

Study of patient experiences at three Iranian teaching hospitals-2010

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Abstract: *Introduction:* Hospitals as one of the most important components of health system which absorb lots of resources every year, have significant impact on public judgment of health system performance. *Objective:* The present study aimed to investigate inpatient experiences with three teaching hospitals in Kerman, Iran. *Methods and materials:* The present descriptive cross-sectional study was carried out in winter of 2010. Research population comprised of patients hospitalized at studied hospitals. A sample of 350 patients was chosen through randomized sampling. We applied a 2 part questionnaire for data collection. Descriptive statistics was used for data analysis using spss 15. *Findings:* patient experiences regarding clinical services, intersectional cooperation, waiting time and free hospital choice was reported as good, however they reported fairly good experiences regarding patients and staff continuity, patient safety, course of treatment, discharge and physical surroundings. Although they did not have good experiences in co-involvement and communication and information. *Conclusion:* To improve patient experiences, staff training to respect patients' personality, providing treatment plan, respecting patient rights and providing written information is recommended.

Keywords: patient experiences, hospital services, teaching hospitals, patient satisfaction.

Introduction

In new management theories, client-orientation principle is regarded as a main guideline of contemporary organizations and has proved its capability to improve performance, productivity and success of various institutes [1]. Hospitals aren't exceptional in this regard and competition among these institutes to attract clients or patients highlights client-orientation principle; hospitals which observe this principle and try to pay more attention to their patients are more successful [2]. In recent years, the importance of customers' satisfaction has been taken into huge consideration both theoretically and empirically [3].

Customers' satisfaction is more important in health sector because patients' dissatisfaction results in undesirable consequences such as their disconnection with health system or at least their unwillingness to cooperate with hospitals in providing services. In addition, people's dissatisfaction will cause personnel to feel disqualified and dissatisfied and it subsequently

decreases performance of health system. Finally, satisfaction is one aspect of individual health and if people's satisfaction isn't taken into consideration, health system will work against its mission i.e. meeting people's need to health [4-5]. Besides, to evaluate services, achieving patients' viewpoints, as a valid source, is of great importance because: patients are a good source for collecting data on the quality of services and their viewpoints must be considered while planning and evaluating services [6].

Many methods are available for evaluating services provided in hospitals and patients' satisfaction which have been used in various studies; e.g. services quality gap model, [7-8] and patients' satisfaction questionnaires [9-12]. A more recent method of evaluating hospital services is to study patients' experience which is now a common strategy for assessing healthcare provider performance in a number of countries and performance information is frequently made available to

facilitate consumer choice [13-18]. Studying patient experiences might serve for different purpose like describing health care from the patient's point of view; measuring the process of care, thereby both identifying problem areas and evaluating improvement efforts; and evaluating the outcome of care [19-21]. Additionally, evaluating patients' experience is a key to continuous quality improvement in health systems and hospitals [22]. Evaluating patients' experiences, hospitals can compare completeness and acceptability of services in different sections and thus can compare the status of their hospitals with that of other hospitals. Studies have shown that huge expenses and duties are imposed to public hospitals every year and even cause them to stop working due to the fact that they ignore patients' expectations and don't know and understand their expectations [23]. Since patients' experience can play an important role in evaluating hospital services and in comparing and ranking various hospitals, this study aimed to study patients' experience in three teaching

hospitals of Kerman University of Medical Science (Shahid Bahonar, Shafa and Afzalipour).

Material and Methods

The present research is a cross sectional one carried out in winter of 2010. Research population included all patients hospitalized in Shahid Bahonar, Shafa and Afzalipour hospitals, of which 350 patients were captured through convenient sampling.

Instrument: to collect data, a 2-section questionnaire was used: first section, which included five questions, studied patients' demographic information and the second section, which included 31 questions, studied the experience of patients hospitalized in Shahid Bahonar, Shafa and Afzalipour hospitals.

Validity and reliability of the questionnaire: This questionnaire was a standard questionnaire whose validity has been approved in previous study [14]. The original English questionnaire was translated to Persian, and again the Persian translation was translated to English; then, the English translation was compared with the original English questionnaire. To confirm its validity, some faculty members of management faculty approved it. Reliability of this tool was also examined and approved in test-retest method (r=0.76).

Analysis: to analyze information, SPSS statistical software and descriptive statistics including mean, standard deviation and statistical tests were used.

