

Non-Urgent Paediatric Emergency Department Visits: Why Are They So Common? A Singapore Perspective

Dear Editor,

Introduction

Over the past decade, overcrowding in emergency departments (ED) has become a serious problem in many developed countries.^{1,2} A recent international literature review reported that between 4.8% to 90% of ED patients were potentially non-urgent cases.^{3,4,5} This high number of non-urgent paediatric ED (PED) visits is a huge financial burden to families as well as to society, not just in financial terms, but in overcrowding and straining resources, and possibly affecting more immediate access to those who might need it for urgent medical care and attention.^{6,7}

A few recent studies have investigated why individuals with non-urgent complaints are brought to the PED. Causes include caregiver dissatisfaction with the primary care provider (PCP), difficulty making appointments with the PCP and seeking medical attention outside of PCP working hours.^{8,9} Other reasons include perceived reduced waiting times, the ability to have a wide range of tests and a better patient care experience at the ED.¹⁰⁻¹²

The caregiver plays an important role in determining the choice of medical attention sought for their child. Therefore, assessing and addressing caregiver perception of the need for the ED visit is essential if we are to develop successful interventional strategies to reduce the number of non-urgent PED visits. As a first step, we set out to determine reasons for these non-urgent visits as perceived by caregivers as well as ED personnel in KK Women's and Children's Hospital (KKH), the largest tertiary care paediatric hospital in Singapore.

Materials and Methods

We conducted a cross-sectional survey with 2 study populations: caregivers and ED personnel. Self-administered questionnaires and information leaflets were given to caregivers and ED personnel over a 4-week period in March 2014.

Study Setting and Population

The study was conducted in the paediatric ED of the KKH which attends to approximately 176,000 visits per year or

about 450 to 550 attendances daily. Patients are triaged as Priority 1 (resuscitation) to Priority 3 (non-urgent/P3). Up to 60% of our daily cohorts of about 500 patients are triaged as Priority 3.

Results

A total of 155 questionnaires were given to the ED personnel with a response rate of 90.3% (140 respondents). A total of 980 questionnaires were distributed to caregivers with a response rate of 73.5% (720 respondents).

The caregivers' most frequently cited reasons for bringing their child to the ED were the convenience of seeing a doctor and having tests done in the same place (79.7%), the perception that the medical problems are too urgent to wait to see PCP/private paediatrician (64.9%) and the belief that the standard of medical treatment is better at the ED (62.8%). Other reasons given were that their child has previous records in the ED (61.4%), the environment in the ED is more child-friendly (49.6%) and that they were unable to see a PCP/private paediatrician as it was after operating hours (48%) (Fig. 1) (Table 1).

When asked about commonly encountered reasons for non-urgent visits, ED personnel felt that a majority of children are brought in on the advice of PCPs/private paediatricians to go to the ED if the child's condition worsens or persists (93.6%). Other common reasons were the convenience of seeing a doctor and having tests done in the same place (87.2%) and that caregivers are not confident of taking care of their unwell children (87.1%). ED personnel also perceived that parents feel it would be better to visit the ED because their children have records in the ED (86.5%) or because they are seeking a second opinion (80.8%) (Fig. 1).

When asked how they felt we could reduce the numbers of these non-urgent PED visits, the caregivers' opinion was that the best solution was to increase the number of PEDs (76.2%), followed by educating the public on the usage of the ED (73.2%) and increasing the number of 24-hour clinics (72.6%) at the PCP level. This differed from the ED personnel's opinion which was that the best solution was by educating the public on the usage of the ED (92.9%), followed by increasing the number of paediatric EDs (83.5%) and increasing the number of 24-hour clinics (82.1%) at the PCP level (Fig. 2).

Table 1. Reasons for Non-urgent Paediatric Emergency Department Visits (Caregivers and Medical Personnel)

Statement	Caregivers				ED Personnel			
	Median	P25	P75	% (4+5)	Median	P25	P75	% (4+5)
Problem too urgent	4	3	4	64.9	3	2	4	42.8
Problem too serious/complex	3	3	4	46.2	3	2	4	39.2
Better standard in ED	4	3	4	62.8	4	3	4	63.6
Seeking second opinion	3	2	4	35.7	4	4	5	80.8
Consult doctor, tests/X-ray in the same place	4	4	5	79.7	4	4	5	87.2
Unable to get appointment with regular doctor	2	2	3	17.8	2	2	4	27.1
After operating hours of PCP/private paediatricians	3	2	5	48	4	3	5	67.8
Waiting time is shorter in ED	2	1	3	16.7	2	1	3	10
Easier to get to the ED	2	2	3	14.3	3	2	3	20
Affordable charges	2	2	3	16.7	3	2	4	32.1
Language	3	2	3	20.3	3	2	4	28.6
ED more child-friendly	3	3	4	49.6	3	2	3	23.5
Family tradition	3	2	3	18.9	3	3	4	47.8
Not confident in taking care of an unwell child	3	2	4	42.5	4.5	4	5	87.1
Has records in the ED	4	3	4	61.4	4	4	5	86.5
Condition worsens/persists	3	2	4	44.6	5	4	5	93.6
Not sure where 24-hour clinics are located	2	2	4	29.3	3	3	4	43.6
For childcare leave	2	2	3	15.5	2	2	3	16.4
Because of CPF/Medisave	3	2	4	37.2	3	2	4	34.3

CPF: Central Provident Fund; ED: Emergency department; PCP: Primary care provider

