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Emergency Department Complaints: A Ten-Year Review

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ABSTRACT

This 10-year (May 1986 - 31 December 1995) retrospective study was done to analyse the types of complaints received by the National University Hospital's Emergency Department (NUH EMD), so as to take remedial measures. It was done by reviewing three sources of complaints received by the department, namely formal written complaints, verbal feedback received by the Corporate Affairs Department, and via feedback forms. The areas of complaints looked for included the nature, number, validity, whether remediable and triage priority of the patients.

One hundred and eighty-eight subcategories of complaints were received from 169 complainants. The complaint frequency was 0.26 per 1,000 visits or 1 complaint per 3,846 visits. The complaint frequency over the 10 years did not vary much (range 0 to 0.44).

Most of the complaints are divided into 4 broad categories ie medical, doctor-patient/paramedical staff-patient relationship, patient flow/ logistics at EMD and in-house complaints.

The majority (71.3%) of the complaints were due to medical and doctor-patient relationship problems. Complaints tend to arise from Priority 2 and 3 rather than Priority 1 patients. 33.7% of the complaints were considered valid, 21.6% not valid while in the remaining 44.7%, validity could not be determined. 48.4% of complaints were likely to be remediable.

Based on this study, we have since instituted a compulsory emergency department-driven "Customer Service Training Programme" and weekly teaching sessions for each incoming group of medical officers posted to the NUH EMD.

Keywords: emergency department, complaints

INTRODUCTION

The emergency department is an important department as it is the "front door" to the hospital. In 1995, 52% of the total hospital admissions to the National University Hospital (NUH) Singapore were through the emergency department. However, there is an apparent perception that the emergency department is one the most difficult departments in a hospital to work in as it appears to receive brickbats more often than bouquets from patients and colleagues from other disciplines. It is obvious to those working long enough in the department to realise that some of the problems can only be solved by the hospital administration eg long waiting time. Also, a fair number of complaints were directed at the medical staff eg possible misdiagnosis and poor communication with the patients.

This was when it was decided that a review of all complaints received by the Emergency Department of National University Hospital (NUH EMD) since its opening in May 1986 till December 1995 would be useful to elucidate the actual types of complaints. To date, this is one of the longest published reviews of complaints in terms of the number of years.

The objectives of this review are threefold:

1) to analyse the types of complaints received by the EMD so that steps can be taken to minimise them in future.
2) To enable the hospital administration to understand the difficulties faced by the EMD.
3) To let new doctors in the EMD know the pitfalls involved in the practice of emergency medicine.

METHODS

This is a retrospective study of all the complaints received by the department from May 1985 till 31 December 1995. There are three sources of information:

1) Formal written complaints
2) Verbal complaints received by the Corporate Affairs Department
3) Feedback forms given out to all patients at our department.

These three sources of complaints with investigations were analysed and categorised under the following headings:

A) Medical
B) Doctor-patient/paramedical staff-patient relationship
C) Patient flow/logistics at EMD
D) In-house complaints
E) Others

Under each category, certain subcategories were identified and recorded. The number of grouses per complaint episode were noted and entered into the relevant categories and subcategories.

After investigations, the validity of each of the complaints were classified as one of the three, ie

1) Valid and apology given.
2) Not valid and complainant notified.
3) Unable to conclude on validity.

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The complaints were also analysed as to whether it was remediable or not remediable in future. There was a third category where there was difficulty in determining whether the problems were remediable as it was difficult to conclude on the validity of the complaint.

An attempt was also made to correlate the complaints with patient's triage category ie Priority 1 (critical), Priority 2 (intermediate) and Priority 3 (non-urgent).

RESULTS

Referring to Table I, between 1986 - 1995, the NUH EMD received a complaint frequency of 0.26 per 1,000 visits or 1 complaint per 3,846 visits. The number of complaints each year was fairly constant except for 1986 (Table I) when NUH EMD was first opened.