Results

350 people took part in this research (51.3 % female). Concerning education, 28.7 were illiterate, 30.7 were under high school diploma, 36.7 had high school diploma and Associate's Degree and 4% had Bachelor's Degree. Average age of participants was 39 years and their average length of stay was 4.8 days. Results on patient experiences regarding different aspect of hospital stay and interaction with personnel are indicated in table 1 & 2.

Table 1: Patients experiences regarding clinical services

| Dimension | Aspects | Patients' experience | | | |
|--|--|------------------------------------|---------------------------|----------------------|----------------------|
| | | Much (77.3%) | Some (21.3%) | A little (21.3) | Never (0) |
| Patients' experience of clinical services | Trusting physicians' professional competency | At all (2%) | A little (22%) | Somewhat (58.7%) | Much (17.3) |
| | Trusting professional competency of nursing personnel | No error (90%) | Administrative error (2%) | Surgical Harm (1.3%) | Wrong treatment (4%) |
| Patients' safety | Type of errors during hospitalization | No error (90%) | Administrative error (2%) | Surgical Harm (1.3%) | Wrong treatment (4%) |
| | Who identified the error? | No error (33.3%) | No error (33.3%) | Companies (40%) | Physician (33.3%) |
| Continuity of relationship between patient and personnel | Staff performance in identifying errors | Did not identify the error (33.3%) | No error (33.3%) | Very weak (40%) | Weak (20%) |
| | During hospitalization, did you know whom to ask a question? | No (16.7) | Yes (83.3%) | | |
| | Did one or two physicians treat you? | Don't know (12%) | No (4%) | Yes (84%) | |
| | Did one or two nurses take care of you? | Don't know (0.7%) | No (0.7%) | Yes (98.6%) | |
| Patients involvement in treatment | Physicians' attention to patients' explanations regarding disease symptoms | I did not explain anything (0.7%) | At all (0.7%) | A little (6%) | Somewhat (29.3%) |
| | Nurses' attention to patients' needs | At all (1.3%) | A little (8.7%) | Somewhat (36.7%) | Very much (53.3%) |
| | Patient cooperation in care and treatment decisions | At all (36%) | A little (37.3%) | Much (2.4%) | Very much (2.7%) |
| | Patient's companies' cooperation in care and treatment decisions | I did not have a company (8%) | A little (69.3%) | Much (2.2%) | Very much (0.7%) |

Table 2: Patients experiences regarding hospital follow up

| Dimension | Aspects | Patients' experience | | | |
|--|--|------------------------------------|--------------------------|------------------------------------|--------------------------------------|
| | | No (0) | Yes (100%) | Very weak (4.7%) | Weak (6%) |
| Discharge | Counseling a physician while discharge | No counseling (2%) | Very weak (4.7%) | Weak (6%) | Good (68.7%) |
| | Counseling in the field of cares in convalescence | No counseling (0) | Very weak (0.7%) | Weak (4%) | Good (73.3%) |
| | Counseling in the field of medicines which must be taken | No counseling was provided (4%) | Very weak (6%) | Weak (37.3%) | Good (47.3%) |
| | Counseling in the field of life style which affects individual's health | No counseling was provided (24.8%) | Very weak (11.3%) | Weak (31.3%) | Good (27.3%) |
| | Consequences of individual's status in future | I cannot judge (64%) | There was no plan (2.7%) | A little (1.4%) | Somewhat (26.7%) |
| Treatment method | Following a prepared program for treatment trend | I cannot judge (7.3%) | | Bad (2.7%) | Good (77.3%) |
| | Cooperation of physicians and nurses | No, and no change happened (53.7%) | | No and some change happened (0.7%) | Yes, and no change happened (18%) |
| Cooperation inside the wards | In a case your physical condition changed before hospitalization, did you know whom to call? | | | | Yes, and some change happened (2.4%) |
| | Authorities' awareness of your situation while you entered the hospital | I cannot judge (3%) | Unaware (2%) | Low awareness (62%) | Almost aware (18.7%) |
| Physical environment and general experience of hospitalization | Hospital physical environment | | Very bad (2.7%) | Bad (28.7%) | Good (66%) |
| | Hospital general experience | Very short (11.3%) | Short (64%) | Appropriate (12.7%) | Long (10.7%) |
| Waiting time | Waiting time for hospitalization | I cannot judge (20.7%) | | At all (67.3%) | Somewhat (2.7%) |
| | Increased hospitalization time due to time needed to receive examinations responses | No (30.7%) | | Yes (69.3%) | |
| Freedom in selecting a hospital | Did you know that you yourself could choose a hospital? | No (61.3%) | | Yes (38.7%) | |
| | Did you choose the hospital? | Prior experience (7.3%) | | Physician referral (70%) | Hospital reputation (8.7%) |
| Giving information | The reason of choosing the hospital | No (100%) | | Yes (0) | Proximity to house (14%) |
| | Did you receive any written information? | Very Bad (1.4%) | | Bad (15.3%) | Good (9.3%) |
| | How do you evaluate the quality of oral information? | Very little (6.7%) | | A little (28%) | Very much (10.7%) |
| | How much information did you receive during hospitalization? | A Little (1.3%) | | To some degree (21.3%) | Much (77.3%) |

