Brief Communication
http://mjiri.iums.ac.ir
Medical Journal of the Islamic Republic of Iran (MJIRI)
Iran University of Medical Sciences

Emergency medicine specialty may improve patient satisfaction

Saeed Abbasi[1], Davood Farsi[2], Maryam Bahrani[3], Saeed Davari[4], Elham Pishbin[5]
Nahid Kianmehr[6], Mahdi Rezai[7], Reza Yazdanpanah[8], Mani Mofidi[9]

Received: 29 May 2013 Accepted: 9 October 2013 Published: 14 July 2014

Cite this article as: Abbasi S, Farsi D, Bahrani M, Davari S, Pishbin E, Kianmehr N, Rezai M, Yazdanpanah R, Mofidi M. Emergency medicine specialty may improve patient satisfaction. *Med J Islam Repub Iran* 2014 (14 July). Vol. 28:61.

Brief Communication

Emergency Department (ED) is a setting where patients usually present with acute and severe illnesses (1). Nowadays, patient satisfaction has become an important outcome of health care services and shows quality of care that provides valuable information about the care delivered by an ED system (2-4). A patient's experience at an ED can influence his or her choice of hospital when seeking future care and may generate either positive or negative comments among their social sphere (5). Patient satisfaction depends on many factors such as length of stay at ED, severity of illness, demographic characteristics of patients, patient's origin and language barriers (6-7). We conducted the current study to find out whether the presence of Emergency Medicine (EM) system is effective in patient satisfaction in the EDs.

This was a cross sectional study on patient satisfaction in EDs of two tertiary centers over a period of 12 weeks. EM residents with supervision of EM faculties provided care at the first center (academic ED) and general practitioners provided care for patients at the second hospital (non academic ED). Both hospitals had an annual number of ED visitors of approximately 40,000 patients with medical and surgical complaints. 3 EM residents and 3 general practitioners were present in each hospital respectively. EM faculties did not visit the patients alone; also there were no interns or residents (other than EM residents in academic ED) in both hospitals. After approval by the Local Ethics Committee (LEC), 12 days were randomly chosen from the 12 weeks of the study period. During a 24-hour period, 40 patients (about 30% of patients presented at the EDs) were randomly chosen to complete the questionnaire.

During 12 weeks period, 716 patients enrolled in the study. The study population consisted of 355 patients (49.6%) from the academic hospital and 361 (50.4%) patients from the non-academic hospital.

There was no difference between two hospitals regarding sex, mean of age and educational levels of patients. Patients' opinion about quality of care in EDs including staff performance, facilities, and physical environment are shown in (Table

1. Associated Professor of Emergency Medicine, Iran University of Medical Sciences, Tehran, Iran. saieedabbasi@yahoo.com
2. Associated Professor of Emergency Medicine, Iran University of Medical Sciences, Tehran, Iran. davoodfa2004@yahoo.com
3. Assistant Professor of Emergency Medicine, Tehran University of Medical Sciences, Tehran, Iran. Maryam_bahrani@yahoo.com
4. Assistant Professor of Emergency Medicine, Hormozgan University of Medical Sciences, Bandarabas, Iran. saeeddavari@gmail.com
5. Assistant Professor of Emergency Medicine, Mashhad University of Medical Sciences, Mashhad, Iran. pishbine@mums.ac.ir
6. Associated Professor of Rheumatology, Iran University of Medical Sciences, Tehran, Iran. kianmehrnahid@gmail.com
7. Assistant Professor of Emergency Medicine, Iran University of Medical Sciences, Tehran, Iran. mah_re@yahoo.com
8. Researcher, Iran University of Medical Sciences, Tehran, Iran. shahrooz_asal@yahoo.com
9. (**Corresponding author**) M.D, Associated Professor of Emergency Medicine, Iran University of Medical Sciences, Emergency Department, Rasoul Akram Hospital, Satarkhan Ave, Niayesh St, PO Box 1445613131, Tehran, Iran. m-mofidi@sina.tums.ac.ir.

[Downloaded from mjiri.iums.ac.ir on 2024-03-28]

Table 1. Patients' Opinions on each Component of the Emergency Department in both Hospitals

Variable (%)	Excellent		Good		Fair		Poor	
	EM	GP	EM	GP	EM	GP	EM	GP
Physicians' attitude	31.3	10	57.7	49.6	9.9	32.7	1.1	7.8
Physicians' competency	29.9	6.9	51	36	17.7	41.8	1.4	15.2
Nurses' attitude	27.6	8.9	57.2	50.7	13.8	32.7	1.4	7.8
Secretary	30.1	10.8	64.8	78.9	3.9	9.1	1.1	1.1
Treatment strategies	21.1	6.4	50.1	41	26.5	38.5	2.3	14.1
Equipments	15.8	3.9	43.1	39.6	36.6	46.3	4.5	10.2
Waiting time for visiting by physician	29.6	10	63.7	55.4	5.4	21.3	1.4	13.3
Physical environment	11.8	5	49.3	42.4	35.8	43.8	3.4	8.9
Laboratory	13	6.1	69.9	65.7	15.2	24.4	2	3.9
Radiology	24.2	10.8	62.5	60.7	11.3	23.5	2	5
Turnaround Time	27.6	6.6	62.5	56	7.3	24.4	2.5	13
Overall satisfaction (after one week)	28.2	4.4	57.7	38	13	41	1.1	16.6

EM: Emergency Medicine, GP: General Practitioner

Table 2. Patients' satisfaction on each Component of the Emergency Department in both Hospitals after One Week from Discharge

Variable (%)	Satisfying		Dissatisfying		p value
	EM	GP	EM	GP	
Admission Time	98.9	84.2	1.1	15.8	Fisher's Exact, <0.001
Physicians	96.9	60.9	3.1	39.1	Chi^2, <0.001
Nurses	96.6	87.8	3.4	12.2	Chi^2, <0.001
Secretors	100	99.4	0	0.6	Fisher's Exact, 0.499
Physical Place	95.2	84.5	4.8	15.5	Chi^2, <0.001
Laboratory	99.4	97.2	0.6	2.8	Fisher's Exact, 0.037
Radiology	99.2	96.1	0.8	3.9	Fisher's Exact, 0.012
Discharge Time	98.6	79.2	1.4	20.8	Chi^2, <0.001

1). We found that all the items (except secretor) received significantly higher score in academic section of ED ($p<0.001$).