Table I - Number and frequency of complaints

Year	Total no. of complaints	Total no. of complaints according to subcategories	Complaints frequency/ 1,000 visits
1986	0	0	0
1987	1	1	0.08
1988	21	24	0.36
1989	21	24	0.36
1990	8	8	0.11
1991	18	21	0.23
1992	22	22	0.28
1993	28	29	0.38
1994	33	40	0.44
1995	17	19	0.21
TOTAL	**169**	**188**	**0.26**

From Fig 1, it is obvious that categories A and B ie medical and doctor-patient/paramedical staff-patient relationship form a total of 71.3% or the bulk of the complaints.

From Fig 2, the majority of category A (medical) complaints were due to misdiagnosis. The cause of the misdiagnosis was frequently due to early, atypical or subtle presentation (Table II). Table III lists the subcategory A1 b misdiagnoses. Of note in Table III are 6 cases of misdiagnosed appendicitis. Referring to Table IV, only 5 were due to failure to diagnose the cases accurately probably from lack of experience of the younger doctors (subcategory A1 a).

Category C (logistics at EMD) complaints were due mainly to long waiting time.

Category D is a unique group of complaints as it consists of complaints from the ward doctors rather than from the patients.

Among the category E complaints, 3 were due to chest pain being wrongly classified as non-emergency. In non-emergency cases, the cost per visit to the EMD is higher.

Table V shows the outcome on the validity of the complaints after investigations. The validity of complaints is highest in category A (medical) complaints. Only 11.8% of category C complaints (the bulk of which was related to long waiting time before being seen by a physician) are deemed to be valid. It is heartening to note that to date, there has been only one lawsuit.

We can determine the triage category of 125 out of 169 complaints of which 44 cannot be determined due to incomplete data. The majority of this group

Table II - Nature of complaints

Main Category	Subcategory	Absolute numbers	%
A) Medical	1) Misdiagnosis due to		
	a) inexperience doctor	5	2.7
	b) early, atypical or subtle presentation.	21	11.2
	2) Inappropriate or inadequate treatment given.	10	5.3
	3) Patient's dissatisfaction with treatment given.	18	9.6
	4) Failure to consider admission when warranted.	9	4.8
	5) Death soon after being seen.	2	1.1
	Sub-total	**65**	**34.6**
B) Doctor-patient/ Paramedical staff-patient relationship	1) Poor communication of medical condition between doctor and patient or accompanying persons.	13	6.9
	2) Rude doctors/insensitive remarks by doctors	18	9.6
	3) Demanding/unreasonable patients.	9	4.8
	4) Poor work attitude of doctors.	14	7.5
	5) Patient's dissatisfaction with paramedical staff.	15	8.0
	Sub-total	**69**	**36.7**
C) Patient flow/ logistics at EMD	Long waiting time (1-5)		
	1) Before being seen by doctor	21	11.2
	2) Before ward admission	7	3.7
	3) Before payment	2	1.1
	4) At EMD pharmacy	1	0.5
	5) Before X-ray is done	3	1.6
	6) Ambulance not bringing patient to hospital of choice	3	1.6
	Sub-total	**37**	**19.7**
D) In-house complaints	1) From other disciplines against EMD staff	4	2.1
	2) From EMD staff against other ward disciplines	2	1.1
	Sub-total	**6**	**3.2**
E) Others		11	5.9
	Sub-total	**11**	**5.9**
	Grand-total	**188**	**100.1**

Table III - Subcategory A1b complaints - misdiagnoses from early, subtle or atypical presentations

Type of misdiagnosis	No. of cases	Remarks
Appendicitis	6	
Subarachnoid haemorrhage	2	i) Mimicked migraine headache in a known migrainous patient. ii) Mimicked cervical spondylosis as patient presented with neck pain.
Intracerebral haemorrhage	1	Mistaken for migraine headache
Ectopic pregnancy	1	Presented as bloody diarrhoea
Early Ramsay - Hunt syndrome	1	
Corneal abrasion	1	Misdiagnosed as conjunctivitis
Typhoid fever	1	Missed in a child
Acute leukaemia	1	Present as syncope
Tear of radial collateral ligament of metacarpophalangeal joint	1	
Tibial fracture	1	Missed and deep venous thrombosis developed subsequently
Chest infection	1	Missed as no chest radiograph was done
Early Steven - Johnson's syndrome due to Phenytoin	1	Misdiagnosed as measles
Upper arm fracture	1	Missed as minimal signs on involved arm. Instead radiographs done on opposite arm where there were external distracting injuries
Avulsion fracture of navicular bone	1	
Missed perianal abscess	1	

