

# Patients' complaints in a hospital emergency department in Singapore

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## ABSTRACT

**Introduction:** This study analysed the complaint rates, profile and trend, and complainant profile of patients' complaints received by the National University Hospital Emergency Medicine Department. An earlier ten-year study (1986–1995) was done on the complaint profile.

**Methods:** Records of all patients' complaints, solicited and unsolicited, from January 2002 to December 2003, were retrieved from the Medical Affairs and Quality Improvement Unit files. Complaint profile analysed was reason, validity, and outcome of complaint and staff category involved. Complainant profile analysed was relationship of complainant to patient, ethnic group, gender and residence type of the complainant; and age group and triage category of the patient.

**Results:** Complaint case rate was 1.17 per 1,000 visits, with 1.27 complaints per complaint case. The complaints were organisation/logistics (49.0 percent), communication (26.0 percent), standard of care (22.9 percent) and other issues (1.3 percent). Most standard of care (76.0 percent) and half of organisation/logistics complaints (46.8 percent) were not valid. Most communication complaints were valid (73.7 percent) and involved all staff categories equally. Most complaints (82.8 percent) were resolved with an explanation/apology. Age group specific and triage-specific complaint rates were highest among adult patients and among priority 3 patients, respectively; ethnic group and gender-specific complaint rates were highest among Chinese patients and among female patients, respectively.

**Conclusion:** Staff-patient communication and organisation/logistics must be continually improved to reduce complaints,

while upholding a good standard of care. These would translate into cost savings for all parties. There must also be appropriate checks and balances particularly where complaints are not valid, so that doctors can practice cost-effective medicine.

**Keywords:** complaint rate, emergency service, hospital complaints, patient complaints, patient satisfaction, staff-patient communication

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## INTRODUCTION

The National University Hospital (NUH) is a 940-bed hospital, with an average bed occupancy rate of 79% and 77% in 2002 and 2003, respectively.<sup>(1)</sup> On average, 65% of patients were admitted through the emergency medicine department (EMD) for both years.<sup>(1)</sup> The first study published by Ooi identified standard of care and communication issues as the major sources of complaints then.<sup>(2)</sup> Today, patients' complaints continue to be featured in newspaper forums and related stories by the media from time to time.

This study analysed the complaint rates, profile and trend, and complainant profile of patients' complaints from January 2002 to December 2003. Complaint profile analysed was reason, validity, outcome and the staff category against which the complaint was lodged. Complainant profile analysed was relationship of the complainant to patient, ethnic group, gender and residence type of the complainant; and age group and triage category of patient. Further analyses were done to determine if complaints were significantly associated with these characteristics, some of which have been studied in relation to patient satisfaction,<sup>(3–6)</sup> but seldom in relation to complaints.<sup>(7)</sup> In the first study, reason and validity were analysed but complainant profile was not analysed except for the triage category. This study helped reveal if quality improvement interventions following the first study successfully addressed the earlier identified flaws. This study also helped provide insight into the current shortcomings in care delivery that could be targeted for improvement to reduce future complaints. This effectively translates into cost savings to all parties.

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## METHODS

Complaint case rate refers to the number of complaint cases per 1,000 EMD patient visits. A complaint case may contain one or more complaints or complaint issues. The main EMD sees all adult cases but only Priority 1 (P1) paediatric cases (from February 2002), as all other paediatric cases are seen at the Child Emergency. Patients are triaged according to the severity of their condition upon presentation. The triage category is, as specified, the 4-point Singapore Patient Acuity Category Scale (PACS), which is used across all public hospitals. Complaint cases that were anonymous with no particulars provided were excluded ( $n = 12$ ); in practice, such cases cannot be thoroughly investigated, thus making the claims untenable.

The population that forms NUH EMD's patient pool is a heterogeneous one that comes from all over Singapore, and it is from this pool that potential complaint cases arise. This is an important point to note in terms of generalisability of the findings from this study. Both unsolicited and solicited complaints were included. This provided a more complete representation of complaints received. Solicited complaints comprised mostly feedback forms; other sources were patient satisfaction surveys and patient visitations by the Quality Improvement Unit (QIU) team. Records were retrieved from the Medical Affairs (MA) and QIU files. The Emergency Department System (EMDS) and Computerised Patient Support Service (CPSS) electronic records were accessed in some cases to obtain missing data fields. For each complaint case, information required for analysis was entered into an Excel spreadsheet, coded and then analysed using the Statistical Package for Social Sciences version 12.0 (SPSS Inc, Chicago, IL, USA).

