

Demographic profile of paediatric patients and their parents visiting paediatric emergency in urban tertiary care Hospital and parental reasons for nonemergency visits

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ABSTRACT

Aim: The present study aims to assess the percentage of emergency and non-emergency cases visiting paediatric emergency department and reasons for non-emergency visits given by parents.

Methods: In this study, the population consisted of children and their parents visiting PED from 25-06-2019 to 24-07-2019. The research variables of the present study were Patients' condition (Emergency/Nonemergency) and Parental reasons for nonemergency PED visits, demographic variables of children include age, gender, residence and demographic variable of parents include socio-economic status. The sample in this study consisted of 4122 children visiting PED from 25-06-2019 to 24-07-2019 who met the inclusion criteria and 190 parents of nonemergency children who were selected by systematic random sampling technique.

Results: In this study majority of subjects (children) were nonemergency cases 84.4%, out of total sample under study maximum number of subject belonged to urban area 65.8%, with majority in the age group of under-five 54.2% and maximum were male children 44.2%. Most of the subjects (parents) were belonging to lower middle class 42.7% and most common reason given by the parents for nonemergency visits was "paediatric emergency was closest to their homes" (an easy accessibility).

Conclusions: Most common reason given by the parents for nonemergency visits was "paediatric emergency was closest to their homes" (an easy accessibility). Many parents seek paediatric emergency department care for minor problems despite their child having a primary care provider.

Keywords: Nonemergency visits; Paediatric emergency department PED; demographic profile of Paediatric patients; Parental reasons.

INTRODUCTION

Emergency departments (EDs) in tertiary care hospitals are the only place in the Indian health care system where people have access to a full range of services at any time regardless of the severity of condition. Today, the ED is becoming a primary resource for more and more people as the primary care system finds itself unable to meet the growing demand of care for paediatric patients. The visits in

paediatric emergency department constitute roughly 20 percent of all ED visits.¹ A vast majority of PED visits fall into the category of non-emergent cases, seeking non-urgent care or ED care for conditions that could have been treated and/or prevented at primary care centre. According to Berry et al., non-urgent cases comprise from 58% to 82% of paediatric ED (PED) visits and contribute to inefficiencies,

overcrowding and adverse effects in healthcare system.² There are numerous factors associated with parents of children presenting to the ED with a non-urgent condition. Some of the frequently cited reasons include convenience, unavailability of care taker/child during outdoor patient department (OPD)

hours 10 am to 4 pm and apprehension due to child's condition.