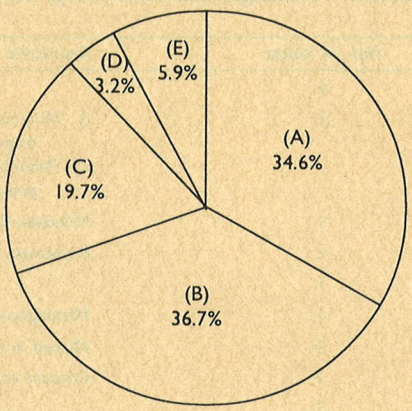
Table IV - Subcategory A1a complaints - obvious misdiagnosis

Type of misdiagnosis	No. of cases	Remarks
Poor assessment of dehydration in a paediatric patient with gastroenteritis	1	Patient returned several hours later with severe dehydration
Delayed diagnosis of acute myocardial infarction	1	In-house complaint
Septic shock	1	In-house complaint as patient admitted to the wrong discipline
Fish bone	1	Missed as only lateral neck radiograph was done without laryngoscopic examination
Fracture of fifth metatarsal	1	

Table V - Validity of complaints

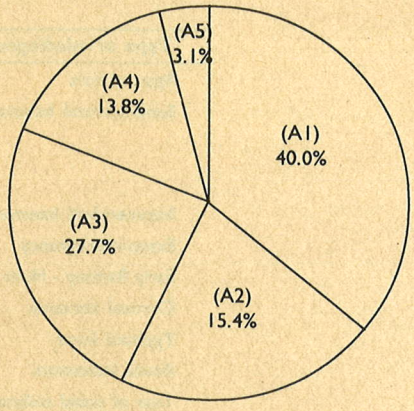
Category of complaint	Valid & apology given		Not valid		Unable to conclude on validity	
	No	%	No.	%	No	%
A) Medical	33	50.8	13	20.0	19	29.2
B) Doctor-patient/ paramedical staff-patient relationship	15	21.7	15	21.7	39	56.5
C) Patient flow/logistics at EMD	6	16.2	11	29.7	20	54.1
D) In-house	3	50	1	16.7	2	33.7
E) Others	3	30	2	20	5	50

Fig 1 - Categories of complaints



Legends
(A) Medical
(B) Doctor/Paramedical staff-patient relationship
(C) Logistics at EMD
(D) In-house
(E) Others

Fig 2 - Subcategories of A or medical complaints



Legends
(A1) Misdiagnosis
(A2) Inappropriate treatment
(A3) Treatment dissatisfaction
(A4) Failure to admit
(A5) Death soon after being seen

were through feedback forms, some of which had incomplete entry of patients' particulars. Out of the 125 complaints, 17 (13.6%) are priority 1 patients, 65 (52.0%) are priority 2 and 43 (34.4%) are priority 3. It is obvious that complaints tend to arise from priority 2 and 3 rather than priority 1 patients.

DISCUSSION

The National University Hospital is a 725-bedded tertiary teaching hospital. The total number of cases seen during this period of review was 640,846. Its total patient attendance in 1995 was 80,362 out of which 78.8% were emergency cases. It is an extremely popular hospital with 85.3% bed occupancy rate in 1995. The Emergency Department started out in a small way in 1986 when NUH first opened. Initially, it only treated walk-in patients and those brought in by the NUH ambulance service. It was only in 1988 that the department started to receive cases brought in by the Singapore Civil Defence ambulance. Ever since then, the percentage of serious cases have increased.

