Original Article

Patient Referral Trail and Fate of Patients Referred to Surgical and Medical Emergency Department of Services Hospital, Lahore

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ABSTRACT

Objective: To assess the formal referral system and the fate of patients referred to Emergency Department of Services Hospital, Lahore.

Methodology: It was a cross-sectional study conducted in Surgical and Medical Emergency Department of Services Hospital, Lahore. The sample size was estimated by WHO statistical software S size using the formula for estimating a population proportion with specified related precision. At confidence level of 95%, anticipated population proportion of referred patient is 50% and relative precision of 10%. The sample size is 129. A detailed structured questionnaire was used to collect data. The data was analyzed by making tables, estimating their frequencies and percentages.

Results: The study assessed the referral system and fate of 129 patients coming to Surgical and Medical Emergency Department. Out of 129 patients, 10.9% reported to Basic Health Care Units (BHUs), 14.7% reported to Rural Health Care Centers (RHCs), 14.7% reported from District Headquarter (DHQ) Hospital and 59.7% were referred by private clinics or hospitals. Out of these patients, 1.6% were referred by dispensers, 5.4% by lady health workers (LHWs), 24.8% by house officers, 56.6% by medical officers and 11.6% by consultants. Regarding the fate of these patients, 91.5% patients were still admitted, 7.0% were discharged and 1.6% left against medical advice.

Conclusion: Majority of the patients were referred by private sector clinics or hospitals. The main reason for referring a patient is lack of availability of specialist doctors at their available healthcare facility. Health personnel carrying out referrals are not trained to recognize problems that can be treated at their health facility centers. Necessary steps to make patients utilize primary and secondary health facilities need to be put in place, so that only serious patients are screened out for tertiary care facilities.

Keywords: *BHU. RHC. DHQ. Patient referral. Services Hospital, Lahore.*

INTRODUCTION

A referral can be defined as a process in which health care workers at one level of system having insufficient resources like drugs, equipment, skilled healthcare provider to manage clinical condition seek assistance of a better and differently resourced facility at the same or higher level to assist in or take over management of patient case.[1]

The modern referral system was first initiated in the United Kingdom and was well established by 1948 nationalization of hospitals. Patient referral services are an integral part of a well functioning health system. The goal of referral system is to ensure that patient is dealt at an appropriate health facility level and receives cost effective and quality management. In addition, referral also serves to provide linkage between primary, secondary and tertiary care. A referral system at all levels is used as a mean to facilitate flow of patients among healthcare providers.[2]

In many developing countries, the referral is an essential part of preventing unnecessary deaths. In Tanzania, the Ministry of Health encourages referrals from dispensaries and health centers to district hospitals, although no official forms available for those being referred.[2]

The healthcare system in India is plagued by overcrowding, lack of specialist doctors, paramedics and an effective referral system. Pakistan healthcare system is a three tiered healthcare delivery system: primary, secondary and tertiary care. In public health sector, the first rung in referral hierarchy is lady health worker (LHW) of the National program, There are 5000 BHUs, 600 RHCs, 7500 other healthcare facilities and over 100,000 LHWs.[5] There are well-equipped tertiary level teaching hospitals to manage the burden of patients referred from peripheral areas of Lahore.[3]

Tertiary care is specialized consultative health care, usually on referral from primary or secondary medical care personnel and has facilities for special investigations and treatment.[4]

The referring physician has valuable data that can inform healthcare provider, including the history of the current problem, past medical problems, medications, allergies and frequently a concrete assessment and plan for the patient such as hospital admission. This profile supports the creation of a referral system including the nature of the current problem, past medical history and medications upon arrival of the patient in the hospital. The patient is identified as the referral and the transfer

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document should be incorporated into the concerned department. If the patients are treated at the first level referral center they may be referred back to the original primary healthcare center with the necessary follow-up advice. This will enhance the trust towards the primary care centers by the patients from the catchments areas.[5] The study aims at evaluating the barriers and constraints to the referral system in our healthcare system at different levels and appraise the access to healthcare system provider and interaction between primary, secondary and tertiary healthcare centers. This will also help in determining the best disciplines to provide comprehensive and integrated healthcare to patients.

