

The Completeness of Patient Satisfaction Questionnaires of Emergency Departments: A Literature Review Approach

Wei-Kung Chen, Yu-Ting Chung, Yi-Chang Cheng, Kim-Choy Ng

Department of Emergency Medicine, China Medical University Hospital, Taichung, Taiwan.

Objectives. The questionnaire is the most common method to evaluate patient satisfaction. The purpose of this study was to review data from the literature to investigate the factors affecting patient satisfaction in the ED and to assess the completeness and quality of patient satisfaction questionnaires in emergency departments in Taiwan.

Methods. The PubMed database was searched for studies addressing "patient satisfaction" and "emergency department (ED)" in title or abstract from January 1990 to July 2002. The studies which focused on the factors of patient satisfaction of ED were selected. The factors related to patient satisfaction from these papers were classified into uncontrollable and controllable factors. Patient satisfaction questionnaires used at emergency departments in Taiwan in 2002 were also reviewed.

Results. Forty papers associated with ED satisfaction were evaluated and included in analysis. Of the 16 factors extracted from 11 papers, the most important affecting patient satisfaction in the ED were background (7/16), age (5/16), illness severity (2/16) and gender (2/16). Of the 52 factors extracted from 29 papers, the most important affecting patients' satisfaction in the ED were communication (18/52), process (15/52), attitude (10/52), ability (6/52) and environment (3/52). ED satisfaction questionnaires (63%) were collected from 42 hospitals. In the patient satisfaction questionnaires of ED in Taiwan, the most common question items lacking were background for uncontrollable factors and communication for controllable factors.

Conclusions. Based on the literature reviewed, there is much variation in patient satisfaction questionnaire design in ED in many of Taiwan's hospitals. Many questionnaires need further revision to improve the surveillance of EDs' patients' satisfaction. (*Mid Taiwan J Med* 2003;8:283-92)

Key words

emergency department, patients' satisfaction, questionnaire, Taiwan

INTRODUCTION

Patient satisfaction (PS) is an indicator of the quality of care provided by the emergency department (ED). High satisfaction implies that patients are more willing to return to the ED if they need emergency care again [1]. Conversely,

dissatisfied patients are not as likely to return to the same ED for future care. They are also likely to express their dissatisfaction to their family or friends. A bad impression may decrease the reputation and, eventually, lead to financial insolvency in an ED as well as a hospital.

PS is important and should be considered in the overall evaluation of quality of care [2]. Hostutler et al described satisfaction as occurring when services are rendered according to customer

Received : May 29, 2003.

Revised : November 3, 2003.

Accepted : December 4, 2003.

Address reprint requests to : Yi-Chang Cheng, Department of Emergency Medicine, China Medical University Hospital, 2 Yuh-Der Road, Taichung 404, Taiwan.

Table 1. The categories of uncontrollable factors related to patients' satisfaction at EDs in studies from 1990 to 2002

Studies	Factor affecting PS	Categories	
Clark et al [5]	Rural location, race	Background	
Baker et al [6]	Language		
Hayes et al [7]	Language		
Davis et al [8]	Urban, rural		
Carrasquillo et al [9]	Language		
Boudreaux et al [10]	Insurance status		
Sun et al [1]	Race		
Hansagi et al [11]	Younger age		Age
Watson et al [12]	Elderly		
Boudreaux et al [10]	Age		
Sun et al [1]	Younger age	Severity of illness	
Nerney et al [13]	Older adults		
Sun et al [1]	Severity of illness		
Hansagi et al [11]	Severity of illness		
Davis et al [8]	Female	Gender	
Derose et al [14]	Sex		

expectations, needs and perception [3]. Trout et al defined overall PS as being "when the patient's own expectations for treatment and care are met (or exceeded)" [4]. According to these concepts, patients or their family members have expectations about the care they will receive before they visit EDs. After medical services have been provided by ED staff, the patient (medical consumer) will inevitably rate the ED on discharge. Factors which patients evaluate include the quality of care provided by ED staff as well as the perceived quality of the hospital facility, process and environment. Although cost efficiency and profits in the ED may be lower than in other hospital departments, the quality of care in the ED may be the most important factor in assessments by hospital management. The questionnaire is the most common and practical method for evaluating PS in the ED. Validating a scientific, complete and effective model of PS with emergency care remains a great challenge. We assumed that the number of questionnaire items reflected the extent to which a hospital was concerned about PS in the ED during the design of the questionnaire. Therefore, the design of questionnaires can reflect an ED's understanding of PS and show the kind of patient data required.