Discussion

In the field of clinical and medical services, patients trusted physician's professional competency very much; this can be explained either by the fact that physicians were very skillful or by the information asymmetry inherent in the health sector which makes people to trust the health professionals and to follow their prescriptions. Patients' experience with clinical services indicated that 58% of patients to some extent trusted physicians' professional competency while 71% trusted nurses very much. A study conducted in British hospitals demonstrated that, 72% of patients trusted

physicians' skill or knowledge very much and patients trust to nurses' knowledge and skill was very much for 71.5% of patients [24]. It is evident that trusting nurses' skills was similar in these two countries, while trusting physicians was higher in Britain than in Iran, which might be either due to the fact that personnel's responsiveness is higher in Britain in comparison with Iran or British patients might be more aware of their rights.

83% of the patients knew whom to ask their questions from and 98% replied that 1 or 2 nurses were in charge of taking care of them and 84% replied that 1 or 2 physicians were in

charge of their treatment; these figures were higher than the results of a similar research carried out by Østerbye et al in which, 63% of the patients knew whom to ask their questions from and 59% replied that 1 or 2 nurses were in charge of taking care of them and 53% replied that 1 or 2 physicians were in charge of their treatment [14]. Higher levels in Iran can be, in one hand, due to lower expectations of patients participated in this study or, in another hand, due to high responsiveness of personnel in these hospitals. A research carried out by Jalili et al in the emergency ward of Imam Khomeini Hospital showed that 89% of patients were satisfied with the way personnel and physicians behaved and treated them [25]; it matches the results of our study and this similarity represents the similar level of expectations in these two groups.

Ninety percent of the patients experienced no mistake during their hospitalization and 45% patients experienced some mistakes but their companies recognized them and 60% regarded personnel's performance in identifying mistakes weak; in this case, Østerbye et al concluded that generally 20% of patients experienced mistakes during their hospital stay and 56% of these people could recognize the mistake and 67% considered personnel's performance good or very good in this regard [14]. Comparing the results of these two studies, it is shown that level of mistakes in Denmark was higher owing to higher level of patients' awareness (so that they could recognize the mistakes better). Regarding personnel performance identifying errors, a huge difference is observed between results of these two researches which represent the fact that personnel in Danish hospitals accepted their mistakes and didn't deny them which might be because of a non punitive culture institutionalized in these settings [26] which can help to make a better image of the hospital in the society [27].

Surprisingly, not only patients did not receive any written information, but also the quality of the communication was not satisfactory, which shows a worse condition compared to another Iranian research carried out by Ebrahimi et al in which patients' main priority in referring to doctors was to get some information about the diseases, and sometimes they expected their physicians to give them information instead of medical treatment; health concerns and fear of

having a severe disease were the main reasons found in visiting a doctor [28]. According to findings of this research, there is a significant relationship between patients' satisfaction with received information and patients' justification by the physician and following the physicians' orders and not changing their physicians. It reflects the importance of giving information to patients which is not taken into high consideration in the studied hospitals in our research. Patients' experience in the field of treatment period revealed that 77% of the patients were satisfied with physicians and nurses' cooperation and 64% mentioned that they couldn't judge their treatment program follow-up; These results are less than the results of a study carried out by Coulter in 2004 in which 80% declared that their treatment programs were followed [24]. Higher levels of treatment follow up in Britain can be due to the fact that they pay more attention to programming and to performing works according to the prepared treatment plans. Patients experienced a rather good cooperation between wards and they believed supervisors were relatively aware of their condition when they entered the ward and more than half knew who to call when their physical status changed; Results of the same study carried out by Coulter in 2004 in Britain showed that 70% considered physicians' responsiveness and availability good and 67% said that nurses' responsiveness was also good [24].