Records of the complainant's account and staff's account of the incident(s) and complaint(s) were analysed to ensure a balance of perspectives. Following that, the departmental head's report post-investigations, and the MA/QIU's report of how the case was resolved were also analysed. With these four perspectives, a complaint was classified as valid, not valid or indeterminate. In this study, the authors' classification of all complaints was consistent with the conclusions of the departmental head's and the internal governing bodies'. Specific rates and rate ratios were determined for ethnic group, gender, age group and triage category for self-complainants only. Denominator data for rates calculation was obtained from EMD patient databases containing aggregate data on the number of EMD visits by age, gender, ethnic group and triage category. Chi-square tests were done for age group, gender, ethnic group and triage category. Rate ratios were calculated with confidence intervals (CI).

## RESULTS

Out of 149,511 EMD visits during the review period, there was a total of 175 complaint cases, giving rise to a complaint case rate of 1.17 per 1,000 visits. On average, there were 1.27 complaints per complaint case, giving rise to a total of 223 complaint issues. The majority were organisation/logistics (49.8%), followed by communication (26.0%) and standard of care (22.9%) issues. Waiting time topped the list of organisation/logistics complaints (Table I). As for standard of care complaints, inappropriate and/or inadequate treatment topped the list, followed by misdiagnosis/delayed diagnosis/missed diagnosis and inappropriate and/or inadequate examination and/or investigation.

The majority of standard of care complaints (76.0%) and half of organisation/logistics complaints (46.8%) were not valid, as opposed to communication complaints of which 73.7 % were valid. Of all complaints on waiting time, half (49.2%) were valid. The majority of all complaints were solved with an apology and/or explanation (Table II). Communication complaints involved doctors, nurses and support staff almost equally. Standard of care complaints involved only doctors. As for organisation/logistics complaints, 75% were directed against systems, while 20% were against support staff.

Adults aged 21–60 years formed the majority of self-complainants (69.3%). Complaints from among elderly patients (> 60 years old) and children (< 21 years old) were mostly lodged by their children (72.3%) and parents (64.3%), respectively (Table III). Age group-specific complaint case rate was highest among adult patients. Complaints were about three times more likely among adult patients compared to children, but the elderly were just as likely to complain compared to children (Table IV). Chinese made up the vast majority of all complainants (78.3%), followed by Indians/Sikhs (10.9%) and Malays (9.1%). Ethnic group-specific complaint case rate was highest among Chinese patients and lowest among Malays. While complaints were about three times less likely among the Malays compared to the Chinese, Indians/Sikhs were only 1.7 less likely to complain as the Chinese (Table IV).

Men comprised 52.6% of all complainants. However, gender-specific complaint rate was actually slightly higher among females, though it was not statistically significant. This was to be expected as the absolute difference in complaint rates between men and women was small. Triage-specific complaint case rate was highest among priority 3 (P3) patients. Complaints were two times less likely among P2 patients compared to P3 patients. Though P1 patients were four times less likely to complain compared to P3 patients, this was not found to

**Table I. Categories of complaints.**

Main category	Subcategory	No. of issues	% of total complaint issues
Standard of care (n = 51)	Misdiagnosis, missed or delayed diagnosis	11	22.9
	Inappropriate and/or inadequate treatment	35	
	Inappropriate and/or inadequate examination and/or investigation	3	
	Other	2	
Communication (n = 58)	Rudeness or insensitive/inappropriate remarks	21	26.0
	Poor or inadequate communication, including inadequate update on medical condition	9	
	Conduct and attitude	28	
	Others	-	
Organisation/logistics (n = 111)	Waiting time	63	49.8
	Inadequate financial counselling at EMD prior to admission	10	
	Billing error	10	
	Lost items	5	
	Appointment and admission-related issues	5	
	Patient flow issues	4	
	Lack of interim care while awaiting doctor's review or admission	9	
	SARS-related issues	5	
	Others	0	
Others		3	1.3
Total		223	100.0

