

The direct medical costs of breast cancer in Isfahan-Iran

M. Davari¹, F. Yazdanpanah^{2,*}, F. Mokariyan³, M. Hosseini⁴, A. Nazari⁵

¹Management and Economics Research Centre, Isfahan University of Medical Sciences, Isfahan, Iran

²School of Pharmacy and Pharmaceutical Sciences, Isfahan University of Medical Sciences, Isfahan, Iran

³Isfahan Breast Cancer Research Centre, Isfahan University of Medical Sciences, Isfahan, Iran

⁴Department of Statistic and Epidemiology, School of Health, Isfahan University of Medical Sciences, Isfahan, Iran

⁵Department of Urology, School of Medicine, Rafsanjan University of Medical Sciences, Rafsanjan, Iran

Background and Aims: Breast cancer is one of the main causes of mortality and morbidity worldwide. The estimation of the direct medical costs of breast cancer can help payers of the cost to understand the burden of breast cancer on their limited financial resources as well as the society.

Methods: We used a cross-sectional study to calculate the direct medical costs of breast cancer among women in Isfahan - Iran. The medical records of all patients which were registered in Seyed Al-Shohada Hospital (SSH) between March 2005 and March 2010 were reviewed. The relevant data from the patients' profiles extracted. These were included age, disease stage, received health care services, days in hospital, and prescribed medications. The direct cost of received services calculated using both public and private medical tariffs.

Results: The total numbers of 467 patients in various disease stages were included into the study; 4.1% in stage I, 28.3% in stage II, 26.6% in stage III and 41.4% in stage IV. The average age of the patients was 49 years old. The average direct cost per patient per month in stages I to IV were, 222.17, 224.61, 316.51 and 828.52 US \$, respectively. The surgery cost was the main cost driver for stages I and II with private tariffs. But for stages III and IV, the medication cost was the main cost component for managing breast cancer. However, considering the public tariffs, the medication cost was the main cost driver for managing breast cancer in all disease stages.

Conclusions: The direct economic cost of breast cancer in Iran is very high; nonetheless, as the age of breast cancer in Iran is nearly 10 years lower than western countries, the burden of the disease in Iran is expected to be significantly high.

Keywords: Costs; Breast cancer; Iran