The purpose of this study was to review the literature to determine which factors affect PS.

These factors were then used to evaluate the quality and completeness of the contents of the EDs' PS questionnaires in Taiwan.

MATERIALS AND METHODS

We performed a structured literature review to identify articles specifically reporting the evaluation of PS in the ED. Studies from January 1990 to July 2002 were searched by the terms "patient satisfaction" and "emergency department" in the PubMed database. The papers which focused on patient satisfaction of ED were selected and analyzed. Reports about the PS of specific treatment or diseases at ED were excluded. Papers were reviewed by two emergency physicians and one English consultant. The papers' conclusions about the factors affecting PS in the ED were categorized into 2 groups: controllable factors and uncontrollable factors. Controllable factors were defined as those which came from ED (services providers). These factors can be changed and improved in the ED by management, such as communication skills or ED process. Uncontrollable those were defined as factors which came from patients or their families (consumers). These related factors were affected by individual patients and so can not be changed by ED, such as patients' gender, age, background or severity of illness.

Table 2. The categories of controllable factors related to patients' satisfaction at EDs in studies from 1990 to 2002

Studies	Factor affecting PS	Categories
Krishel et al [15]	Concern and caring	Attitude
Bursch et al [16]	Caring	
Raper JL [17]	Psychological safety	Communication
Thompson et al [18]	Expressive quality	
Hall et al [19]	Concern	
Yarnold et al [20]	Attitude	
Baker et al [6]	Caring, respect	
Boudreaux et al [10]	Staff cared	
Nerney et al [13]	Concern	
Derose et al [14]	Respect, caring	
Bjorvell et al [21]	Information given	
Maitra et al [22]	Information given	
Krishel et al [15]	Information given, explanation	
Bursch et al [16]	Information given	
Grover et al [23]	Communication	
Brown et al [24]	Communication	
Raper JL [17]	Information given	
Thompson et al [18]	Information delivery	
Hall et al [19]	Communication	
Yarnold et al [20]	Explanation	
Bruce et al [25]	Information given	
Kologlu et al [26]	Information given	
Watson et al [12]	Interpersonal relation	
Lau FL [27]	Communication	
Campanella et al [28]	Interpersonal interaction	
Boudreaux et al [10]	Interaction	
Sun et al [1]	Information giving	Process
Nerney et al [13]	Staff explanation, interpersonal	
Booth et al [29]	Waiting time	
Maitra et al [22]	Waiting time, total time in ED	
Bursh et al [16]	Waiting time	
Krishel et al [15]	Total ED time	
Brown et al [24]	Waiting time	
Hall et al [19]	Waiting time	
Thompson et al [18]	Waiting time	
Chan et al [30]	Throughput time	
Yarnold et al [24]	Waiting	
Boudreaux et al [10]	Wait for physician	
Sun et al [1]	Waiting time	Ability
Nerney et al [13]	Waiting time	
Sandovski et al [31]	Total time at ED, waiting time	
Hedges et al [32]	Waiting time	
Spaite et al [33]	Waiting interval	
Krishel et al [15]	Physician skill	
Rhee et al [34]	Technical quality of care	Environment
Rydman et al [35]	Rapid diagnosis	
Watson et al [12]	Quality of care	
Boudreaux et al [10]	Nurse technical skill	
Nerney et al [13]	Aggressive treatment of pain	Environment
Mack et al [36]	ED facility	
Watson et al [12]	Cleanliness	
Barlas et al [37]	Privacy	

Table 3. The related questions of uncontrollable factors of patient satisfaction questionnaires at EDs of 42 hospitals in Taiwan