One week after discharge from the hospital, we called patients and asked them about the reasons for satisfaction and dissatisfaction. The details are shown in (Table 2). The overall satisfaction was significantly higher in academic hospitals. (Chi^2, $p<0.001$)

83 percent of patients who admitted at the academic hospital responded that they may recommend the hospital to their relatives or friends. One explanation about the effect of EM specialists in various aspects of satication was that in academic hospital, all process of patient care were supervised by EM faculties and each staff or worker took into account a better care for patients.

We found that in the academic hospital, the majority of patients were discharged by EM system. In contrast to other hospital, most patients were either admitted or left against medical advice. Unnecessary admission result in unfruitful outcomes such as less available empty beds for actual necessary hospitalization, overcrowding of ED, more waiting time for admission, more discharge by written consent and higher dissatisfaction rate. The number of leave against medical advice was significantly lower in academic hospital. These events probably related to better decision making and better disposition which was done by EM system. Blanco-Abril et al showed that overall satisfaction was higher among those ED patients who returned home than those who were admitted to the hospital (8). The most important reason for patient dissatisfaction in non academic hospital was related to the physicians' performance (39.1%; 95% CI, 34.3-44.3). But at the academic hospital, only 3.1% (95% CI, 1.4-5.1) of patients were dissatisfied with the physicians.

In our study, waiting time for the first vis-

[Downloaded from mjiri.iums.ac.ir on 2024-03-28]

it was an important factor for dissatisfaction in non-academic hospital (15.8%; 95% CI, 11.9-19.7). This value was 1.1% (95% CI, 0.3-2.3) in academic hospital. The results from two studies conducted in 2 academic centers of Turkey and Pakistan have shown that prolongation of waiting time was the major concern for patients' dissatisfaction (6,9). Some studies revealed that clear expression of real situation to the patients had a significant influence in decreasing the sense of elongated waiting time and leads to an increase in the general satisfaction with the ED experience (10,11).

In conclusion, this study showed that the presence of EM specialist in EDs could be one of the important factors that decreases patient complaints and increases patient satisfaction.

Acknowledgements

This study belonge to Dr. Saeed Davari and Dr. Maryam Bahrani's residency thesis and was supported by a grant from Iran University of Medical Sciences (IUMS) to Dr. Mani Mofidi.

References

1. Boudreaux ED, Cruz BL, Baumann BM. The use of performance improvement methods to enhance emergency department patient satisfaction in the United States: a critical review of the literature and suggestions for future research. Acad Emerg Med 2006; 13(7):795–802..
2. Howard M, Goertzen J, Hutchison B, Kaczorowski J, Morris K. Patient satisfaction with care for urgent health problems: a survey of family practice patients. Ann Fam Med 2007; 5(5):419-24.
3. Schull MJ, Guttmann A, Leaver CA, Vermeulen M, Hatcher CM, Rowe BH, et al. Prioritizing performance measurement for emergency department care: consensus on evidence-based quality of care indicators. CJEM 2011; 13(5):300-9.
4. Bernard AW, Lindsell CJ, Handel DA, Collett L, Gallo P, Kaiser KD, et al. Postal survey methodology to assess patient satisfaction in a suburban emergency medical services system: an observational study. BMC Emerg Med 2007; 7:5.
5. Kersnik J. Patients' recommendation of doctor as an indicator of patient satisfaction. Hong Kong Med J 2003; 9(4):247-50.
6. Yildirim C, Kocoglu H, Goksu S, Gunay N, Savas H. Patient satisfaction in a university hospital emergency department in Turkey. Acta Medica (Hradec Kralove) 2005; 48(1):59-62.
7. Mygind A, Norredam M, Nielsen AS, Bagger J, Krasnik A. The effect of patient origin and relevance of contact on patient and caregiver satisfaction in the emergency room. Scand J Public Health 2008; 36(1):76-83.
8. Blanco-Abril S, Sánchez-Vicario F, Chinchilla-Nevado MA, Cobrero-Jimenez EM, Mediavilla-Durango M, Rodríguez-Gonzalo A, et al. Patient satisfaction with emergency care nurses. Enferm Clin 2010; 20(1):23-31.
9. Imam SZ, Syed KS, Ali SA, Ali SU, Fatima K, Gill M, et al. Patients' satisfaction and opinions of their experiences during admission in a tertiary care hospital in Pakistan - a cross sectional study. BMC Health Serv Res 2007; 7:161.
10. Vidal O, Romero JM, Ginestà C, Badiella L, Valentini M, Espert JJ, et al. Factors associated with patient satisfaction and care of over 65 year olds in emergency departments. Cir Esp 2008; 83(5):260-5.
11. Magaret ND, Clark TA, Warden CR, Magnusson AR, Hedges JR. Patient satisfaction in the emergency department--a survey of pediatric patients and their parents. Acad Emerg Med 2002; 9(12):1379-88.

[Downloaded from mjiri.iums.ac.ir on 2024-03-28]