Why our tertiary care hospital emergencies are overcrowded? Faulty referrals or anything else: A study from a Teaching Hospital of North India

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ABSTRACT

Objective: To understand the reasons for referral of patients received at SKIMS Srinagar.

Methods: A prospective study was conducted at SKIMS during a study period from October 2019 to December 2019. The study sample consisted of patients referred to SKIMS emergency medicine department.

Results: Lack of expertise and equipment were the most common reasons given for referral (>90.0%).

Conclusion: The primary and secondary level hospital services be strengthened and increased so as to limit inappropriate use of tertiary care referral hospitals.

Key words: Referral System, Tertiary Hospitals

Introduction

Referral is a process in which a health worker at a one level of the health system, having insufficient resources (drugs, equipment, skills) to manage a clinical condition, seeks the help of a better or differently resourced facility at the same or higher level to assist in (WHO).¹

Referral system plays a vital role in management of diseases in any healthcare system. Typically, this system is pyramidal. Primary healthcare centers (PHC) constitute the base, which is large in numbers. Less number of secondary centers are in the middle, and a fewer number of tertiary care centers constitute the top. Secondary and tertiary level centers are also important for appropriate for training programs to strengthen our health care workforce ².

Sub Centres (SC) Primary Health Centres (PHC) Community Health Centres (CHC) Sub District (SD) District Level (DH) Tertiary Health Facilities in Medical College Hospitals (MC) Super Speciality Hospitals

Figure 1: Scheme of referrals in India

Unfortunately, a different scenario is observed at ground level. It is opposite to the principle mentioned above. In India any one (patients) can go to anywhere, irrespective of level of existing architectural hierarchy in health care system without any referral. It exerts a huge burden on the higher level facilities. Usually it is seen that large number of patients with minor illnesses flock around the Out Patient Departments (OPDs). Ideally these patients can be easily tacked at the lower level health facility. A study shows that more than 50% morbidity could have been seen at the PHC level. Unfortunately, they consume resources of a higher level health facility, which can be effectively utilized for the serious ones ³.

An active referral system ensures a handy relationship between every levels of health care delivery system i.e. primary, secondary and tertiary health care. It also ensures public to receive the optimal utilization of health care which is adjacent to their residence 4^{4} .

The study aimed to understand the pattern of referrals being received at SKIMS emergency and ways to reduce load on the services.

Material and Methods

Study Design

A prospective study was done to determine the characteristics of patients received at SKIMS. Patient demographic characteristics, referral diagnoses, sources of referral and outcome were recorded.

Sampling methods

The study involved all patients referred to SKIMS emergency medicine department during the study period from all sources over a period of three months from October 2019 to December 2019.

Inclusion Criteria

The cases studied were referred from other health facilities.

Exclusion Criteria

Self referrals were excluded from the study.

Results

A total of 2000 patients were studied during the study period.

Demographic characteristics

A total of 2000 patients were studied out of which majority of the patients were from rural areas belonging to the age group of 31-60 years.

Table 1: Demographic characteristics

Feature	n=2000	
Gender	Male	1140(57.00%)
	Female	860(43.00%)
Domicile	Rural	1360 (68.00%)
	Urban	640 (32.00%)
Age group	<15	120 (6.00%)
	16-45	480 (24.00%)
	31-60	1200 (60.00%)
	>60	200 (10.00%)
Marital status	Married	1100 (55.00%)
	Unmarried	900 (45.0%)

Sources of Referral

Majority of the cases were from district hospital and district medical colleges in addition to it a fraction of the patients were referred from private hospitals also.

Table 2: Source of Referral

Feature	n=2000
Private Hospitals	180 (9.00%)
Government hospitals	PHC 20(1.00%)

CHC 400(20.00%)
District Hospitals 900(45.00%)
Medical Colleges 500(25.00%)

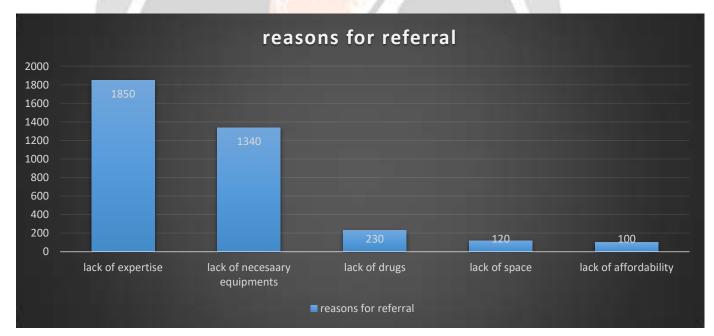
Reasons for Referral

The main reason for the referral was lack of expertise and lack of equipment's at referring centres.

Table 3: Reasons for Referral

Feature	n=2000
Lack of expertise(specialists/ superspecialists)	1850(92.50%)
Lack of necessary equipment(ICU beds, monitors)	1340(67.00%)
Lack of drugs(Life saving drugs, high end antibiotics)	230(11.50%)
Lack of space/beds	120(6.00%)
Lack of affordability	100(5.00%)

Figure 2 : Reasons for Referral



Discussion

Referral system plays a vital role in management of diseases in any healthcare system. An active referral system ensures a handy relationship between every levels of health care delivery system i.e. primary, secondary and tertiary health care. It also ensures public to receive the optimal utilization of health care which is adjacent to their residence One of the major aim of referral system is to make cost-effective utilization of health care. Hence it ensures better quality care in all levels if, it is functioning properly.

A good referral system should have following characteristics¹

- A. Patients should be given optimal care at the right level, right time and right cost.
- B. Optimal and cost-efficient utilization of health care systems.
- C. Optimal and appropriate utilization of specialist services for needy persons.
- D. Optimal utilization of primary health care services.

Multiple studies have documented the root causes of failure in referral systems in India.¹

These are:

- 1. Lack of skilled and motivated manpower, especially in secondary level.
- 2. Inadequate infrastructure in the PHCs.
- 3. Non adherence on the referral system guidelines.
- 4. Lack of accountability in each level for controlling of unnecessary referrals.
- 5. Lack of back referral of minor cases coming directly to higher level.

6. Non-availability of universal health card like in developed countries where the health facility for primary treatment or screening is indicated for a particular population.¹

In our study major reasons for referrals were lack of expertise (specialists/ superspecialists) in 92.50% of the cases followed by the lack of necessary equipments in 67.00% of the cases. The similar results were obtained by the studies conducted in Honduras⁵ and Tanzania⁶, showing a common trend in developing world.

Conclusion

Key factors impacting on patient health seeking behaviour were mainly the inadequacy of local hospitals especially at district level. Efforts to strengthen health care referral systems require, in addition to improving service capacity of the tertiary care hospitals, a corresponding effort to increase the capacity of primary and secondary level hospitals. While this strategy will take a long time to be realized in many countries, short term strategies to increase access by the general population to the underutilized private sector need to be explored. Such strategies might include extension of national health insurance to cover all citizens.

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