Evaluation of hematological and solid malignancies under chemotherapy referred to Imam khomeini hospital of Ardabil from march 2020 to march 2021 and their distribution based on demographic characteristics of patients

## **Abstract**

**Background:** Today, what requires the accurate registration of cancer and the implementation of appropriate methods of prevention and treatment of cancer diseases is the change in the status of diseases, so that the types of infectious diseases that were once considered as the main cause of death, today are relatively were brought under control, but due to changes in lifestyles and nutrition in different societies, increase in average life and life expectancy, the occurrence of cancer in populations has increased. Cancer control policies as well as cancer epidemiological research in developed countries depend on the existence of cancer registration and correct cancer statistics.

**Aim:** The aim of this study was to determine the types of hematological and solid cancers under chemotherapy referred to Imam Khomeini Hospital (RA) in Ardabil during 2019.

Materials and methods: Our study population consisted of patients undergoing chemotherapy who referred to the hematology department of Imam Khomeini Medical Center in Ardabil in 2019. The required information was collected from the hospital files and the pathology report sheets in the patients' files. Information about age, sex, place of residence and type of hematological or solid malignancy (according to the International Classification of Cancers or ICD-O) was determined from the patients' records.

Results: A number of 417 patients undergoing chemotherapy in Imam Khomeini Educational-Therapeutic Center of Ardabil were studied, among them 109 cases (27.3%) had hematological cancer and 289 cases (72.6%)had solid cancer. The average age of the studied patients was 56.42±14.67, and the lowest and highest ages were reported as 7 and 90 years, respectively. 213 (51.2%) of the studied patients were male and 203 (48.8%) were female; Also, 208 people (50.1 percent) of the patients reported their residence in Ardabil and 207 people (49.9 percent) reported their residence in the suburbs of Ardabil. The frequency of types of cancer was reported in the order of frequency as follows: 150 cases (37.7 percent) GI tract cancer, 38 cases (9.5 percent) lung cancer, 36 cases (9 percent) breast cancer, 23 cases (5.8 percent) gynecologic cancers, 14 cases (3.5%) of urological cancer, 13 cases (3.3%) of sarcoma, 8 cases (2.1%) of head and neck cancer, 4 cases (1%) of metastasis of unknown

origin and 3 cases (0.7 percent) of Melanoma. Also, Among hematological malignancies, 17.6% of malignancies originated from bone marrow cells (including MM 8.5%, MDS 0.3% and leukemia 8.8%) and 39 cases (9.8 percent) were lymphoms.

**Conclusion:** Moving to the established stages of epidemiological transmission opens a window of opportunity for health authorities to set executive laws to better control the current and future burden of non-communicable diseases in the rapidly aging Iranian population.

**Key words:** solid malignancy - hematological malignancy - chemotherapy