

Original Research Article

Referral pattern of patients coming to Mandya Institute of Medical Sciences, Mandya

M. Vinay, J. Bharath*, B. R. Harish

Department of Community Medicine, Mandya Institute of Medical Sciences, Mandya, Karnataka, India

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*Correspondence:

Dr. J. Bharath,

E-mail: bharathlakshmisagara@gmail.com

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ABSTRACT

Background: In the act of medical practice, referral is the transfer of a patient's care from one physician or clinician to another. Appropriate referral is an integral part of a complete quality health care management. At present, patients can visit any level of health care irrespective of severity of their health condition and most of the burden of these patients is on tertiary centers. This study was done to describe the Referral Pattern of Patients Coming to Mandya Institute of Medical Sciences, Mandya.

Methods: It was a cross sectional study conducted from October 2017 to November 2017 with sample size of 400, p=50%. Sampling technique used was convenient sampling and data was collected by interview using the semistructured questionnaire.

Results: Among the study population 197 (49.3%) were males and 203 (50.7%) were females, 392 (82.3%) had BPL card. Mean distance travelled by them to MIMS was 17.7 ± 14.8 km. Medicine department n=80 (20%) followed by ophthalmology department n=64 (16%) were the most frequently visited departments. Mean distance to the nearest health center from their place of residence was 3.2 ± 2.9 km. 148 (37.0%) visited the health center near their place of residence before coming to MIMS and 253 (63.0%) did not visit.

Conclusions: Most of the patients visited tertiary healthcare center (MIMS) without visiting health center near to them, though the distance is more and availability of specialists and low cost of treatment were the main reasons for visiting MIMS.

Keywords: Referral pattern, Tertiary care, Primary health care

INTRODUCTION

A referral can be defined as 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 assistance of a better or differently resourced facility at the same or higher level to assist in or take over the management of the client's case.¹

An effective referral system ensures a close relationship between all levels of the health system and helps to ensure people receive the best possible care closest to home. It also assists in making cost-effective use of hospitals and primary health care services. Support to health centers and outreach services by experienced staff from the hospital or district health office helps build capacity and enhance access to better quality care. In many developing countries, a high proportion of clients seen at the outpatient clinics at secondary facilities could be appropriately looked after at primary health care

centers at lower overall cost to the client and the health system.²

The health care system in India is plagued by overcrowding, lack of specialist doctors, paramedics and an effective referral system. There is a provision for referral of patients from subcentres, primary health centres, community health centres to subdistrict or district level and then to tertiary health facilities in medical college hospitals, superspeciality hospitals and research institutes under the public health care in India. The actual practice of referral is entirely different than that is laid down in principle. Anyone can go to any level of health care system without any referral. This poses a burden on the secondary and tertiary level hospitals or health settings where a large number of patients with minor ailments come the outpatient departments and increases the bulk of patients who can be easily tacked at the lower level health care settings.³

For a referral system to work at its best, relationships between service providers should be formalized and referral procedures should be agreed upon. All levels of the health system, including primary health care services, need to be functioning appropriately.⁴ This present study was conducted to describe the referral pattern and reasons of patients coming to OPD (Out Patient Department) registration counter of Mandya Institute of Medical Sciences (MIMS), Mandya.

Objectives

- To describe the referral pattern of patients coming to OPD (Out Patient Department) registration counter of Mandya Institute of Medical Sciences, Mandya.
- To describe the reasons for patients visiting MIMS.

METHODS

Study design and area

Cross-sectional study carried out in Mandya Institute of Medical Sciences (MIMS), Mandya.

Study population

Patients coming to OPD counter of Mandya Institute of Medical Sciences, Mandya

Inclusion criteria

Inclusion criteria were patients ≥ 18 years of age; patients visiting MIMS OPD counter between 9am to 4pm.

Exclusion criteria

Exclusion criteria were persons who come for certificates like birth/death certificates, fitness certificate etc.

Sample size: 400

Sample size was calculated using the formula $4pq/r^2$, where $p=50\%$ (since no previous studies were available, we assumed prevalence of referral to be 50%) and $r=10\%$ of p .

Sampling method: Convenience sampling

Data collection

Data collection was done during October - November 2017 by interview using semi structured questionnaire.

Statistical analysis

Data collected were entered in MS-Excel and analyzed using Epi-info software. Descriptive statistical measures like percentage, mean, and standard deviations were used.

RESULTS

In the present study out of 400 study participants both males and females were in equal proportions. Majority i.e., 392 (82.2%) had BPL ration card and 121 (30.3%) of them had no formal education. Most of the study participants i.e., 343 (85.8) were residing outside the Mandya city (Table 1).

Majority i.e., 252 (63.0%) of the study participants did not visit to the health center near to them before coming to MIMS and among those visited i.e., 148 (37.0%) only 65 (43.9%) were referred. Main reason for referral was for specialist opinion followed by availability of imaging facility (Table 1).