METHODOLOGY

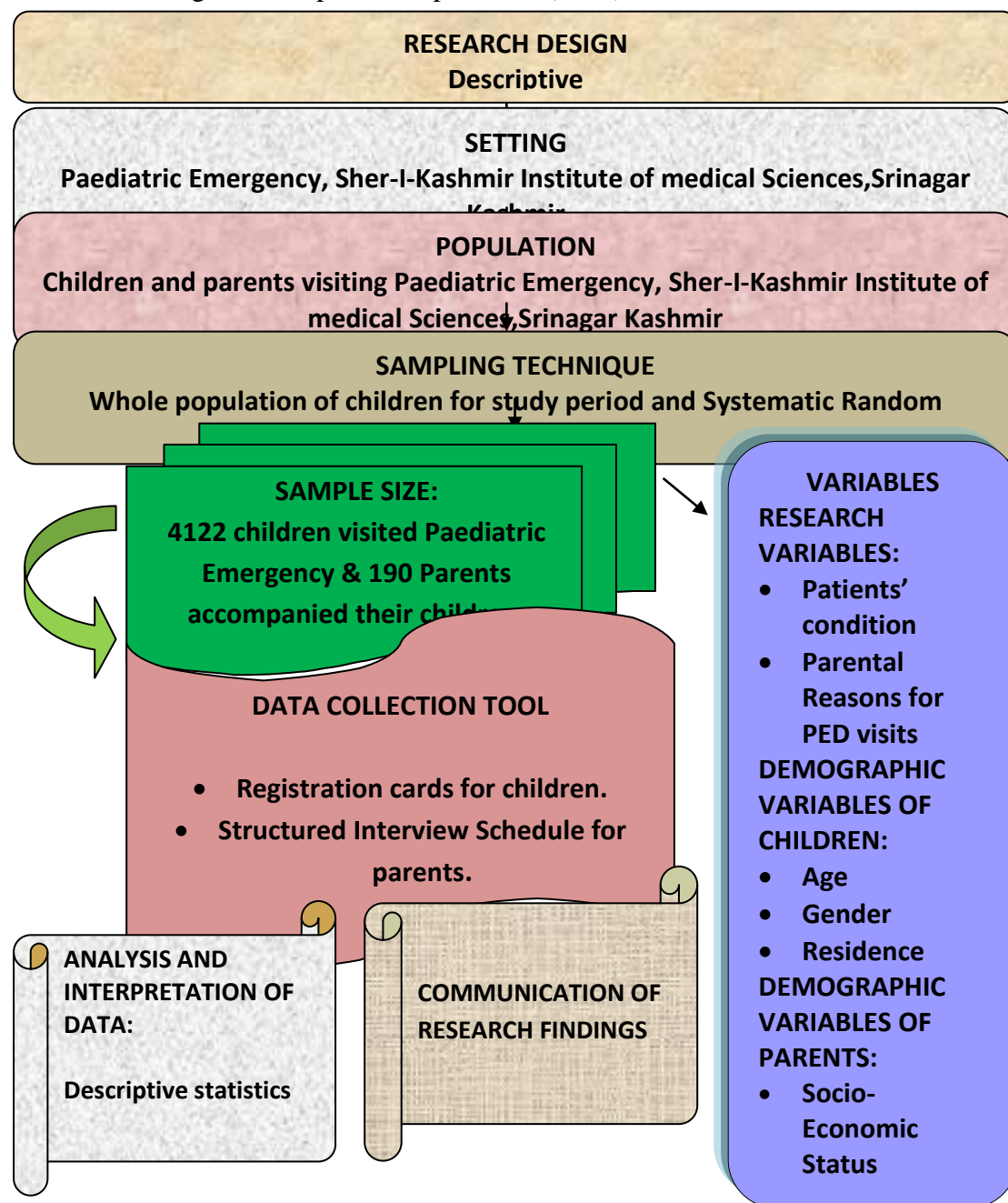


Figure 1: Schematic representation of Research Methodology

The present study aims to assess the percentage of emergency and non-emergency cases visiting paediatric emergency department and reasons for non-emergency visits. A quantitative approach is

used to accomplish the objectives of the present study and intended to gather data concerning demography of children, parents, patients' condition and their reasons for nonemergency PED visits. The research

design used for the present study was non experimental descriptive design. The descriptive design was selected since it aided in attaining first hand information and enhanced obtaining accurate and meaningful information data. The setting of the present study was “Paediatric Emergency Department (PED) Sher-I-Kashmir Institute of Medical Sciences”, a tertiary care Hospital in Soura, Srinagar (J&K). In the present study, the population consisted of children and their parents visiting PED from 25-06-2019 to 24-07-2019. The research variables of the

present study were Patients’ condition (Emergency/Nonemergency) and Parental reasons for nonemergency PED visits, demographic variables of children include age, gender, residence and demographic variable of parents include socio-economic status. The sample in this study consisted of 4122 children visiting PED from 25-06-2019 to 24-07-2019 who met the inclusion criteria and 190 parents of nonemergency children who were selected by systematic random sampling technique.

Table 1
Schematic representation of selection of subjects (parents) N=190

S no.	Place of sample selection	Date	Number of subjects selected
1.	Paediatric Emergency Department	27-06-2019	32
2.	Paediatric Emergency Department	02-07-2019	31
3.	Paediatric Emergency Department	07-07-2019	32
4.	Paediatric Emergency Department	12-07-2019	32
5.	Paediatric Emergency Department	17-07-2019	31
6.	Paediatric Emergency Department	22-07-2019	32

Inclusion Criteria

For Children

1. Children from the age of one month up to 16 years who visit pediatric emergency, irrespective of condition of patient (emergency/nonemergency).
2. Children with medical conditions only.

For Parents

1. Parents of nonemergency children visiting pediatric emergency from 4pm to 10 am.
2. Parents who were willing to participate.

1. Parents visiting PED during OPD hours 10am-4pm
2. Parents who are not willing to participate.
3. Parents of children with emergency condition.

Data collection tool and technique

Data collection tool used in present study for children was registration cards issued at the time of consultation and structured interview schedule for parents. Interview technique was adopted for recording the responses of the subjects (parents) as some of the parents were likely to be illiterate or low literate. Recording was done then and there in order to maintain the accuracy of the response.