**Table II. Outcome of complaints.**

Category of complaint	Outcome of complaint No. (%)			Total No. (%)
	Apology and/or explanation offered and accepted	Waiver/fruit basket/compensation offered and accepted	Other outcomes	
Standard of care	40 (78.4)	10 (19.6)	1 (2.0)	51 (100.0)
Communication	57 (98.3)	1 (1.7)	0	58 (100.0)
Organisational/logistics issues	89 (80.2)	16 (14.4)	6 (5.4)	111 (100.0)
Others	1 (33.3)	1 (33.3)	1 (33.3)	3 (100.0)
Total	187 (83.9)	28 (12.6)	8 (3.6)	223 (100.0)

Outcome of complaints was not analysed in the first study.

**Table III. Correlation between relationship of complainant to patient and patient age.**

Relationship of complainant to patient	Patient category No. (%)			Total
	Child (< 21 years)	Adult (21–60 years)	Elderly (> 60 years)	
Self	4 (28.6)	79 (69.3)	7 (14.9)	90 (51.4)
Parents/parents-in-law	9 (64.3)	3 (2.6)	0	12 (6.9)
Children/children-in-law	0	8 (7.0)	34 (72.3)	42 (24.0)
Spouse	0	11 (9.6)	4 (8.5)	15 (8.6)
Siblings/siblings-in-law	0	6 (5.3)	1 (2.1)	7 (4.0)
Others	1 (7.1)	7 (6.1)	1 (2.1)	9 (5.1)
Total	14 (100.0)	114 (100.0)	47 (100.0)	175 (100.0)

**Table IV. Complainant profile of the 175 complaint cases.**

Complainant profile variable	Total no. of complaint cases	No. of self-complaint cases (a)	Total no. of patients by category (b)	Complaint case rate (per 1,000 visits) = a/b*1,000	Complaint case rate ratio (95% CI)
Age (years)					
Children (< 21)	14	4	15,659	0.26	1
Adults (21–60)	114	79	105,656	0.75	2.93 (1.07–8.0)
Elderly (> 60)	47	7	28,196	0.25	0.97 (0.29–3.32)
Gender					
Female	83	44	69,859	0.63	1
Male	92	46	79,652	0.58	0.92 (0.61–1.39)
Ethnic group					
Chinese	137	74	92,230	0.80	1
Malay	16	6	21,602	0.28	0.35 (0.15–0.80)
Indian/Sikh	19	10	20,624	0.48	0.60 (0.31–1.17)
Others	3	0	15,055	0	-
Triage					
P1	12	1	6,066	0.16	0.23 (0.03–1.67)
P2	27	9	30,582	0.29	0.42 (0.21–0.83)
P3	136	80	112,830	0.71	1
P4	0	0	33	0	-
Type of residence					
Public	114	70	-	-	-
Private	37	20	-	-	-
Missing data	24	-	-	-	-

be statistically significant (Table IV).

In terms of proportions, complainants who lived in public housing made up the majority of complaint cases (65.2%) while those living in private homes made up 21.1%. Residence type-specific rates could not be determined because the relevant denominator data was not available. However, assuming that the housing type distribution of the study population did not differ from the Singapore national housing distribution with 84% residing in public housing and 16% in private housing,<sup>(8)</sup> it would then appear that patients living in private homes had a higher complaint case rate.

## DISCUSSION

The complaint case rate found in this study (1.17 per 1,000) is comparable with rates reported by others, ranging from 0.158 to 3.8 per 1,000.<sup>(7,9-12)</sup> The higher rate as compared to the first study (0.26 per 1,000) could be due to previous under-reporting, as there was no dedicated department overseeing service quality issues then. Furthermore, in addition to feedback forms, feedback is also being actively solicited through patient satisfaction surveys and patient visitations. Although there was no

standard categorisation system across different studies, the main reasons for complaints revolved around standard of care, communication and waiting time issues.<sup>(7,9-12)</sup> While standard of care and communication complaints were the main reasons for complaints in the first study, the profile has changed to organisation/logistics issues, particularly waiting time. It is worth noting that some EMD patient satisfaction studies found that perceived waiting time rather than actual waiting time determined overall satisfaction.<sup>(3,13-15)</sup> This perception could be attributed to the public's expectation of instantaneous service because "this is an emergency room."<sup>(16)</sup> Some measures that have been instituted at NUH to address this common EMD complaint include rostering of a senior doctor at the P3 triage area, so that essential investigation and relief medication could be ordered while the patient waits for a formal assessment.