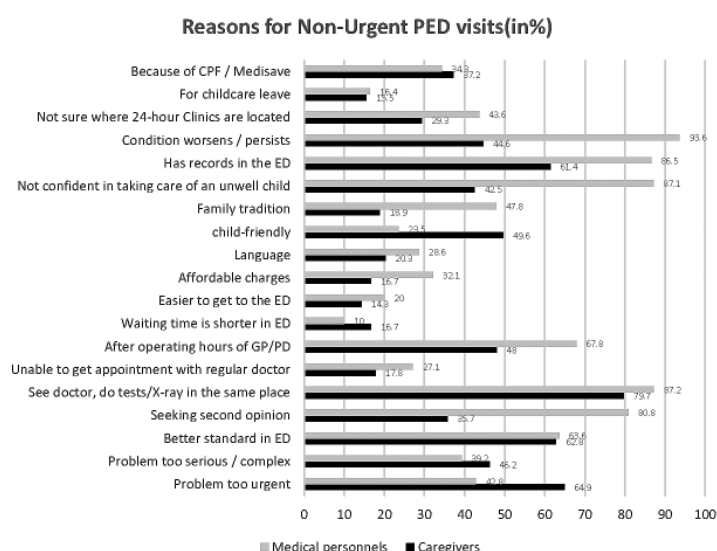


Fig. 1. Response given by medical personnel and caregivers on the reasons for non-urgent paediatric emergency department (PED) visits.

Discussion

There is an apparent discrepancy in perception between ED personnel and caregivers with regard to reasons behind non-urgent PED visits.

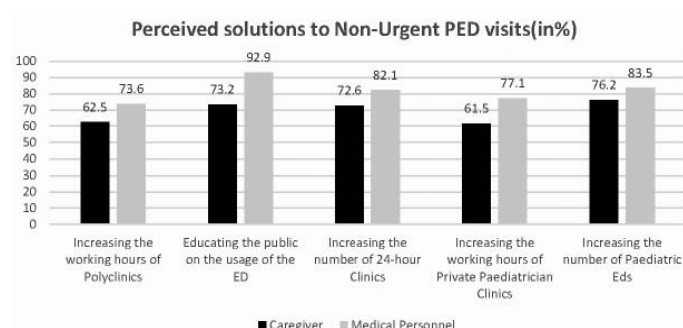


Fig. 2. Response given by medical personnel and caregivers on the perceived solutions to non-urgent paediatric emergency department (PED) visits.

A majority of the caregivers favoured the ED for its convenience and for its ability to function as a one-stop center where they could consult a doctor and have investigations performed. This brings forth the perception of the modern caregiver who values convenience and holistic one-stop care. A similarly high proportion of ED personnel, 87.2%, agreed with the above. Most PCPs have access to laboratory as well as radiology facilities and would be able to adequately diagnose and treat majority of problems presenting to them. There are currently ongoing educational and outreach programmes in place to educate caregivers on recognising illnesses that need the resources of the ED and those illnesses that can

be managed adequately in the primary health care setting.

Two-thirds (65%) of the caregivers visited the ED because their children's problems were deemed to be urgent, but only 43% of the medical personnel think this is a common reason for non-urgent PED visits. Almost half (42.5%) of the caregivers cited not being confident of taking care of unwell children as a reason to go to the ED. This highlights the role for caregiver training and education regarding the use of the ED as well as how to manage common paediatric medical problems and perceived emergencies.

A total of 61.4% of the caregivers agree that they go to the ED because their children have records in ED. Since public polyclinics in Singapore have shared access to patient records with public hospitals, this information should be made known to the public so that the misconception can be addressed.

Conclusion

All in all, it adds to the growing body of evidence that there is a dire and urgent need to review and reshape how primary paediatric care should be delivered in Singapore. There is a need for a community paediatric model to be set up in Singapore to bridge this gap in delivering less urgent paediatric care holistically to the community with proper “right siting” of paediatric care—without maintaining, sustaining and expanding the need to have the community increasingly tap into the limited finite resources of tertiary centers. A comprehensive community paediatric model which is able to address the needs of the new age holistic care-seeking parent should and will be able to lift a significant burden of non-urgent cases from the tertiary centres.

There is a pressing need to develop a more inclusive and holistic paediatric model within our paediatric healthcare system to deliver a more balanced continuum of paediatric care from the primary paediatric sector to the tertiary sector in the hospitals. We need to create a more appropriate right siting of acute, low-medical acuity (i.e. Priority 3 paediatric patients) paediatric healthcare care for our community. This will involve enhancing the capabilities of the community paediatric PCP and creating a seamless system where care can be better shared between the community paediatric PCP and their colleagues in the tertiary hospitals.

Within this community paediatrics framework, we should also meaningfully enhance the point-of-care capabilities of PCP/private paediatricians not just in isolation but as a partnership model with the children's hospital so that patient-centered care can be better provided.

We should actively work with the Health Promotion Board and People's Association as well as leverage on IT to enhance information and education to better equip our young parents in dealing with common childhood medical problems. There should be a concerted effort in caregiver education, to teach them not just about the role of the ED, but what they can do at

home as a caregiver to manage simple non-urgent conditions, basic first aid steps that can be done at home before bringing the child to the doctor, when they may go to a PHP and what the red flags are for bringing the child to the ED.

In effect, we need to actively set up and develop a community paediatric model of healthcare delivery for Singapore for our immediate and long term future.

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