Description of the tool

For Children the tool comprises of two parts:

Part I: Demographic variables of children on registration cards who visited PED for consultation. It had three items, Age, Residence and Gender.

Part II: Patients' condition (emergency/nonemergency) was determined by the duration of hospital stay. Those with the minor ailments (nonemergency) were sent back and those with the emergency condition were admitted for full stay or short stay.

For Parents the tool 'Structured Interview schedule' comprised of two parts

Part I: Demographic variable of parents whose children were consulted in PED. REVISED KUPPUSWAMY'S SOCIOECONOMIC STATUS SCALE was used.³ It had three items Education, occupation and family income.

Part II: structured questionnaire for conducting interview schedule comprised of one question and 10 responses in below table:

Table 2

Why do you bring your children to PED who belong to nonemergency cases?			
S.No.	Responses	Tick the relevant	Code. No.
1	The Paediatric Emergency is the closest to my home.		1
2	I usually get my child treated in Paediatric Emergency.		2
3	I can't afford the long waiting time of Paediatric OPD.		3
4	I was at my work place during Paediatric OPD hours.		4
5	I wished my child to be treated quickly.		5
6	I was anxious for my child.		6
7	I feared that my child's illness was very severe.		7
8	The caregivers in this department are the most specialized.		8
9	My child was at school during Paediatric OPD hours.		9
10	I wanted my child to have laboratory exams quickly.		10

Data collection procedure

The data was collected from 25-06-2019 to 24-07-2019 from emergency registration cards regarding demographic variable for the children who visited PED and who fulfilled the inclusion criteria. Sample of 4122 children were included in the study and data was recorded in an excel sheet. The condition of patient (emergency/nonemergency) was determined by the duration of Hospital stay, nonemergency cases

were sent back after consultation and emergency cases were admitted for full stay or short stay. The data was collected from 190 parents on every fifth day starting from 27-06-2019 and every 4th nonemergency patient by systematic random sampling from 4pm to 10 am on respective days. Consent was also taken from the parents before data collection. The investigator established good rapport and written consent was obtained after explaining the importance and purpose of study. 2-5 minutes were

taken for conducting interview. The interview was conducted at the bed side in the PED room.

RESULTS

Results were categorized into four segments

Segment I: Describes the distribution of demographic variables residence, age and gender among the children visiting PED.

Segment II: Describes the condition of the patient (emergency/nonemergency) on the bases of Hospital stay.

Segment III: Describes the distribution of demographic variable Socio-Economic status (Education, Occupation and family income) among the selected subjects (Parents) visiting PED.

Segment IV: Describes the parental reasons for nonemergency visits and cross tabulation with Socio-Economic status of subjects.

Segment I

Distribution of demographic variables (residence, age and gender) among the children visiting PED

Table 3

	Frequency	Percent
Rural	1281	31.1
Urban	2823	68.5
Outside Jammu & Kashmir	18	.4
Total	4122	100.0

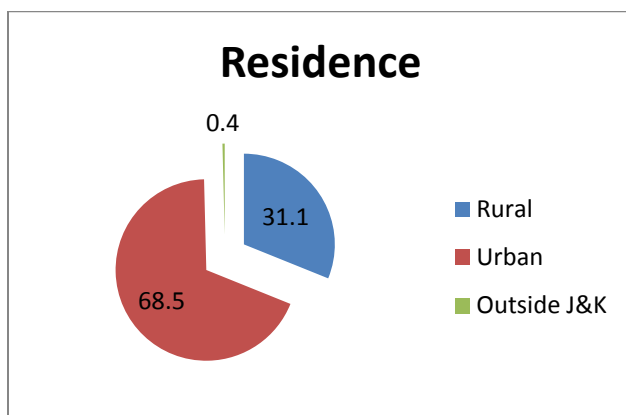


Figure 2: Percentage distribution of subjects according to their residence

The data presented in Table 3 and figure 2 reveals that maximum number of subjects 68.5% were from urban areas, 31.1% were from rural areas and 0.4% was outside J&K residents.

