

LETTER TO THE EDITOR

## Outpatient cancer care in a turkish university hospital

Dear Editor

Turkey is a country with a size approximating that of Texas and a population over 65 million (2000 census). There are approximately 70 medical oncologists with formal training and some 50 trainees in this specialty [1]. This number is far below of the country's needs and the gap is filled by many other specialists, mainly pneumonologists and other internal medicine subspecialists. Although general surgeons are not, urologists and neurosurgeons are active, administering chemotherapy in their individual units. Because of deficiencies in data collection systems, it is not well known which specialties are providing systemic chemotherapy to cancer patients.

Marmara University Hospital is a 350-bed hospital in the asian side of Istanbul and serves as a teaching hospital for the only medical school in this part of the city [1]. An outpatient intravenous therapy unit with 9-bed capacity opened in January 1997 and a formally trained medical oncologist was appointed to work 8 months later. Until then, a self-declared medical oncologist treated cancer patients, and gradually faced out of oncology practice in late 1999 and joined back to hematology. The unit expanded to 14 beds in February 1998.

We gathered the patient data to find out which medical specialties are providing outpatient chemotherapy services in our hospital and how the arrival of a formally trained medical oncologist impacted this practice.

We analysed the records of the outpatient intravenous therapy unit patients from January 1997 to December 2000 with regard to the kind of treatment administered (chemotherapy *versus* supportive infusional treatments, including blood transfusions) and which specialty team ordered this treatment .

Comparing 1997 with 2000, the total number of chemotherapy administrations increased by 109% (from 1620 to 3385). This was mainly due to a 608% increase (from 384 to 2336) in medical oncology patients. Patients treated by the pulmonary division decreased by 31% (from 353 to 243), and those treated by the hematology division decreased by 36% (from 662 to 422). Although patients treated by the rheumatology division (mostly infusional corticosteroids) increased from 53 to 77, a decline was observed on a percentage basis (from

3.3% to 2.3%). Radiation oncology infusional treatments (mostly amifostine for xerostomia) increased from 3.4% to 9.1%. The neurology department switched their bolus corticosteroid treatments to inpatient administration, and the nephrology department opened a hemodialysis unit where bolus corticosteroids for renal disorders were administered. The gynecology department referred their cancer patients to the medical oncology department. All along, the majority of cancer chemotherapy was ordered by the medical oncology, hematology and pneumonology divisions. Medical oncologists, hematologists and pneumonologists ordered 86.4 % (23.7%, 40.9%, and 21.8%, respectively) of all chemotherapy applications in 1997. However, in 2000 this relationship changed radically with medical oncologists, hematologists and radiation oncologists ordering 69%, 12.5% and 9.1% of the chemotherapy prescribed, respectively. Table 1 outlines these changes.

Cancer is a common problem in the Turkish society [2], and an adequate number of medical oncologists are urgently needed to provide appropriate cancer care to these patients. Meanwhile, because of that need, other specialists are providing conservative cancer therapies when no medical oncologist is available. The number of medical oncologists is expected to rise to adequate levels within the next decade [1]. Still, it is not clear whether self-declared cancer care providers will leave their positions to these new coming specialists.

Table 1. Patients treated in the outpatient infusional therapy unit according to departments

Department	Patients in 1997 n (%)	Patients in 2000 n (%)
Nephrology	51 (3.1)	0 (0)
Pneumology	353 (21.8)	243 (7.1)
Hematology	662 (40.9)	422 (12.5)
Gynecology	54 (3.3)	0 (0)
Rheumatology	53 (3.3)	77 (2.3)
Medical oncology	384 (23.7)	2336 (69)
Neurology	8 (0.5)	0 (0)
Radiation oncology	55 (3.4)	307 (9.1)
Total	1620 (100)	3385 (100)

Our findings point out that with the presence of a medical oncologist supported by the institution as provider of solid tumor treatment, it is likely that many other specialists will refer their patients to medical oncologists in our country. Pneumonologists are the ones with the heaviest involvement in chemotherapy applications and they may be the ones with the greatest resistance to this change.

## References

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Received 30-07-2002; Accepted 02-09-2002

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