

# Monitoring Emergency Referral Services in a Secondary Health Care Institution in Sri Lanka

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**Abstract:** ***Background:** A referral system will function effectively if all service providers adhere to the referral discipline, to refer appropriately. **Objective:** To monitor emergency referral pattern in a Secondary health care institution in Eastern Province of Sri Lanka between Jan 2014 to Jan 2016. **Study design:** A record based descriptive study. **Results:** Majority of cases (56.69%) was referred between 8 am to 2pm & snake bite and poisoning (26.01%) were the most common cause of referral. Most cases (51.45%) are referred to higher center for further management (inpatient care) followed by specific investigation (27.96%). 98.4% cases were found to be appropriate for referral & there was no back referral information in majority (95.8%) of cases. **Interpretation:** Standardized referral register should be maintained both in initiating facility and receiving facility. Higher center should provide proper Back referral information.*

**Keywords:** Referral, Monitoring, emergency service, back referral.

## 1. Introduction

At present a system of forward referrals is in practice at all level in the form of transfers from lesser specialized to more specialized institutions. It should be the responsibility of the transferring authority to ensure that transfers are for appropriate specialized care or for specialist opinion not available at a lower level rather than for the absence of consultants or lack of necessary supplies of essential items.

Referral can be defined as a process in which a health worker at 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 patient's case. <sup>(1)</sup> A referral system will function effectively if all the service providers will function effectively, to refer appropriately.

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. <sup>(1)</sup> Monitoring and evaluation activities provides essential information for assessing the extent to which the referral network is achieving its intended objectives and patients' needs are met. Evaluating the referral network provides feedback for quality assurance and for informing the planning, design and implementation of future services. <sup>(2)</sup>

## 2. Methods and Materials

This record based descriptive study was carried out at Base hospital, Kalmunai (North), Sri Lanka.

The Base hospital, Kalmunai (North), Sri Lanka is a line ministry institution governed by Ministry of health, Sri Lanka.

An emergency referral register is maintained in the hospital in which details about the patient, clinical findings, provisional diagnosis & back referral information are registered. Cases referred from 2014 to 2016 were identified from the emergency referral register and analysed. Only cases which were referred on emergency basis were considered in this study. Data were collected on patient demography, cause for referral and back referral. The appropriateness of referral was determined by an assessment of the severity of illness and intensiveness of care required. <sup>(3)</sup>

Indicators used for monitoring and evaluating referral network: <sup>(1)(4)(5)</sup>

- 1) Total number of referrals made.
- 2) Quality of documentation.
- 3) Reason for reference.
- 4) Appropriateness of referral.
- 5) Back referral information

**Table 1:** Age; Sex distribution of referrals Figure in parentheses represents percentage

Age interval (years)	No of reference	Males	Females
0-19	55 (10.67%)	29 (52.72%)	26 (47.27%)
20 – 39	96 (18.64%)	44 (45.83%)	52 (54.16%)
40 – 59	163 (31.65%)	101 (61.96%)	62 (38.03%)
60-79	180 (34.95%)	84 (46.66%)	96 (46.66%)
80 +	21 (4.07%)	11 (52.38%)	10 (47.61%)
Age not mentioned			
TOTAL	515 (100%)	269 (52.23%)	246 (47.76%)

The total number of emergency reference sent during the study period was 515.

The age of the patient ranged from day1 of birth to 84 years. Maximum no. of references are in the age group 60-79years (34.95%). (Table 1)

**Table 2:** Time of reference

S. No	TIME	No. of references
1	8AM To 2PM	292 (56.69%)
2	2PM To 8PM	181 (35.14%)
3	8PM To 8 AM	42 (8.15%)
4	TIME NOT MENTIONED	-
Total		515 (100%)

Majority of cases (56.69%) were referred between 8am to 2pm (Table 2)

**Table 3:** Reason for reference

Reason for Reference	n=515
Further management	265 (51.45%)
Expert opinion	106 (20.58%)
Specific investigation	144 (27.96%)
TOTAL	515 (100%)

Most cases (51.45%) are referred to higher center for further management (inpatient care) followed by specific investigation (27.96%). 98.4% cases were found to be appropriate for referral & there was no back referral information in majority (95.8%) of cases.

**Table 4:** Cause of reference (underlying condition)

Cause of Reference	n=515
Cardiovascular emergencies	101 (19.61%)
Injuries	39 (7.57%)
GI emergencies	29 (5.63%)
Infection	27 (5.24%)
Obstetric emergencies	22 (4.27%)
Snakebite/poisoning	27 (26.01%)
Neurological emergencies	134 (2.91%)
Respiratory emergencies	15 (2.91%)
Psychiatric emergencies	-
Others	121 (23.49%)
TOTAL	515 (100%)

Snake bite and poisoning (26.01%) were the most common cause of referral (Table 4)

### 3. Discussion

This study was conducted to evaluate emergency service at a secondary care level.

Study revealed that documentation of emergency reference was incomplete.

Records of higher level facility revealed lack of information on either patient referral or feedback. Feedback from referral centre to the initiating facility was missing. Omaha; et al in their study of patient referral system noted the same problem as several doctors complained of not receiving any reply or not even hearing any results concerning the patient they had referred in some complicated cases to higher level institution. <sup>(6)</sup>

The referral process is a critical component of quality of clinical care, and it has become increasingly scrutinized in the managed care era. The development of effective patient referral system is one of the important public health issue in developing countries. Referral is a two-way process that

involves co-ordination and information transfer between the health centres and the hospitals. Effective referral requires clear communication to assure that the patient receive optimal care. Breakdown in communication can lead to poor continuity of care, delayed diagnosis, poly-pharmacy, increased litigation risk and unnecessary testing, and can therefore decrease the quality of care. <sup>(7)</sup>

Tejal et al (2000) in their study state that a critical component of effective referral system is the referral letter and specialists were dissatisfied with the content of the letters and with the information they received. Back referrals are less satisfactorily established and the reasons are very often the absence of secretarial assistance in the wards and at clinics. Which are so heavily patronized that extra work in the form Of notes for back referrals throws an extra burden on consultants and staff. Hence the necessary for secretarial assistance.

### 4. Conclusions and Recommendations

Standardized referral register should be maintained both in the initiating facility and receiving facility. Referral centre should provide proper back referral information to the initiating facility. Monitoring and evaluation is essential to ensure the proper functioning of the referral systems. regular review of the referral register to identify the missing information, incomplete service delivery and documentation problems. Referrals to Intensive care unit from one institution to another should always be in consultation with the consultant in – charge of the Intensive care unit in the Transferred hospital or the Director of the hospital. The practice of transferring case for ventilation or Intensive care management without ascertaining the availability of a bed would put the life of the patient transferred in jeopardy. It should be the responsibility of the consultants and the Head of the institution to ensure this requirement is adhered to without exception.

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