Table 4

	Frequency	Percent

Infant	824	20.0
Under-Five	1822	44.2
Over-Five	1476	35.8
Total	4122	100.0

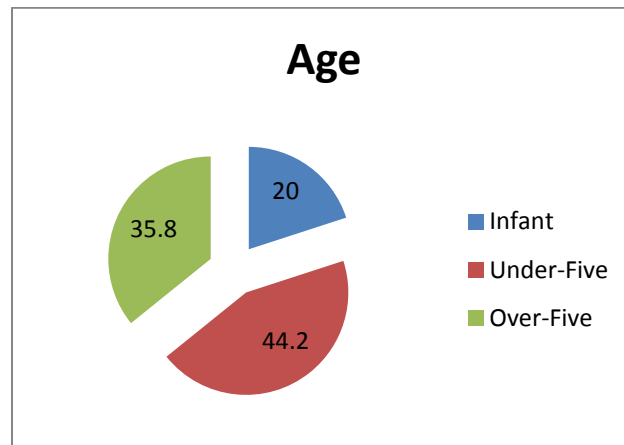


Figure 3: Percentage distribution of subjects according to their age

The data presented in Table 4 and figure 3 reveals that maximum numbers of subject 44.2% were under-five, 35.8% were over-five up to 16 years and 20% were infants.

Table 5

	Frequency	Percent
Female	1887	45.8
Male	2235	54.2
Total	4122	100.0

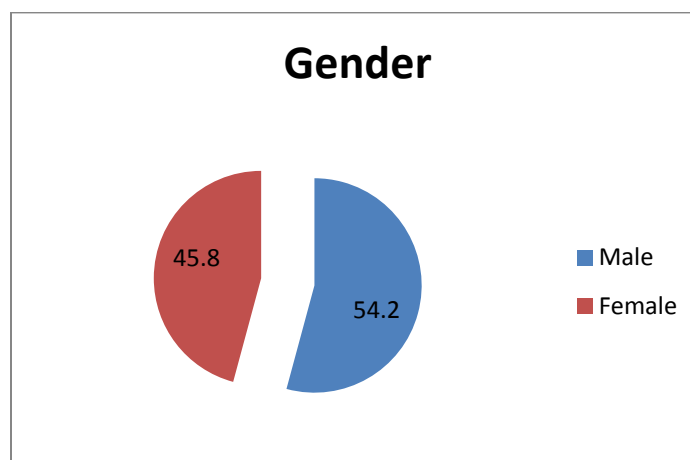


Figure 4: Percentage distribution of subjects according to their gender

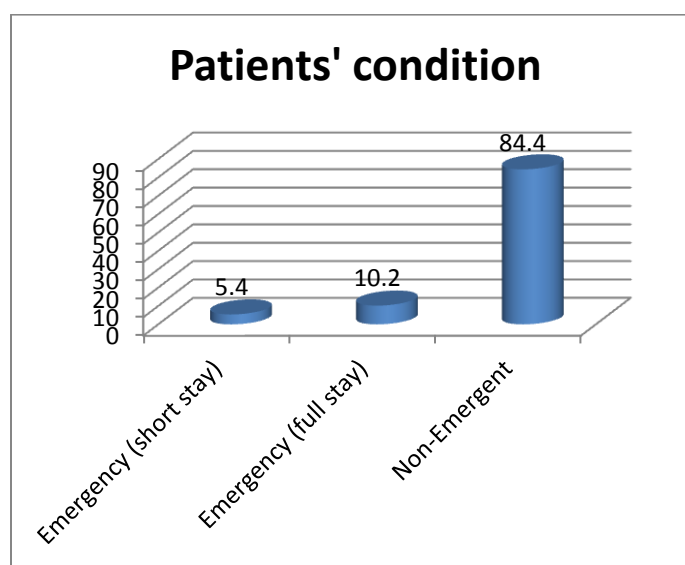
The data presented in Table 5 and figure 4 reveals that maximum numbers of subject 54.2% were male children and 45.8% were female children.

Segment II

Condition of the patient (emergency/nonemergency) on the bases of Hospital stay

Table 6

	Frequency	Percent
Non-Emergent	3477	84.4
Emergency (Short Stay)	223	5.4
Emergency (Admission)	422	10.2
Total	4122	100.0

**Figure 5: Percentage distribution of subjects according to their condition (emergency/nonemergency).**

The data presented in Table 6 and figure 5 reveals that maximum numbers of subject 84.4% were nonemergency, 10.2% were emergency and admitted for full stay and 5.4% were also emergency but admitted for short stay. Total of 15.6% subjects belonged to emergency category.

Segment III

Distribution of demographic variable Socio-Economic status (Education, Occupation and family income) among the selected subjects (Parents) visiting PED.