Related questions	No. of questions	No. of hospitals lacking relevant questions (%)
Age	30	12 (29)
Gender	30	12 (29)
Background	34	17 (40)
Illness severity	30	12 (29)

Table 4. The distribution of questionnaires related to different numbers of questions in controllable factors of patient satisfaction

Controllable factors	No. of questions per questionnaire				
	0 n (%)	1-3 n (%)	4-6 n (%)	7-9 n (%)	≥10 n (%)
Attitude	0	5 (11.9)	4 (9.5)	27 (64.3)	6 (14.3)
Communication	9 (21.4)	28 (66.7)	4 (9.5)	1 (2.4)	0
Ability	8 (19.0)	33 (78.6)	1 (2.4)	0	0
Process	7 (16.7)	6 (14.3)	24 (57.1)	5 (11.9)	0
Environment	8 (19.0)	4 (9.5)	26 (62.0)	4 (9.5)	0

We also collected PS questionnaires used at EDs in Taiwan in 2001. The items of these questionnaires were also classified into controllable and uncontrollable factors as defined above. The items were further categorized into communication issues which included any item rating communication, such as information giving, explaining test results and waiting time. The items of questionnaires categorized into attitude issues included the rating of ED workers' attitudes, expectations, compassion and respect. The items of questionnaires classified into workers' ability issues included any question rating the ability of the medical provider, such as the fulfillment of the technique or knowledge of ED workers, or the fulfillment of the treatment outcome. The items of questionnaires categorized into process issues included any question rating the ED process, such as the waiting time for test results or other data and waiting time after admission to ED. The items of questionnaires categorized into ED environment issues included any question rating the environment of the ED, such as the clearance and convenience of ED. The items of questionnaires rating patients' basic data were classified into the "uncontrollable factors" as defined above.

RESULTS

A search of the Pubmed database from January 1990 to July 2002 revealed 40 reports associating ED satisfaction with service and patients. A total of 68 themes were categorized into uncontrollable and controllable factors. The uncontrollable factors which were suggested to significantly affect patient satisfaction (PS) in the ED are shown in Table 1. Of the 16 themes extracted from 11 papers, the most important uncontrollable factors affecting PS in the ED were cultural background (7/16) [5-10], age (5/16) [10-13], illness severity (2/16) [1,11] and gender (2/16) [8,14]. The uncontrollable factors which significantly affected PS in the ED are shown in Table 2. Of the 52 factors extracted from 29 papers, the most important controllable factors affecting PS in the ED were attitude (10/52) [13-20], communication (18/52) [21-28], process (15/52) [15,16,29-33], ability (6/52) [1,12,34,35] and environment (3/52) [36,37].

Forty-two hospitals' ED satisfaction questionnaires were collected from 42 hospitals. A total of 102 items regarding uncontrollable factors and 882 items about controllable factors were categorized according to the literature reviewed.

For uncontrollable factors, the most frequently lacking item concerned with PS in the ED in Taiwan was cultural background (Table 3). Twenty-nine percent of questionnaires at 42 hospitals lacked questions about one or more of the following factors; age, gender and illness severity. For controllable factors, the most frequent question item for rating of PS in the ED was attitude, followed by process and environment (Table 4). The most frequently absent question items in ED questionnaires concerning PS were communication (21%), ability (19%) and environment (19%).

DISCUSSION

As awareness of consumerism in health services grows, evaluation of PS has become increasingly important, particularly for hospital management when evaluation of PS might be an important reference indicator for future insurance assessments. However, PS of EDs is difficult to measure accurately because of many variable factors. There has been a steady rise in the number of studies measuring PS in emergency services because of the increase in utilization of EDs. A systemic review of the literature could improve the knowledge of PS in the ED. Trout et al compared the results of 16 papers and discussed the methodology and key themes [4]. Our review provides a literature-reviewed description and classification of both uncontrollable and controllable factors affecting PS in the ED.