METHODOLOGY

It was a cross-sectional study conducted in Surgical and Medical Emergency Department of Services Hospital, Lahore. This is a tertiary care hospital having 1196 Beds comprising of 31 departments. One twenty nine patients referred to emergency department of services hospital were included in this study using non-probability convenient sampling. A data collection tool was objectively developed and pre-tested in the Surgical and Medical Emergency Department. A data collection team consisting of 4th year medical students was organized and trained for the data collection. A detailed structured questionnaire was used to collect data. Face to face interview was conducted. The questionnaire was translated into local languages i.e. Urdu & Punjabi. Both open and close ended questions with multiple options were used. Permission from hospital review committee was taken. All the respondents were explained the purpose of study and informed consent was taken from them.

STATISTICAL ANALYSIS

SPSS version 21.0 was used for data entry and analysis. For qualitative variables, frequency and percentage distribution tables are granted. For inferential statistics, the chi-square test was used.

RESULTS

The study shows that out of 129 patients, 77(59.7%) had the previous history of medical or surgical illness while 52(40.3%) came for the very first time. Fourteen (10.9%) reported to BHU, 19(14.7%) reported to RHC, 19(14.7%) visited DHQ and 77(59.75%) went to private clinics or hospitals respectively.

Our results showed that 59(45.7%) patients were referred because of no specialist was available, 11 (8.5%) were referred due to non-availability of medicines, 25(19.4%) were referred because of no equipment and 34(26.4%) were referred due to any other reasons, mainly due to no improvement in their health.

Regarding the healthcare providers, 2(1.6%) patients were referred by the dispensers, 7(5.4%) were referred by LHWs, 32(24.8%) were referred by house officers, 73(56.6%) were referred by the medical officers and 15 (11.6%) were referred by the consultants. After referral decision, 38(29.5%) were provided by discharge slip, 30(23.3%) were given a referral letter and 61(47.3%) were referred verbally. It was noted that in Services hospital, 22(17.1%) were attended by house officers, 52 (40.35%) by the medical officers, 42(32.6%) by postgraduate trainees (PGRs), 11(8.5%) by the registrars and 02(1.6%) by the consultant. It shows that majority of the patients had their first interaction with medical officers. Fifty five (42.6%) were advised laboratory tests and 74(57.4%) were asked for radiological tests i.e. ultrasound and x-rays etc.

Sixteen (12.4%) patients were not satisfied with basic facilities provided while 113(87.6%) said they were well diagnosed and treated after referred from their first contact.

The fate of 10 (7.8%) patients were decided by house officers, 63(48.8%) by the medical officers, 33(25.6%) by the consultants, 15(11.6%) by assistant professors and 8(6.2%) by professors. It shows that fate of most of the cases was decided by medical officers.

Table 1: Healthcare facilities from which patients are referred to Services Hospital

Healthcare Center	Number of Patients Referred	
	Frequency	Percentage
BHU	14	10.9%
RHC	19	14.7%
DHQ	19	14.7%
Private	77	59.7%

Table 2: Reasons for referral of patients to Emergency Department of Services Hospital, Lahore

Reasons for referral of patients	Frequency	Percentage
Specialist not available	59	45.7%
Medicine not available	11	8.5%
Equipment not available	25	19.4%
Any other reason	34	26.4%

Table 3: Mode of documentation used by previous facility for referral

Mode of Documentation	Frequency	Percentage
Discharge slip	38	29.5%
Referral letter	30	23.3%
Verbal	61	47.2%
Total	129	100%