The finding that most standard of care complaint issues were not valid, reflects positively on the interventions instituted following Ooi's study, such as 24-hour senior doctor coverage, formulation of clinical protocols, compulsory vetting of radiographs and ECGs by a senior doctor (registrar level and above), and structured

teaching for medical officers with pre- and post-training assessments.<sup>(2)</sup> Communication complaints have remained one of the top two categories, although initiatives, such as staff seminars on handling difficult patients and family, have been a regular feature at the department. This could be due to the patients' ever increasing expectations. It is also important for staff to match their professional styles according to different patients, as one's personal style may not always be appropriate for all patients.<sup>(17)</sup>

The finding that most complaints were resolved through an explanation and/or apology is consistent with the findings of others.<sup>(7,11)</sup> It is also to be expected because communication and organisation/logistics issues were the main complaints, and the majority of standard of care complaints was not valid. Giving an apology soon after a complaint may help defuse the situation<sup>(18-20)</sup> and reduce the resources required for a final resolution.<sup>(18,19)</sup> However, it is worth noting that most complaints were resolved through an explanation and/or apology, implying that there could be a lack of adequate communication in the first place.

The higher propensity to complain among the Chinese and Indians, compared to Malays, might be related to sociocultural differences. For the elderly, complaints were mostly surfaced by family members, who may have done so because of genuine concern or to assuage feelings of guilt. The elderly had similar complaint rates compared to children, which was expected, as both are "vulnerable" populations. The complaint rate was higher in females, though not statistically significant, as was found in the other recent EMD complaints study by Taylor et al.<sup>(7)</sup> This suggests that the difference, if any, was probably marginal. As for the triage category, although complaints were four times less likely among P1 patients compared to P3 patients, this was not statistically significant, probably because of the small sample size.

Only four cases approached external parties first, and none of these were sentinel events. That this was not the norm reflected well on the department's handling of complaints. Hospitals should always try to resolve patient complaints while it is still within their boundaries.<sup>(21)</sup> Hospitals must also systematically identify root problems and change gears from one of "fighting fires" to "all hazards prevention". Having fewer complaints also creates a happier working atmosphere. However, while it can be argued that from a business perspective, complaints represent a failure of the provider or system to meet a patient's expectations, and while parallels are being drawn between healthcare and other service industries, there are aspects of the healthcare industry that are uniquely different. To apply "customer satisfaction" principles indiscriminately would be an injustice not just to healthcare providers, but also to patients. This is

because being the "patient advocate" entails doing the right thing, even if it is not popular. Meeting patients' expectations does not necessarily result in better healthcare. What people want or think they need may not always be in their best interest.

To address complaints on waiting time, besides ensuring adequate staffing, there is a need for continued public education on responsible utilisation of EMD services. Introducing activities during waiting, and providing information on waiting time, could also help reduce boredom and keep waiting patients and relatives informed on what is going on. Providing updates on the patient's condition to waiting relatives would keep them informed on what is being done for their loved one. Staff training in interpersonal skills and communication skills and engaging public/patient relations officers to handle potential complaints on the ground could help reduce communication complaints. Complaint-generating situations should also be highlighted to staff regularly. Role-playing may help staff develop better strategies in managing difficult situations.<sup>(3)</sup> Some EMD patient satisfaction studies have shown that patients visiting busier EMDs were no less satisfied than those visiting less busy EMDs,<sup>(3,22,23)</sup> i.e., good technical skills and interpersonal skills may outweigh the potential effect of patient volume.<sup>(22,23)</sup>

Several limitations of this study need to be mentioned. Firstly, the lack of a standard complaints classification system as well as the lack of any standard scale for analysing validity of complaints, mean that some misclassification bias might have been unavoidable. However, this is not expected to be significant because of the process taken in analysing each complaint, as detailed in the Methods section. Secondly, the lack of individual non-complainant data did not allow for multivariate analysis to be carried out to control for the simultaneous effect of multiple confounders in the analysis of complainant profile. Future studies could be extended to a cohort or case-control study with use of multivariate analysis for more effective control of confounders.