Uncontrollable Factors of PS in the ED

The most important uncontrollable factors are patient background, age, gender and disease severity. Patients' requirements and needs of services differ widely. These factors are not easily controlled but they affect patients' expectations when they visit an ED. The most frequent uncontrollable factor that affects PS was patients' background [1,5-10]. Patients' background, such as education level, economic status, different languages or culture may affect their expectations, requirements and attitudes to treatment and ED staff. For example, Davis et al

reported the difference between satisfaction scores among patients in rural and urban areas [8]. Different spoken languages also affected the patient-provider relationship [6,7,9]. It is well known that providing services to very important persons (VIPs) is still a great challenge to ED staff [38].

Age was found to be the second most important uncontrollable factor of PS in the ED [1,10-13]. Watson et al reported that elderly patients had greater expectations of emergency services than younger patients [12]. Nerney et al reported that EDs should be more attentive to older patients' concerns and questions, recognize and aggressively treat pain, and reduce the patients' perception of a long waiting time [13]. If we want to improve PS in the ED, we must not overlook the age factor because the expectations and requirements of services may not be the same in different age groups. Severity of patients' condition is another important factor, because patients presenting to the ED have a hierarchy of wants and needs that is inversely related to their degree of illness [1,11]. The greatest need of critically ill or injured patients is promptly delivered medical expertise. On the other hand, a patient with a cold probably takes medical expertise for granted and most often wants prompt attention from an empathetic member of staff. Gender is another factor affecting PS [8,14]. The need for respect and privacy among females may be greater than among males.

The Completeness of Questionnaires in Assessment of the Uncontrollable Factors

For uncontrollable factors, the patients background was the most frequently mentioned factor that influenced PS in the ED. In the United States, the ethnicity of a patient may significantly affect PS, but in Taiwan, PS may be more strongly associated with economic conditions and education level. However, the percentage of questionnaires in Taiwan which lacked questions about patients' background was around 41%. The average number of questions about this factor was less than one (0.8 ± 0.9). This implies that the design of the questionnaires used in Taiwan's EDs

do not take into consideration the interaction of patients' background and satisfaction. The same was true for other important factors, including gender, age and severity of illness. If the questionnaires do not measure these factors the final analysis will yield incorrect results about PS in the ED. It has already been well established that patients' demographics have a considerable affect on patients' attitudes and expectations, which in turn affect their overall satisfaction. For example, a young male patient and an elderly female patient, both with a laceration wound on an upper limb, may provide very dissimilar satisfaction scores. For this reason, questionnaires about uncontrollable factors in many hospitals in Taiwan are incomplete, and need to be redesigned.

Controllable Factors of PS in the ED

For controllable factors, communication skills, attitude of ED staff, ability issues, as well as ED process and ED environment were the most frequently reported factors affecting PS in the ED. These factors can be changed and improved. The main purpose of designing a questionnaire to measure PS is to determine which controllable factors can be improved in the ED. Using the results of the PS questionnaires, health care providers can identify problems with their ED services and improve their quality of care, thereby increasing PS. Communication skills, including information given, or explanation to patients or their families and friends, was thought to be the most important factor influencing PS. Communication by staff is an active process. Information provided by ED staff to patients has a significant effect on patients' perception of the quality of care and overall satisfaction [4]. Good communication skills, such as delivery of information that patients anxiously want to know, tends to decrease criticism of long waiting intervals. Improvement of ED workers' communication skills is very important to improve the PS of ED [27]. Most patients can accept waiting if definite information about waiting time is provided by ED staff. This may explain why many papers reported that waiting

time did not significantly affect PS, but good communication did [1,16,18].

