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# Background

During the last 5 years, there has been a trend of an increased number of Gaza patients referred for health care to non-Ministry of Health facilities. This is attributed to the weakened public health system, shortages of drugs, medical disposables and equipment, inadequate labs, and lack of skilled human resources and specialized services to address the changing population needs toward more non-communicable and chronic disease care. The health system capacity is also hindered by the closure of the Gaza Strip since 2007, and the political, financial and developmental restrictions in the context of Israeli occupation. However, actual reasons for referrals have not been studied.

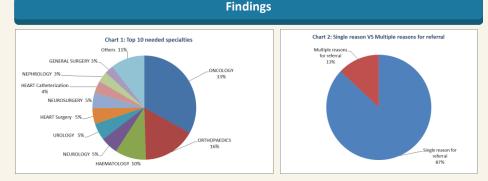
## Methodology

Referring physicians in Shifa Hospital, which alone generates 50% of referral requests in Gaza, completed 1000 questionnaires regarding referrals requested in October and November 2015, noting diagnosis and recommended treatment without patient ID, and selecting reason for referral from a checklist. Data were analyzed using excel. Quality of data collection was checked on 10% of questionnaires using patients' records while data entry was checked for 5% of the questionnaires.

## Findings

Characteristics of patients: 47% female, 53% male; 65% from Gaza governorate, 34% other governorates; 9% urgent, 61% non-urgent referrals and 30% unreported. Urgent referrals were mainly for oncology (30%), heart surgery (12%), hematology (9%), neurosurgery (8%), neurology (6%) and general surgery (5%).

The most frequent needed specialties for referred Gaza patients were: oncology - 33% of all referrals, orthopedics - 16%, and hematology - 10% (Chart 1).

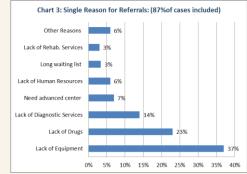


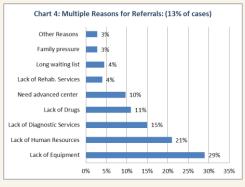
#### Physicians' explanations for 87% of referrals were attributed to a single reason:

- 37% lack of medical equipment;
- 23% lack of needed pharmaceuticals;
- 14% lack of diagnostic services:
- 7% lack of advanced center:
- 6% lack of specialized human resources; 3%-long waiting list,
- 3% lack of rehabilitation services
- 6% for other different reasons. (of
- which, 0.9% family pressure (Chart 2).

#### Of those referred for multiple reasons 13% of cases, physician explanations were:

- 29% lack of medical equipment 21% - lack of specialized human
  - resources, 15% - lack of diagnostic services,
  - 11% lack of needed pharmaceuticals,
  - 10% needed advanced center.
- 4% lack of rehabilitation services, 4%due to long waiting list,
- 3%- due to family pressure
- 3% other different reasons (Chart 3).





Special thanks for Shifa hospital administration and the department of medical reports and referrals.

### Discussion

Referrals for Gaza patients are driven primarily by the lack of medical equipment and pharmaceuticals, confirming data on health system shortages. Secondary reasons were a lack of diagnostic services, human resources and rehabilitation services, also major features of the weak health system.

Radiotherapy services was one of the main needs for Gaza patients (30%), but the lack of more basic medical equipment was also important: isotope scan, ESWL, laser, ERCP, arthroscopes, endoscopes, surgical endoscopes, pacemakers, PET scan, equipment for urodynamic study, equipment for joint replacement and hyperbaric oxygen therapy among others.

## **Recommendations**

Referrals cannot be reduced without Immediate and serious sustainable investment in the health system in the Gaza Strip to adequately address health needs and increase access to quality health care.



Shifa hospital, December 2015 © WHO