Table 7

	Frequency	Percent

Upper Class	10	5.3
Upper Middle Class	62	32.6
Lower Middle Class	81	42.7
Upper Lower Class	23	12.1
Lower Class	14	7.3
Total	190	100.0

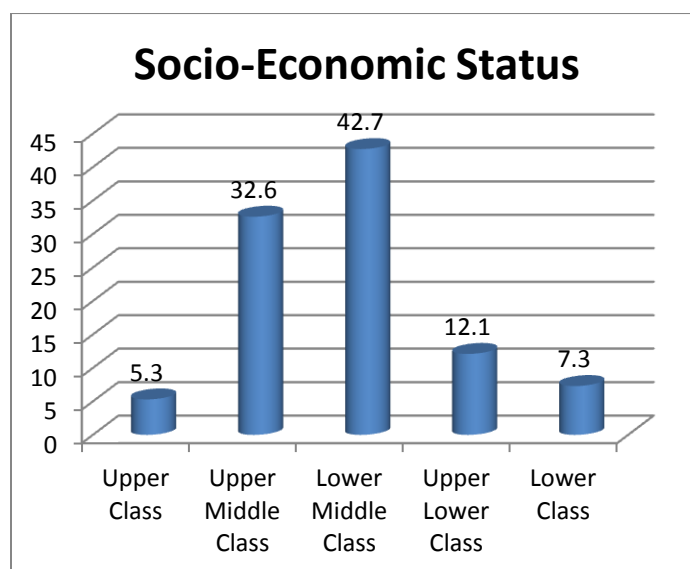


Figure 6: Percentage distribution of subjects according to their socio economic status.

The data presented in Table 7 and figure 6 reveals that maximum number of subjects 42.7% belonged to lower middle class, 32.6% subjects belonged to upper middle class, 5.3% subjects belonged to upper class, 12.1% subjects belonged to upper lower class and 7.3% of the subjects belonged to lower class.

Segment IV

Parental reasons for nonemergency visits and cross tabulation with Socio-Economic status of subjects.

Table 8

	Frequency	Percent
The Paediatric Emergency is the closest to my home.	61	32.1
I wanted my child to have laboratory exams quickly.	11	5.8
I usually get my child treated in Paediatric Emergency.	34	17.9
I can't afford the long waiting time of Paediatric OPD.	10	5.2

I was at my work place during Paediatric OPD hours.	22	11.6
I wished my child to be treated quickly.	14	7.4
I was anxious for my child.	11	5.8
I feared that my child's illness was very severe.	11	5.8
The caregivers in this department are the most specialized.	7	3.7
My child was at school during Paediatric OPD hours.	9	4.7
Total	190	100.0