The second-most frequent factor which was suggested to affect PS in the ED was patient processing of ED. The factor which correlated most strongly with PS was waiting time [15,16,18,19,29-33]. Decreasing the waiting intervals may improve PS. Hedges et al recommended improving patients' perceptions that waiting intervals are appropriate rather than simply shortening waiting intervals [32]. At the ED, waiting cannot always be avoided, so shortening waiting times and explaining to patients the circumstances regarding the waiting interval is very important. The other significant factor related to PS in the ED is attitude [13-20]. The attitude of ED staff is passively perceived by patients, their families or friends. All visiting patients expect the ED staff to behave with compassion and show a caring attitude, which can be a challenge for staff who may be working under pressure. The fourth most frequent factor revealed in the review of the reports was ability [10,12,13,15,34,35]. Better outcomes in the ED have been associated with greater satisfaction. Patients whose diagnosis of disease or relief of acute pain was rapid had a better impression of EDs' services [35,39]. How patients perceive a good outcome after treatment at the ED is still not fully understood. The least commonly reported controllable factor of PS in the ED was environment [12,36,37]. A comfortable and clean environment tends to result in higher PS.

The Completeness of Questionnaires in the Assessment of the Controllable Factors

As we hypothesized, the number of questions regarding a factor was related to the importance of that factor. In Taiwan EDs' PS questionnaires, the most important items were concerned with attitude and all questionnaires contained items about controllable factors. The second most important factor in PS questionnaires in EDs was concerned with communication. The questionnaires focused more attention on staff attitude than on communication skills. In addition, there were more questionnaire items

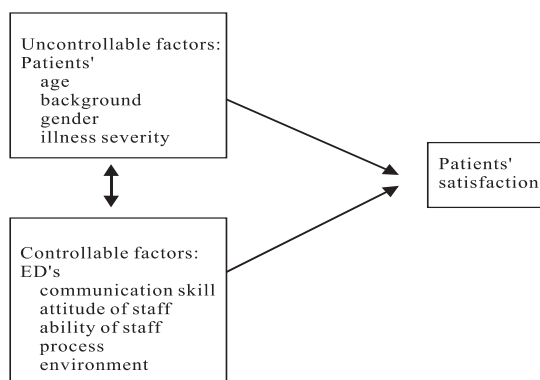


Figure. Diagram of relationships of EDs, patients in EDs and controllable/ uncontrollable factors.

about ED process and ED environment than about communication. This suggests that communication is less of a problem in Taiwan's EDs than processing of patients in the ED and ED environment. Also, EDs' PS questionnaires appeared to have neglected the recommendations of previous research. Questionnaires at seven hospitals (22%) did not include any items related to communication skills of ED staff. The same problem occurred in some hospitals that lacked questions about other controllable factors. Therefore, the validity of the questionnaires, particularly regarding the sections about controllable factors appears to be incomplete.

Questionnaires and Assessments of PS in the ED

Uncontrollable factors will individually affect the expectations of patients. As such, we should try to improve PS in the ED without overlooking these factors. ED managers or staff who have a better understanding of the different kinds of patients who visit the ED will be more able to effectively handle the various demands of these patients with the appropriate time and manpower and thereby maximize PS. Of the studies reviewed, most conclusions showed that controllable factors had the biggest effect on patient satisfaction. This is because controllable factors can be changed through education of ED staff. ED management may be better able to identify weaknesses in the ED and implement measures to remedy the situation, although it is

important to recognize that patients with different demographic profiles or disease severity have different requirements. The kind of service provided to patients by ED staff must be adjusted according to those uncontrollable factors. As such, the provision of medical services is something of an art, and needs to be carefully balanced to satisfy the patient. The contents of questionnaires need to be carefully constructed so that they accurately measure different patients' needs in the ED. However, the diagram of PS in the ED, which is affected by uncontrollable and controllable factors, can not be changed. A diagram of the relation between the medical consumer and the ED, according to our review is shown in the Figure.

In this study, we also found that some of the hospitals lacked a special questionnaire for ED patients. These hospitals may be overlooking the importance of EDs in the role of medical services or the different requirements of ED's consumers. If patient satisfaction questionnaires of EDs are incomplete, the information for them is inadequate. Our study may provide a clearer understanding of how to design and evaluate PS questionnaires for use in the ED so that all relevant factors are included. A greater awareness of the factors affecting PS in the ED among ED staff may lead to improved PS and a positive working atmosphere in EDs.