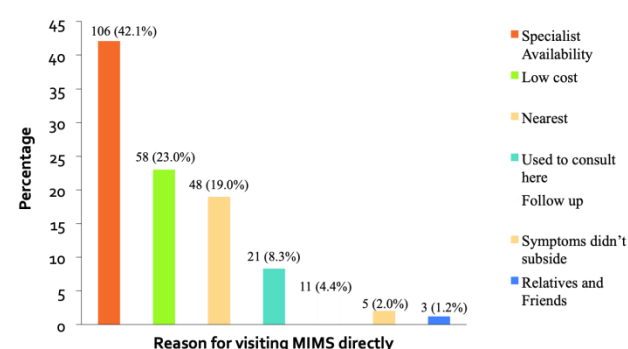


Figure 1: Distribution of study participants according to their main reason for visiting MIMS directly (n=252).

Among those who came to MIMS directly i.e., 252 (63.0%) without visiting health center near to them the main reasons given by them for coming here were 'specialist availability' 106 (42.1%) followed by 'low cost of treatment' 58 (23.0%) (Figure 1).

Table 1: Socio-demographic details and referral pattern among the study participants.

	Frequency	Percentage (%)
Distribution of study participants according to gender (400)		
Female	203	50.7
Male	197	49.3
Distribution of study participants according to BPL (below poverty line) card status (n=400)		
Have BPL ration card	392	82.2
Don't have BPL ration card	71	17.8
Distribution of study participants according to their level of education (n=400)		
No formal education	121	30.3
Primary school	88	22.0
High school	95	23.8
Pre-university education	41	10.3
Degree holders	27	6.8
Distribution of study participants according to place of residence (n=400)		
Mandya city	57	14.3
Other than Mandya city	343	85.8
Distribution of study participants according to their visit to nearest health center before coming to MIMS (n=400)		
Visited	148	37.0
Not visited	252	63.0
Referral status of the study participants after their visit to nearest health center (n=148)		
Referred	65	43.9
Not referred	83	56.1
Reason for referral from the nearest health center (n=65)		
Specialist opinion	26	40.0
Imaging facility	20	30.8
Drugs availability	11	16.9
Blood investigations	8	12.3

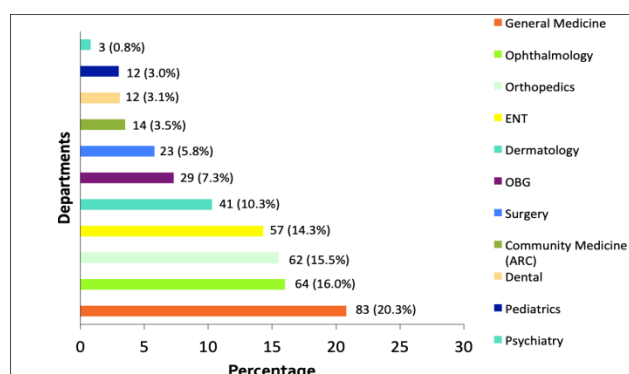


Figure 2: Distribution of study participants according to departments visited (n=400).

Approximate distance travelled from their residence to MIMS is 17.7 ± 14.8 km and approximate distance to the nearest health center from their place of residence is 3.2 ± 2.9 km.

Most commonly visited departments were 'General Medicine' by 83 (20.3%) followed by 'Ophthalmology' by 64 (16.0%) and Orthopedics by 62 (15.5%) of the study participants (Figure 2).

DISCUSSION

In the present study most of the study participants did not visit to the health center near to them before coming to a tertiary center and among those visited less than fifty percent were referred. We need to emphasize the fact here that study subjects travelled more distance to reach tertiary center as compared to distance they need to travel to a health center near to them. This shows their belief that the tertiary care center is a one-stop destination for all their health problems and health center near to them doesn't serve their purpose.

While a lot of studies have focused on various aspects of the topic or subject area, none of them deal with this particular research idea.

In a study conducted by Jhanjee et al, in Department of Psychiatry, University College of Medical Sciences & GTB Hospital, Dilshad Garden, Delhi, psychiatric consultation was sought for various reasons including expert opinion, abnormal behavior, irrelevant talk and other reasons and the medicine department sent the maximum number of consultations, followed by surgery, ophthalmology, orthopaedics.⁵ Present study doesn't focus on any one department but gives a comprehensive picture of the referral pattern and also their study involves both in patients and out patients where as our study focus on outpatient department only.

In a study conducted by Manjunatha et al, in Cheluvamba Hospital, Mysore, Karnataka, among in-patients of Cheluvamba Hospital who have been referred, absence of doctors in the periphery was the most common cause for referral and 86.67% of the study participants had to travel greater than 25 km to reach Cheluvamba hospital.⁶ These findings are similar to the present study where the common reason given by the study subjects to visit MIMS directly was availability of specialists. This shows the need to strengthen the lower levels of health care centers and increase the confidence among the patients.

In a study conducted by Parekh et al, in Department of Paediatrics, Smt NHL Municipal Medical College, Ahmedabad regarding Referral Pattern of Neonates at Tertiary Care Centre, most of neonatal referrals were self or with improperly organized transport and associated with inadequate pre-referral stabilization, incomplete advice regarding care during transport and poor

communication.⁷ Finding are similar to the present study where most of the study subjects were self-referred.

CONCLUSION

Most of the patients visited tertiary healthcare center (MIMS) without visiting health center near to them, though the distance is more and availability of specialists and low cost of treatment were the main reasons for visiting MIMS. Among those who were referred: Specialist availability and imaging facilities were the main reason for referral. We recommend that the Primary level healthcare should be strengthened to provide necessary care.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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