## **Original Paper**

## Effect of referral of cancer patients to medical centers outside Golestan province on the coverage and quality of population-based cancer registry data

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## **Abstract**

**Background and Objective:** Considering the importance of coverage and quality of data in Golestan population-based Cancer Registry (GPCR), northern Iran. This study was conducted to determine the effect of the referral of cancer patients to medical centers outside Golestan province on the coverage of the population-based cancer registry program.

**Methods:** This descriptive-analytic study was performed on all cancer patients registered in the diagnostic centers of Golestan province, northern Iran during 2008-10. Data of patients referred to the centers of the province from the bank of the Golestan province cancer registry program and data of patients referred to the centers outside the province were received from the Ministry of Health Department of Cancer. Data were analyzed using the record linkage method.

**Results:** A total of 6083 new cases of cancer were registered in Golestan province. According to the cancer data, 678 (11%) of them were referred to outside of Golestan province centers. 343 of these 678 patients (50.6%) were found as duplicate records between the two datasets. The most frequent cases were gastric cancers (70.4%), breast (63.5%) and esophagus (62.5%).

**Conclusion:** This study suggested that referrals of cancer patients to centers outside the Golestan province may result in an underestimation of about 5% in GPCR. This level of underestimation seems to have no considerable effects on completeness and quality of data in the GPCR.

Keywords: Cancer registration, Golestan, Low, Coverage

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Received 14 Jun 2016

Revised 30 Jul 2016

Accepted 6 Aug 2016