REFERENCES

1. Sun BC, Adams J, Orav EJ, et al. Determinants of patient satisfaction and willingness to return with emergency care. *Ann Emerg Med* 2000;35:426-34.
2. Rhee KJ, Bird J. Perceptions and satisfaction with emergency care. *J Emerg Med* 1996;14:679-83.
3. Hostutler JJ, Taft SH, Snyder C. Patient needs in the emergency department: nurses' and patients' perceptions. *J Nurs Adm* 1999;29:43-50.
4. Trout A, Magnusson AR, Hedges JR. Patient satisfaction investigations and the emergency department: what does the literature say? [Review] *Acad Emerg Med* 2000;7:695-709.
5. Clark CA, Pokorny ME, Brown ST. Consumer satisfaction with nursing care in a rural community hospital emergency department. *J Nurs Care Qual*

- 1996;10:49-57.
6. Baker DW, Hayes R, Fortier JP. Interpreter use and satisfaction with interpersonal aspects of care for Spanish-speaking patients. *Med Care* 1998;36:1461-70.
 7. Hayes RP, Baker DW. Methodological problems in comparing English-speaking and Spanish-speaking patients' satisfaction with interpersonal aspects of care. *Med Care* 1998;36:230-6.
 8. Davis BA, Duffy E. Patient satisfaction with nursing care in a rural and an urban emergency department. *Aust J Rural Health* 1999;7:97-103.
 9. Carrasquillo O, Orav Ej, Brennan, TA, et al. Impact of language barriers on patient satisfaction in an emergency department. *J Gen Intern Med* 1999;14:82-7.
 10. Boudreaux ED, Ary RD, Mandry CV, et al. 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.
 11. Hansagi H, Carlsson B, Brismar B. The urgency of care need and patient satisfaction at a hospital emergency department. *Health Care Manage Rev* 1992;17:71-5.
 12. Watson WT, Marshall ES, Fosbinder D. Elderly patients' perceptions of care in the emergency department. *J Emerg Nurs* 1999;25:88-92.
 13. 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.
 14. Derose KP, Hays RD, McCaffrey DF, et al. Does physician gender affect satisfaction of men and women visiting the emergency department? *J Gen Intern Med* 2001;16:218-26.
 15. Krishel S, Baraff LJ. Effect of emergency department information on patient satisfaction. *Ann Emerg Med* 1993;22:568-72.
 16. Bursch B, Beezy J, Shaw R. Emergency department satisfaction: what matters most? *Ann Emerg Med* 1993;22:586-91.
 17. Raper JL. A cognitive approach to patient satisfaction with emergency department nursing care. *J Nurs Care Qual* 1996;10:48-58.
 18. Thompson DA, Yarnold PR, Williams DR, et al. 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.
 19. 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.
 20. Yarnold PR, Michelson EA, Thompson DA, et al. Predicting patient satisfaction: a study of two emergency departments. *J Behav Med* 1998;21:545-63.
 21. Bjorvell H, Stieg J. Patients' perceptions of the health care received in an emergency department. *Ann Emerg Med* 1991;20:734-8.
 22. Maitra A, Chikhani C. Patient satisfaction in an urban accident and emergency department. *Br J Clin Pract* 1992;46:182-4.
 23. Grover G, Berkowitz CD, Lewis RJ. Parental recall after a visit to the emergency department. *Clin Pediatr (Phila)* 1994;33:194-201.
 24. Brown K, Sheehan E, Sawyer M, et al. Parent satisfaction with services in an emergency department located at a paediatric teaching hospital. *J Paediatr Child Health* 1995;31:435-9.
 25. Bruce TA, Bowman JM, Brown ST. Factors that influence patient satisfaction in the emergency department. *J Nurs Care Qual* 1998;13:31-7.
 26. Kologlu M, Agalar F, Cakmakci M. Emergency department information: does it effect patients' perception and satisfaction about the care given in an emergency department? *Eur J Emerg Med* 1999;6:245-8.
 27. Lau FL. Can communication skills workshops for emergency department doctors improve patient satisfaction? *J Accid Emerg Med* 2000;17:251-3.
 28. Campanella HC, Campanella PM, Grayson K. Factors affecting department of defense patient satisfaction in a military emergency department. *Mil Med* 2000;165:396-402.
 29. 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.
 30. Chan L, Reilly KM, Salluzzo RF. Variables that affect patient throughput times in an academic emergency department. *Am J Med Qual* 1997;12:183-6.
 31. Sandovski U, Salman H, Bergman M, et al. Patients' satisfaction with the staff function in an emergency department. *Eur J Emerg Med* 2001;8:117-22.
 32. Hedges JR, Trout A, Magnusson AR. Satisfied Patients Exiting the Emergency Department (SPEED) Study. *Acad Emerg Med* 2002;9:15-21.
 33. Spaite DW, Bartholomeaux F, Guisto J, et al. Rapid process redesign in a university-based emergency