Patients' experience in the field of physical environment and patients' general experience of hospitalization showed that 76% of patients had a good or positive experience of hospitalization and 66% said that physical environment of the hospital was good; these results are less than Østerbye's study in which 90% of patients had a good or positive experience of hospitalization and 83% said that physical environment of the hospital was good [14]. Higher level of these variables is probably due to the fact that these hospitals had better and modern facilities and equipment and paid more attention to cleaning their hospitals. Higher levels of positive and desirable experience in Denmark can be as a result of receiving good and desirable services as well as of respecting patients' rights and

personalities. Sixty four percent of patients experienced a short waiting time for hospitalization and 67% believed that experiments and other diagnostic and therapeutic affairs didn't lengthen their hospitalization time; In a study carried out by Jalili et [25]. It was shown that 2% of patients were dissatisfied with the waiting time and most patients believed that this time was short and this similarity can be as a result of good reception system of the studied hospitals; this result approves the findings of our present study. Additionally, most of the patients stated their autonomy in choosing the hospital. Another research entitled "study the level of patients' satisfaction of nursing and medical services" carried out by Madani et al in 2004 in Isfahan [29], showed that 76% of patients referred to their favorite hospitals based on their personal decisions and type of insurance and 14% referred to their hospitals based on their physicians' suggestion. However, results of our present study showed that in most cases the physicians suggested the hospitals. Dissimilarity of results can be due to the fact that Esfahan hospital belonged to the Social Security Organization and thus most people who referred there were covered by Social Security insurance, but our hospitals were educational ones and the patients referred to these hospitals regardless of their insurance.

Conclusion

Concerning the features of hospital services such as producing and providing services simultaneously, necessity of interaction between patients and service provider, customers' special status, prohibition of advertisements about hospital services and the like, most pioneer hospitals in the world are now aware of patients' experience and know that they can draw a good

picture of their hospitals by managing patients' experience so that the patients and their companies can act as a good advertiser for the hospital. By which, the hospital can attract rich people to help the hospitals and can also attract patients to this hospital.

Results of this research revealed that patients' experience management haven't been taken into consideration in the studied hospitals so far and there is no program for this issue, although some measures which have been taken by hospitals have some desirable effects on patients' experience of hospitals. However, concerning patients' increased awareness and their access to information technologies, hospitals cannot be passive in the field of patients' experience management anymore; if the hospitals are going to be governed as autonomous entities and compete with other hospitals in providing services without relying on public purse, one of the most important measures which can be effective for them in this area is to manage patients' experience and to allocate a unit in their hospitals to study and consider this issue. Even if this trend continues and the hospitals don't have to compete with each other, again they can, by managing patients' experience and by creating more desirable experiences, provide their patients with more desirable and better environment and it can be effective in improving patients' satisfaction and quality of hospital services.

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References

1. Latifiqormish K, Mahmoodifar Y. Comparing content of Takrim plan with principles and fundamentals of customer orientation, *Health management journal*, 2006;26:7-14[Persian].
2. Sayaditouranloo H, Jamali R, Jalalpoor M, Sadrbafighi SM. Gap analysis of total quality management factors in health services institutions at fuzzy environment (Case study of Isfahan Khorshid hospital), *Journal of Shahidsadooghi University of medical sciences*, 2008;16:57-67[Persian].
3. Yahyaei M. Customer satisfaction determination via reengineering, *Journal of Public management*, 2004; 52:44-56[Persian].
4. Abolhassani F. Toward quality in health services, proceeding of conference of optimization of services at hospitals, *Tehran*, 1996:1-4[Persian].
5. Mosadeghrad A. Handbook of organization and technical management of hospital, *Dibagaran Publication, Tehran*, 2004:54-62[Persian].
6. Researchers Group, Methodology of developing standardized questionnaire of determining inpatient satisfaction at hospitals, Proceeding of conference