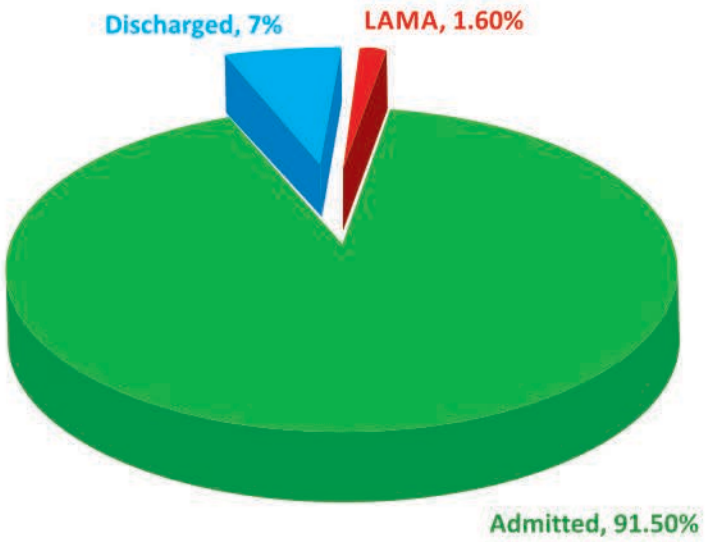

Figure 1: Fate of Referred Patients

DISCUSSION

A two-way referral system is advocated from the lowest level of health care to highest except in emergency when patients can be referred to any of the facilities for immediate treatment. This is hardly the case in many of the developing countries. The current study attempts to point out deficiencies in the referral system of the public sector. One hundred and twenty nine patients who were interviewed went through the referral system.

It is obvious from above analysis that majority of patients (59.7%) are being referred by the private sector. In Pakistan, private medical care is omnipresent in both urban and semiurban areas and extends also to rural areas. It enjoys a great popularity amongst our patients and is utilized more than public services. However, it is the primary role of health services to strengthen public sector and make it more reputable. These results are in accordance with Akande who carried a study in a tertiary care hospital in Nigeria about the referral system of patients. Although there is a well defined three level system of health facilities for the patient but according to the survey, it was pointed that most of patients directly attend the tertiary care

units on their own without any prior visit to primary or secondary units. Furthermore, the private practitioners also refer patients to the tertiary health care without referral to basic setups. All these breaches in the regular referral system leads to compromise on the effectiveness of the system by creating overload on tertiary units.[6]

This study also implores that patients were not diagnosed properly at previous healthcare centers or they were not satisfied with the therapeutic interventions. Omaha et al. conducted a study on patient referral system in the Republic of Honduras. They narrated that referral in health system is the backbone of the patient treatment chain. Thus there is need to develop confidence in family practitioner and physicians who are the first point of call on getting to tertiary center and there is need to organize medical education for family physician in treatment of simple disease. The need for early referral shows that family physician has doubt in diagnosis.[28] These results are in line with our study and we should make proper arrangements to improve this situation.

In our study, only 5.4 % patients were referred by LHWs while 56.6 % were referred by medical officers. This is in accordance with another study conducted by Mumtaz et al. According to him, there is a marked observed barrier in area wise gender discrimination, therefore in some areas, only the lady health workers can guide and educate the population of the same gender.[8]

Out of 129 patients, 94.6% respondents thought that referral was necessary while 5.4% were not in favor of this decision. This is in contrast to another study which showed that in the general referral system of developed countries only a very small percentage of patients attending the primary health unit need to be referred to secondary or tertiary units except those in the emergency or severe ailment.[7]

This study also illustrates that main cause of referral is non-availability of the specialist doctors at primary and secondary healthcare facilities. Patients often used to visit their nearby private clinics where emergency facilities and professional staff is absent so they immediately refer patients to tertiary care hospitals verbally (47.3%) and very few provide discharge slips (29.5%). This is in accordance with a study conducted by Roland et al. He found that the referral rates vary depending upon availability of physician consultants, prescribing rates were analyzed for thoracic medicine, psychiatry, dermatology and medicine. Results came out to be referrals proportional to availability of consultants while roughly related to need for outpatient services. Referral rates were influenced greatly by availability of the consultants.[9]

These results are contrary to a study conducted in the USA which concluded that due to the clinical confusion there is stress and difficulty in physician's decision making ability. Younger physicians had higher referral rates. Stress from uncertainty, heavy workload and loss of control over practice environment were associated with heavy referrals.[7]

CONCLUSION

Majority of the patients were referred by private sector clinics or hospitals. The main reason for referring a patient is lack of availability of specialist doctors at their available healthcare facility. Health personnel carrying out referrals are not trained to recognize problems that can be treated at their health facility centers. Although most of the people were not satisfied with the quality of treatment provided and behavior of staff still they were admitted. Necessary steps to make patients utilize primary and secondary health facilities need to be put in place, so that only serious patients are screened out for tertiary care facilities. Instead of referring a patient verbally, proper documentation must be provided that must include the admission date, diagnostic details, treatment provided and the investigations carried out along with the reason of transferring the patient. Appropriate communication with respect to referral must be made with the relatives and the receiving unit or health facility.

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