- department: decreasing waiting time intervals and improving patient satisfaction. *Ann Emerg Med* 2002; 39:168-77.
34. Rhee KJ, Bird J. Perceptions and satisfaction with emergency department care. *J Emerg Med* 1996;14: 679-83.
35. Rydman RJ, Zalenski RJ, Roberts RR, et al. Patient satisfaction with an emergency department chest pain observation unit. *Ann Emerg Med* 1997;29:109-15.
36. Mack JL, File KM, Horwitz JE, et al. The effect of urgency on patient satisfaction and future emergency department choice. *Health Care Manage Rev* 1995;20: 7-15.
37. Barlas D, Sama AE, Ward MF, et al. Comparison of the auditory and visual privacy of emergency department treatment areas with curtains versus those with solid walls. *Ann Emerg Med* 2001;38:135-9.
38. Smith MS, Shesser RF. The emergency care of the VIP patient. *N Engl J Med* 1988;319:1421-3.
39. Richards CR, Richell-Herren K, Mackway-Jones K. Emergency management of chest pain: patient satisfaction with an emergency department based six hour rule out myocardial infarction protocol. *Emerg Med J* 2002;19:122-5.

急診室病患滿意度問卷調查的完整性：以文獻回顧來檢視

陳維恭 鍾侑庭 鄭宜昌 黃金財

中國醫藥大學附設醫院 急診部

目的 問卷調查是最常用來評估急診病患滿意度的方法。本研究目的是使用文獻回顧的方式，探討影響急診部病患滿意度的因素及評估急診室病患滿意度問卷的合適性。

方法 查詢醫學索引(Medline)資料庫從1990年1月到2002年7月之間在標題或摘要有出現「病患滿意度」和「急診室」二詞的文獻。我們挑選有探討急診滿意度因素的文獻進行分析。關於「病患滿意度」的因素則區分成不可控因素和可控因素。另外，本研究亦收集2002年臺灣地區急診室的病患滿意度問卷進行分析。

結果 共蒐尋到34篇有關於急診室病患滿意度的文獻。在不可控因素方面共有11篇報告及16個建議，最常見的影響因素為背景因素(7/16)，其次是年齡因素(5/16)，疾病嚴重度因素(2/16)及性別因素(2/16)。在可控因素方面，共有29篇報告及52個建議，其中最常見的影響因素是溝通因素(18/52)，其次是流程因素(15/52)，態度因素(10/52)，技能因素(6/52)以及環境因素(3/52)。此外本研究共收集42家急診室病患滿意度問卷調查表(回收率為63%)。急診病患滿意度問卷中，一般最缺少的問卷項目是不可控因素中的背景因素及可控因素中的溝通因素。

結論 基於文獻探討，在臺灣許多醫院急診室的病患滿意度問卷設計差異很大且不完備。許多問卷都必須重新修正以提昇急診病患滿意度的評估。(中台灣醫誌 2003;8:283-92)

關鍵詞

急診室，病患滿意度，問卷，臺灣

聯絡作者：鄭宜昌

地址：404台中市北區育德路2號

中國醫藥大學附設醫院 急診部

收文日期：2003年5月29日

修改日期：2003年11月3日

接受日期：2003年12月4日