Complaints analyses, though not without limitations, help to highlight service gaps that need to be bridged, and procedures and policies that need to be changed. Findings could also be translated into staff training goals. Although it is unlikely that patients' complaints can ever be totally eliminated because it is impossible to "please all of the people all the time", the EMD should strive to enhance the entire patient experience, particularly where it hinges on standard of medical care, communication and systems that could be improved. On the other hand, there must also be appropriate checks and balances, to ensure that doctors can continue to practise good medicine in the wider interests of all patients with the confidence that

the hospital will stand up for them if the complaints are not valid. Only with such actions can doctors feel safe to practise cost-effective medicine.

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### REFERENCES

1. Management Information System Department (MIS), National University Hospital, Singapore.
2. Ooi SB. Emergency department complaints: a ten-year review. *Singapore Med J* 1997; 38:102-7.
3. Boudreaux ED, Ary RD, Mandry CV, McCabe B. Determinants of patient satisfaction in a large, municipal ED: the role of demographic variables, visit characteristics, and patient perceptions. *Am J Emerg Med* 2000; 18:394-400.
4. Nerney MP, Chin MH, Jin L, et al. Factors associated with older patients' satisfaction with care in an inner-city emergency department. *Ann Emerg Med* 2001; 38:140-5.
5. Sox CM, Burstin HR, Orav EJ, et al. The effect of supervision of residents on quality of care in five university-affiliated emergency departments. *Acad Med* 1998; 73:776-82.
6. Miró O, Sánchez M, Espinosa G, Millá J. Quality and effectiveness of an emergency department during weekends. *Emerg Med J* 2004; 21:573-4.
7. Taylor DM, Wolfe R, Cameron PA. Complaints from emergency department patients largely result from treatment and communication problems. *Emerg Med (Fremantle)* 2002; 14:43-9.
8. HDB Annual Report 2003/04, Housing and Development Board, Singapore.
9. Schwartz LR, Overton DT. Emergency department complaints: a one-year analysis. *Ann Emerg Med* 1987; 16:857-61.
10. Hunt MT, Glucksman ME. A review of 7 years of complaints in an inner-city accident and emergency department. *Arch Emerg Med* 1991; 8:17-23.
11. Kadzombe EA, Coals J. Complaints against doctors in an accident and emergency department: a 10-year analysis. *Arch Emerg Med* 1992; 9:134-42.
12. Salazar A, Ortiga B, Escarrabill J, Corbella X. Emergency department complaints: a 12 year study in a university hospital. *Ann Emerg Med* 2004; 44: Suppl ACEP Research Forum.
13. Bursch B, Beezy J, Shaw R. Emergency department satisfaction: what matters most? *Ann Emerg Med* 1993; 22:586-91.
14. Thompson DA, Yarnold PR, Williams DR, Adams SL. Effects of actual waiting time, perceived waiting time, information delivery, and expressive quality on patient satisfaction in the emergency department. *Ann Emerg Med* 1996; 28:657-65.
15. Booth AJ, Harrison CJ, Gardener GJ et al. Waiting times and patient satisfaction in the accident and emergency department. *Arch Emerg Med* 1992; 9:162-8.
16. Zimmermann PG. Customer service run amok. *J Emerg Nurs* 1997; 23:514-5.
17. Hart J, Weingarten MA. A procedure for handling complaints against general practitioners. *Fam Pract* 1986; 3:107-12.
18. Pichert JW, Miller CS, Hollo AH, et al. What health professionals can do to identify and resolve patient dissatisfaction. *Jt Comm J Qual Improv* 1998; 24:303-12.
19. Bendall-Lyon D, Powers TL. The role of complaint management in the service recovery process. *Jt Comm J Qual Improv* 2001; 27:278-86.
20. Halsel D. Handling patient complaints. *Mo Med* 1993; 90:645-7.
21. How to address patient complaints. *ED Manag* 2001; 13:103-5.
22. Hall MF, Press I. Keys to patient satisfaction in the emergency department: results of a multiple facility study. *Hosp Health Serv Adm* 1996; 41:515-32.
23. Mowen JC, Licata JW, McPhail J. Waiting in the emergency room: how to improve patient satisfaction. *J Healthcare Mark* 1993; 13:26-33.