In this 10-year review of complaints at NUH EMD, our complaint frequency of 0.26 per 1,000 visits is comparable to the King's College Hospital, London of 0.20[1], but much lower than the William Beaumount Hospital, Michigan of 3.8[2] and the Children's Hospital of Pittsburgh of 0.69[3].

The commonest complaints were due to medical causes, particularly misdiagnosis and doctor - patient/ paramedical staff-patient relationship. This was the case in a review of complaints at the Accident and Emergency Department of King's College Hospital, London[1], whilst misdiagnosis was the commonest complaint at the Children's Hospital, Pittsburgh[3]. In contrast, billing formed the commonest complaint in the Department of Emergency Medicine, William Beaumont Hospital, Michigan[2]. In the Department of Emergency Medicine at the Children's Hospital, Boston, quality of care was the commonest complaint[4].

A review of 200 cases of malpractice in the Emergency Department in Pennsylvania revealed that the majority (66%) was due to misdiagnosis[5]. It is also interesting to note that a study done in Canada showed that the major cause of misdiagnosis was not lack of knowledge but a faulty interpretation of available clinical data[6].

In the subcategory of misdiagnoses, there were 6 cases of missed appendicitis. Appendicitis, although a common condition, poses diagnostic difficulties as evidenced by the many papers that have been published[7-12]. Appendicitis can be diagnosed accurately in over 80% of cases by some senior surgeons but only about 50% among junior surgeons[7]. This is because the clinical diagnosis of appendicitis is hampered by the similarity of signs and symptoms produced by other conditions. the absence of pathognomonic laboratory or radiographic tests and the inability to determine exactly when perforation will occur[8]. To reduce the number of such cases, the set-up of an abdominal pain observation ward at EMD with frequent reviews by an experienced emergency specialist may be considered. Studies have shown that clinical indicators of appendicitis (and probability of diagnosis) changed after relatively brief periods of observation of patients presenting to the emergency department with abdominal pain. These changes improved the physicians' ability to distinguish patients with or without appendicitis, particularly in patients with low to intermediate pre-observation probability of appendicitis[9]. The use of structured forms for assessment of abdominal pain (with or without computer-aided diagnosis) has been well-documented to help in decision-making[10,11]. The introduction of such proformas as standing practice in an emergency department ought to be considered in order to decrease the potential for complaints in this area.

To reduce the number of category A or medical complaints, round-the-clock senior EMD cover is very important. Cases with dubious diagnoses are asked

to return to the Emergency Department the following morning for review by the emergency specialist. To further minimise cases of misdiagnoses, the department has started to formulate protocols for high-risk clinical problems[13] and has taken steps to introduce more patient advice sheets. Besides these, there is an ongoing structured weekly teaching programme for each new batch of medical officers posted to our department.

Category B problems due to human relationships are among the most difficult to solve as they involve human temperaments and stressful working conditions at EMD. Moreover, many cases may occupy a doctor's attention at the same time. This may sometimes result in lack of explanation to the patient and their relatives. In an article entitled "Emergency Department Satisfaction: What Matters Most?"[14], the authors concluded that among the important variables associated with overall satisfaction with EMD services were how caring the nurses and physicians were and satisfaction with the amount of information the nurses gave them about what was happening to them. The total time patients actually spent in the EMD was found to be less important than receiving some immediate attention and caring service.

