast, skin, colorectal, stomach, and esophagus. Five common cancers among men in Iran are skin, stomach, bladder, prostate, and colorectal. Cancer death was the third leading cause of death in Iran. It is estimated that over 30.000 deaths occur in Iran annually. The DALY (Disability Adjusted Life Years) of cancer was estimated to be over 450/000 years. During the past few decades following economic expansion and widespread travel of the Iranian population, connections to other parts of the world, some cancer disease patterns have changed in our country. Referring to our paper printed in 1997 in Volume 809 of the Annals of the New York Academy of Sciences, at that time, most parts of Iran had a nuclear family pattern but at this time, the family pattern has changed to smaller sizes in large cities and it makes cancer management especially in progressed cases more flexible. Colon cancer and female breast cancer incidence had increased in Iran especially in mechanized big cities. Apparently this is due to a westernized life style especially regarding food. Hepatitis B vaccination has been enforced according to health codes in Iran so it is hoped that the incidence of hepatocellular carcinoma will decrease in Iran in the near future. The smoking of tobacco products has been forbidden in public communities since 2004 in Iran but smoking has not decreased in private homes of Iranians so lung cancer will most likely not decrease in the next 10 years. Also, the selling, distribution and drinking of alcohol is forbidden by Islamic law. Stomach cancer and pancreatic cancer have not decreased in Iran as yet, but the eradication of helicobacter pylori in individual patients is progressing. The refrigeration of food products is widely practiced in villages so we will most likely witness a decrease of the incidence of stomach cancer in the near future in Iran. Ovarian cancer is not yet detected in the early stages in Iran like it is in other parts of the world and we will have problems in its treatment and management. Prostate cancer incidence in Iran has increased. This is apparently due to better detection of this cancer. Human immunodeficiency virus (HIV) associated cancers in Iran are very few due to cultural and religious rules of sexual contact. Non-solid tumor treatment management (especially leukemia and lymphomas) has been revolutionized in Iran during the past 20 years because of stem cell transplantation and its availability in large numbers in Iran but, still, we need to increase our transplantation centers to cover all the needs of patients.