Short Report

An audit on transfers from peripheral hospitals to a paediatric unit, Teaching Hospital, Kandy

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Sri Lanka Journal of Child Health, 2011; **40**(4): 169-171

Abstract

Introduction: Many patients are transferred to Teaching hospital, Kandy (THK) from peripheral hospitals for investigation and specialized management.

Objectives: To study the pattern of transfers from peripheral hospitals to a paediatric unit in THK and the outcome of management of these transfers.

Method: A prospective observational study based on questionnaires was carried out from May to July 2007on children transferred from peripheral hospitals to a paediatric unit in THK. Questionnaires were completed by one of the investigators on admission and on discharge.

Results: The study population comprised 146 transferred children, 84% from district and rural hospitals and 16% from base and general hospitals. Forty five percent were admitted outside working hours and 75% were preschoolers. Eighty six percent of transfers were for further management. Fifty nine percent were transferred on the first day of admission. Thirty one percent had respiratory tract infections, 14% febrile convulsions and 10% gastroenteritis. Seventy percent needed basic medical treatment on admission. Only 3% needed intensive care. Fifteen percent had basic investigation results on admission. Sixty five percent were discharged during first two days. Forty eight percent had respiratory tract infections as the final diagnosis. Forty one percent of the transfer forms were well completed with necessary information. In 19% the designation of the transferring officer was not mentioned.

Conclusions: Most transfers were from rural and district hospitals and the main reason for transfer was investigation and further management of respiratory tract infection. Transferring officers need to pay more attention to essential information when filling the forms.

(Key words: transfer, teaching hospital, transfer form)

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(Received on 3 December 2010: Accepted on 25 February 2011)

Introduction

Teaching hospital, Kandy (THK) provides specialized health care services to the adjoining provinces. A considerable number of patients are transferred to this hospital for investigation and specialized management. This hospital has two paediatric medical units, a neonatology unit and a paediatric surgical unit. Each paediatric medical unit has on an average 30 admissions per day.

Objectives

To study the pattern of transfers from peripheral hospitals to a paediatric unit, THK and to assess the outcome of management of these transfers

Method

A questionnaire-based prospective observational audit was carried out from May to July 2007 on children transferred from peripheral hospitals to a paediatric unit, THK. Information was gathered on demographic data, reason for transfer, investigation results available at the time of transfer, documentation of necessary information on the transfer form and the outcome of those transfers. Questionnaires were completed by one of the investigators on admission and on discharge.

Results

Of 980 admissions to the paediatric unit during the study period 146 (15%) were transfers from

peripheral hospitals. The types of peripheral hospitals from which transfers occurred are shown in table 1.

Table 1
Type of peripheral hospital

Peripheral hospital	No. of patients (%)
General	12 (08)
Base	12 (08)
District	96 (66)
Rural	26 (18)

Seven percent were first admitted to the emergency treatment unit (ETU). Forty five percent were admitted outside working hours (between 4pm-8am). The age groups of the transferred patients are shown in table 2.

Table 2
Age Groups of the transfers

Age group	No. of patients (%)
<1 year	48 (33)
1-5 years	61 (42)
>5 years	37 (25)

The reasons for the transfer are shown in table 3.

Table 3
Reasons for transfer

Reason for transfer	No. of patients (%)
Investigation & further management	125 (86)
Intensive care	06 (04)
Due to long weekend	06 (04)
Unknown	09 (06)

Fifty nine percent were transferred on the first day of admission, 31% on 2nd and 3rd days and 10% after the 3rd day of admission. The diagnoses at the time of transfer are shown in table 4.

Table 4
Tentative diagnosis at the time of transfer

Diagnosis	No. of patients (%)
Respiratory tract infections	45 (31)
Febrile convulsions	20 (14)
Acute gastroenteritis	15 (10)
Poisoning	10 (07)
Urinary tract infections	04 (03)
Afebrile convulsions	03 (02)
Typhoid	02 (01)
Other	14 (09)
None	33 (23)

Out of 45 who had respiratory tract infection as the tentative diagnosis, 13 (29%) had asthma, 5 (11%) had bronchiolitis, 12 (27%) had pneumonia, 8 (18%) had upper respiratory tract infections (URTI) and 7 (16%) had lower respiratory tract infections (LRTI).

The final diagnoses at the time of discharge are shown in table 5.

Table 5
Final diagnosis at the time of discharge

Final diagnosis	No. of patients
Febrile fit	20
Asthma	15
Pneumonia	15
URTI	15
LRTI	15
Acute gastroenteritis	15
Bronchiolitis	10
Poisoning	10
Viral fever	06
Urine infection	04
Afebrile convulsion	03
Typhoid	02
Others	16

Seventy percent needed basic medical treatment on admission. Twenty one percent needed intravenous (IV) antibiotics, 4% IV fluid boluses, 15% IV fluid maintenance, 51% nebulization and 9% oxygen. Fifteen percent had basic investigation results on admission (50% had blood test, 27% had urine test and 23% had x- ray). Only 3% needed intensive (ICU) care. Significant changes in diagnosis and management were made only in 39 (27%) cases. Forty eight percent had respiratory tact infection as the final diagnosis.

Sixty five percent were discharged during the first two days after admission and 15% on the 3rd day after admission. Twenty percent stayed for more than 3 days for investigation and further management. There were no deaths.

Analysis of the transfer forms showed the following: 28% were well completed with necessary information, 52% had inadequate information and 20% were not completed at all. The designation of the transferring officer was not mentioned in 19% of the transfer forms.

Discussion

There are very few studies in Sri Lanka on transfers from peripheral hospitals to teaching hospitals[1,2]. Our audit showed that the majority of the transfers were from rural and district hospitals for the management of respiratory tract infections. The main reason for such transfers was non-availability of basic investigation and management facilities which is probably the reason for the majority of transfers occurring on the first day of admission. By providing basic treatment facilities such as nebulization, oxygen and IV antibiotics we can improve the quality of care in these hospitals. We also stress on the necessity of completing the transfer form with all relevant clinical information as this influences the patient care in the receiving hospital.

Conclusions

- Majority of transfers were from rural and district hospitals and the main reason for transfer was investigation and further management of respiratory tract infection.
- Most cases were transferred on the 1st day of admission as many local hospitals lack basic investigation and management facilities.
- The transferring officers need to pay special attention to essential information when filling the transfer forms.

References

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