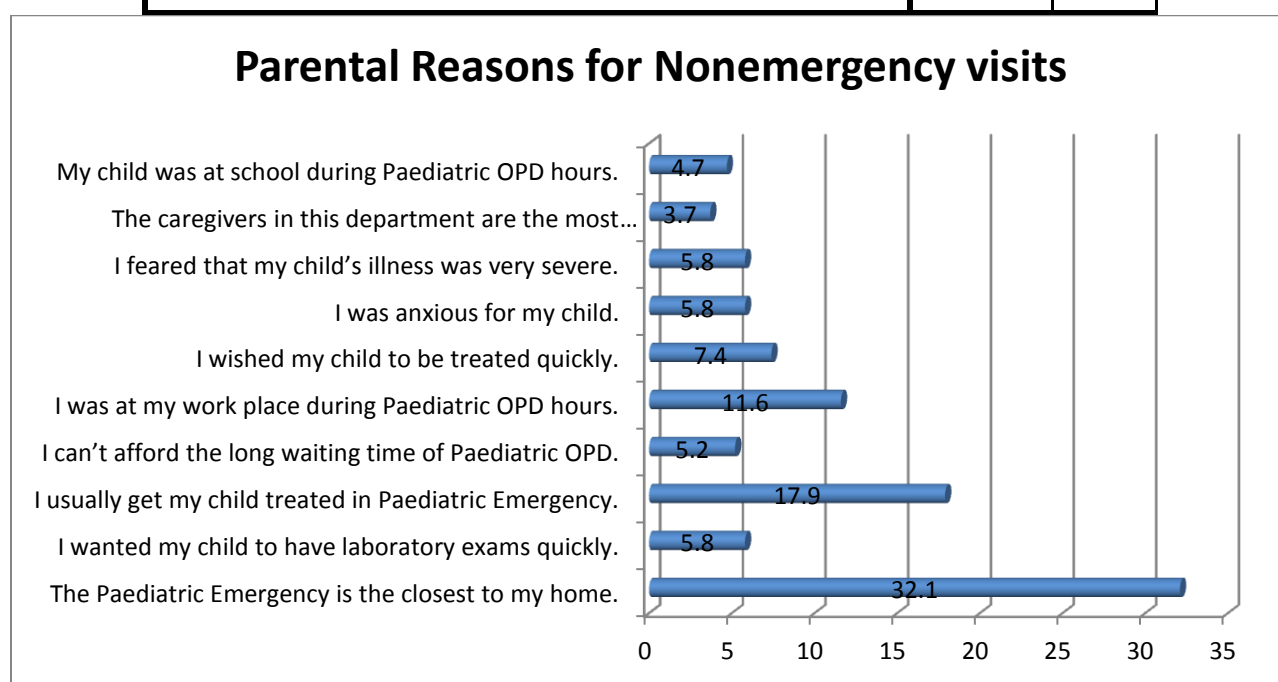


Figure 7: Percentage distribution of subjects according to response of parents for nonemergency visits.

The data presented in Table 8 and figure 7 reveals that maximum number of subjects 32.1% responded that 'the paediatric Emergency was closest to their home'.

Table 9

	Socio-Economic Status					Total
	Upper Class	Upper Middle Class	Lower Middle Class	Upper Lower Class	Lower Class	
Response						
Paediatric Emergency is closest to my home.	0	18	39	2	2	61

	I wanted my child to have laboratory exams quickly.	3	8	0	0	0	11
	I usually get my child treated in Paediatric Emergency.	0	8	24	2	0	34
	I can't afford the long waiting time of Paediatric OPD.	4	6	0	0	0	10
	I was at my work place during Paediatric OPD hours.	0	0	1	12	9	22
	I wished my child to be treated quickly.	0	4	8	1	1	14
	I was anxious for my child.	0	11	0	0	0	11
	I feared that my child's illness was very severe.	0	1	3	5	2	11
	The caregivers in this department are the most specialized.	0	0	6	1	0	7
	My child was at school during Paediatric OPD hours.	3	6	0	0	0	9
Table	Total	10	62	81	23	14	190

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displays cross tabulation of parental responses with that of their socio-economic status.

DISCUSSION

The aim of study was to assess the percentage of emergency and nonemergency visits in PED and parental reasons for nonemergency visits. The results of the study revealed that nonemergency visits accounted a huge portion of PED visits which is 84.4% the results of our study are supported by the study conducted in 2006 where the annual rate of ED visits for Parisian children less than 2 years old ranged, according to district, from 46.9% to 91.3%.⁴ Almost similar results were concluded from the study of Mistry RD, Hoffmann RG, Yauck JS, Brousseau DC, "association between parental and childhood emergency department utilization" up to 80 percent

of paediatric visits to EDs are nonemergency.⁵ Nonemergency visits to PED are problematic from both a cost and quality standpoint. Nonemergency visits to PED diminishes the quality of ED care; crowding, long waits and added stress on staff decreases the quality patient care in a true emergency. At the beginning of our research, we focused on *nonemergency* visits to the emergency department. However, we found that the conditions driving emergency department overuse extend far beyond minor acute illnesses. Emergency departments are overused for many different conditions including acute episodes of chronic illnesses, the need for prescription refills and well-child visits. Furthermore we found that frequent reasons given by the parents were, convenience, easy

accessibility, habitual and busy schedule in out-patient hours and same reasons were found with that of the Reasons given by parents in different studies for their decisions to go to paediatric EDs (PEDs), even without referral by their children's primary care physicians, include that they seek a quick and convenient solution to a health issue; that they are very worried about their child's health; that they have a habit of going to the ED.⁶⁻¹¹

SUMMARY AND CONCLUSION

- In this study majority of subjects (children) were nonemergency cases, out of total sample under study maximum number of subjects were from urban area, in the age group of under-five with majority of male children.
- Most of the subjects (parents) were belonging to lower middle class and most common reason given by the parents for nonemergency visits was "pediatric emergency was closest to their homes" (an easy accessibility).
- Many parents seek pediatric emergency department care for minor problems despite their child having a primary care provider.
- Ensuring timely access to these providers may help reduce paediatric emergency department overuse. Educational initiatives should inform parents about minor problems and where appropriate care can/should be accessed.

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