- of optimization of services at hospitals, *Tehran* 1996:32-45[Persian].
7. Mirghafoori S, Zareahmadabadi H. Analysis of health centers services quality applying SERVQUAL model; case study of Shahidrahnamoon hospital, *Journal of Shahidsadooghi University of medical sciences*, 2007; 15:84-92[Persian].
 8. Nekoueimoghdam M, Amiresmaili M. Hospital Services Quality Assessment; Hospitals of Kerman University of Medical Sciences, as a tangible example of a developing country", *International Journal of Health Care Quality Assurance*, 2011; 24:57-66.
 9. Hajian K. Inpatient satisfaction with therapeutic services at Shahidbeheshti and Yahyanejad hospitals, *Research journal of Babol's University of medical sciences*, 2007; 9: 51-60[Persian].
 10. Seydi M, Haidari A, Raeiskarami S. Internal and surgical patients satisfaction with nursing and medical services, *Journal of Iranian nursing*, 2004;40:55-61 [Persian].
 11. Safirabiei M, Shahidzadehmahani A. Saisfaction of hospitalized patients at hospitals affiliated with Hamedan university of medical sciences and factors effective on it, *Payesth journal*, 2006;4: 271-279 [Persian].
 12. Zafarghandi M, Rezaei SA, Khalkhali H. Study of patients satisfaction with admission process at hospitals of Tehran university of medical sciences, *Hakim Journal*, 2005;8: 31-37[Persian].
 13. Stubbe JH, Gelsema T, Delnoij DM: The Consumer Quality Index Hip Knee Questionnaire measuring patients' experiences with quality of care after a total hip or knee arthroplasty. *BMC Health Serv Res* 2007; 7:60-68.
 14. Østerbye T, Sevaldsen J, Skjødt Hansen K, Freil M. Patient's experiences in Danish hospital .2006, available from [URL:http://www.patientoplevelser.dk/log/medie/Rapporter/Survey_2006_english.pdf](http://www.patientoplevelser.dk/log/medie/Rapporter/Survey_2006_english.pdf).
 15. CAHPS Home Page [<https://www.cahps.ahrq.gov/default.asp>]
 16. Redding D, Boyd J. Data briefing. Involvement leads to satisfaction. *Health Serv J* 2008; 17.
 17. Delnoij DMJ, Asbroek GT, Arah O, Koning JD, Stam P, Poll A, Vriens B, Schmidt P, Klazinga NS. Made in the USA: the import of American Consumer Assessment of Health Plan Surveys (CAHPS) into the Dutch social insurance system. *European Journal of Public Health* 2006; 16: 652-659.
 18. Stubbe JH, Brouwer W, Delnoij DM: Patients' experiences with quality of hospital care: the Consumer Quality Index Cataract Questionnaire. *BMC Ophthalmology* 2007; 7:14.
 19. Sitzia J, Wood N. Patient satisfaction: a review of issues and concepts. *Soc Sci Med* 1997; 45:1829-1843.
 20. Donabedian A. Evaluating the quality of medical care. *Milbank Mem Fund Q* 1966; 44:166-206.
 21. Tarlov AR, Ware JEJ, Greenfield S *et al*. The Medical Outcomes Study. An application of methods for monitoring the results of medical care. *J Am Med Assoc* 1989; 262:925-930.
 22. Piri Z and Zohoor A, Hospitalized patients satisfaction with services provided, *journal of management and medical informatics*, 2003; 6(14): 65-74[Persian].
 23. Molaei S and Haghdoost S, Study and comparison of knowledge and satisfaction of medical services insurance and social security insured with provided services at teaching hospitals affiliated with kerman university of medical sciences , BSc thesis in health services administration, *Kerman University of medical sciences*, 2004:1-4[Persian].
 24. Coulter A, Trends in patient experience of the NHS, *Picker institute*, 2005:31-34.
 25. Jalili M, Mostesharnezami M, Siahtir M. Study of patient satisfaction with services provided at emergency department of Imam Khomeini hospital, *Proceeding of Second national congress on emergency medicine*, 2007;23-29[Persian].
 26. Amiresmaili MR, Tourani S and Barati O. Measuring safety culture and setting priorities for action at an Iranian hospital, *Al Ameen J Med Sci*, 2010;3(3): 237- 245.
 27. Amiresmaili MR, Rostami SH, Isfahani P. Measuring level of public relations in hospitals, *Middle east journal of family medicine*, 2012; 10:23-28.
 28. Afkhamebrahimi A, Nasresfahani M, Saghafi N. Patients expectations and satisfaction with their physician, *Journal of Iran's university of medical sciences*, 2004;11(41): 367-376[Persian].
 29. Madani SG, Farzan A, Rabiei M. Study of hospitalized patients satisfaction with nursing and medical services, *Journal of Isfahan nursing and midwifery faculty*, 2009; 24:15-17[Persian].

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