Among the category B complaints of note were rude doctors. This may seem appalling but the commonest cause was actually patients not being able to accept "lecturing" by the EMD doctors for misuse of EMD for doctor-perceived minor non-urgent problems. Of the 18 subcategory B2 complaints, 6 could not correlate to the triage priority due to incomplete records. Of the remaining 12 which could be correlated, there were 0 priority 1, 5 priority 2 and 7 priority 3 cases. EMD doctors often get frustrated having to spend time treating non-urgent cases when their time could be better spent treating emergencies. This is worse during weekends and public holidays when the general practice clinics are closed. One of the ways our department has taken to minimise this problem is to increase the complement of doctors working during the evenings of weekends and public holidays by getting locum doctors. Doctors are also advised to just concentrate on treating each patient who presents to the EMD and let the appropriate personnel educate the public on the proper use of EMD. To make up for the lack of teaching in doctor - patient relationship in the undergraduate curriculum, every new batch of residents at our EMD is made to attend a compulsory seminar on "How to handle the difficult patient/family at the emergency department" at the beginning of their EMD posting. This seminar was felt useful to decrease category B1 and B2 complaints. The first such seminar was introduced in November 1994. Figure V shows that since the introduction of this seminar, there has only been 1 complaint in categories B1 and B2, though the reduction may not be entirely due to this seminar. There have been other changes as well. These included an increase in the senior doctors coverage, the department having fewer medical officers who have worked there for more than a posting and who were beginning to feel the stress of the practice of emergency medicine and the increase in manpower working during the evenings of weekends and public holidays.

The category C complaints were mainly received in the form of feedback survey forms rather than formal written complaints. With the introduction of evening clinics run by locum doctors for general practice type of cases, we hope that the physician waiting time during the weekends and public holidays will shorten.

With more beds available since the opening of 'C' class beds (ie heavily government subsidised 8-bedded non-air-conditioned wards) in NUH in 1994 and the completion of phase III of NUH scheduled in mid 1996, it is hoped that waiting time before ward admission will be shorter. Phase III of NUH is an expansion and upgrading programme of the hospital. It will add approximately another 250 beds to the existing 725 beds in the hospital. Complaints have been brought up time and again in the press regarding ambulances not bringing patients to their hospital of choice.

Two of the 4 in-house D1 complaints were related to misdiagnoses, 1 was due to the EMD doctor not informing the doctor of a critically ill patient and 1 admission was felt to be unnecessary. A word to the ward doctors regarding category D complaints - feedback is valued but not to be overly critical as anybody who has worked in the EMD before will understand the difficulties faced by the EMD doctors having to juggle the fine balance of speed versus diagnostic accuracy and treatment.

To rectify the wrong classification of urgent versus non-urgent cases in category E complaints, the EMD doctors are advised to classify the patients according to their presenting complaint rather than the "take home" diagnosis. The Ministry of Health recently introduced guidelines on what constitutes "emergency" versus "non-emergency" cases instead of leaving it to individual doctor's perception.

Referring to Table V, the validity of a large percentage complaints in categories B, C and E cases could not be determined. Seventy-three percent of category C complaints were through feedback forms, many of which did not have complete patient's particulars to enable proper investigations. Category B complaints tend to be subjective and often difficult to conclude on the validity of the patient's complaints against the doctor's reply.

After reviewing the nature of complaints over the past 10 years, it appears that patients' expectations of the emergency department service are as follows:

1) Correct diagnosis with appropriate treatment given.
2) Empathetic doctors and paramedical staff who communicate adequately the patient's problems with the patient himself or the family.
3) Despite the pressure of a huge and unpredictable crowd at the EMD, doctors

should appear to the patient/family to examine and treat adequately (as 8% of complaints were directed at perceived poor work attitude of doctors).

4) Patients often expect fairly prompt service at EMD as they often view their complaints (however minor from a medical standpoint) to be an emergency. Many of the patients do not understand the concept of triage at the EMD.

Hence, if any of the above expectations are not met at the EMD, patients complain. 48.4% of the complaints were likely to be remediable; 24.5% were not remediable and 27.1% were difficult to determine whether remediable as the validity was uncertain.

CONCLUSION

This study has elucidated the nature of complaints and determined possible reasons why patients complain. Potential remediable measures have been given for each category of complaints. Category C complaints regarding patient's logistics at EMD will have to be solved with the cooperation of the hospital administration eg to increase the number of staff during peak periods, to improve the ambience and comfort of patients in the waiting area and to hire a liason officer to communicate with the patients and their family more effectively. For every new batch of EMD doctors, letting them know the patient's expectations and potential clinical misdiagnosis at the beginning of their posting will enable them to avoid the pitfalls in the practice of emergency medicine.

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