

*Original Article****Relationship of Services Utility with Patients Tending to Hospitals***Amirashkan Nasiripour¹. *Ghassem Abedi². Mozhgan Tavana³.

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* Iq134589@yahoo.com***Abstract***

Background and purpose: In the health sector, In addition to the important result of treatment, health system should meet the expectations regarding the desirability of services. Expectations and perceptions of patients of desirability of services play an important role in select hospitals, their loyalty to the organization, Re planning to purchase. Thus the present study is taken with the purpose of determining the relationship between desirability of services and tendency of patients to public hospitals or private of Sari.

Materials and Methods: This study is a descriptive and analytical type that has been done in 2012 in four private and public hospitals of Sari. The study population consists of hospitalized patients that using by stratified random 361 samples has been subjected to inquiry. The survey tool was research questionnaires that its validity was judged and approved by teachers and its reliability was obtained by the Cronbach's Alpha 0.972. The collected data by spss software was analyzed by Independent t, t one sample test, and descriptive statistics.

Results: Findings shows that in services cost indexes there are not any significant differences between public and private hospitals but in the other desirability of services indexes such as accessibility, availability, speed, quality, and complete package of services and ..., there is a significant difference between public and private hospitals.

Conclusion: In tendency of patients to hospitals, utility service indicators satisfy a significant impact. So, codified planning for improving these indexes, in order to absorption more patients by authorities is unavoidable. [Nasiripour A.A. *Abedi Gh. Tavana M. **Relationship of Services Utility with Patients Tending to Hospitals. IJHS 2013; 1(2):61-67**] <http://jhs.mazums.ac.ir>

Key words: Utility, Tendency, Patients, Hospital.

1. Introduction

In health care, hospitals are the main components of this sector so that 40 to 70 % of the health budgets are allocated to hospitals, thus changing attitude towards the hospitals' role and their capabilities is required in order to become health promoting structures (1). Utilizing hospital cares is a form of social behavior, which in turn results from some complex factors. Services are lower than expected; this problem always happens which customers and users of services of the day find less credibility and trust in service providers. Finally, lack of customers and clients and their negative publicity caused losses and sometimes it destructs the related organizations. Hospital admission is affected by many factors including insurance's type, income, age, gender, education, marital status, health status, disease severity and race. Several studies have been done by many researchers; show that variables such as family income and service price, distance to service, quality of service are important factors in the choice of providers of health care (2). Resource cost is an important factor in choosing hospital and using health services. It seems to result from low cost treatment in public hospitals and their facilities, many patients are willing to follow their therapy in these hospitals. But this problem in these hospitals led to a crowded and waiting lists and delayed admission (2). Hospitals in developed countries, about 40 % and in developing

countries, 89 % allocate costs of health sector to themselves (3). Patients show more sensitivity than past in choosing health care service and they are involved in their health care more than before. They ask about their diagnosis. They want to be sure that the treatment is appropriate. They react when their expectations are not fulfilled. Health care providers are facing with the fact that their patients are ready to claim their rights (2). In Iran, private and public sectors are both responsible for providing different health services. But public sectors, especially the Ministry of Health and Medical Education have higher share in this regard. More than 9.70 % of the country's medical institutions depend on universities of medical science. 8.18% of all health institutions are given to the private sector: however, physicians who are engaged in private hospitals for treating patients due to fewer visitors to physicians of public hospitals are more available and pay more attention to them. The state enjoys more importance especially in diseases that require doctor's presence more with patients. On the other hand, there is usually more patients referring to public hospitals so that physicians and nurses may not have enough time and motivation for their visit and treatment, also unable to respond to all their needs and this factor is one of the reasons behind patients' dissatisfaction and non choosing public hospitals (2). Managers and planners of health care should apply available

resources with the most efficient and effective way and in line with appropriate admission of the right patients (4). Yaghoubi states that patients are involved in choosing hospital today more than past and they decide to choose their hospitals (4). According to several studies based on patients' tendency towards private and public sectors, there is still an area of mystery in order to which one is a priority. In the present study, the researcher aims to find the involved factors that cause utility, which one of them could be involved in public and private hospitals in order to provide more information for people in health sector, especially the managers of hospitals according to the talent and opportunity they acts to attract more patients.

2. Materials and Methods

The present study is applied, correlative, and cross-sectional. It was selected randomly in October 2012 in order to determine the number of publications in the selected hospitals of private and public in Sari. At first, the

number of all in-patients was estimated in 6346 patients in the mentioned month and then according to Morgan table and in relation with the publication, totally 361 patients from a random stratified method were found that were distributed per share beds in each public and private hospital. To collect data, the researcher used questionnaire in this study that was scored by 5-point Likert Scale. Its validity was confirmed by teachers and experts; also, its reliability was obtained by using alpha-Cronbach as 0.972, respectively. The questionnaire composed of two parts including a) demographic information b) the axes related to the main indicators of utility of health service in the axes of service quantity including (service availability, service accessibility, and service package completeness), the cost of service, the speed of delivery and the quality of service with respect to reference (5). Results obtained via data collection were analyzed by descriptive statistics and inferential statistics, sample t-test and independent t-test. The SPSS software was used to carry out the analyses.

3. Results

Table 1. Demographic Frequency & Type of Respondent’s Insurance in Public and Private Hospitals

| Demographic | Frequency | percent | Insurance Type | percent |
|-------------|-----------------------------------|---------|----------------------|---------|
| Population | Imam Khomeini hospital (public) | 39.6 | Not-insured | 8.3 |
| | Boalisina’s hospital(public) | 32.7 | Social security | 46.8 |
| | Shafa hospital (private) | 13.9 | Private insurance | 1.7 |
| | Nimeshaban hospital(private) | 13.9 | Self -employed | 2.8 |
| Gender | male | 42.1 | Government employees | 18.3 |
| | female | 57.9 | Additional insurance | 4.4 |
| | illiterate | 28.8 | | |
| Education | Diploma holder | 28 | | |
| | diploma holder and higher diploma | 24.4 | Other | 17.7 |
| | Bachelor | 15.5 | | |
| | master and higher | 3.3 | | |

Table 2. Comparing Statistical Information of Utility Services Indicators between Public and Private Hospital

| data variable | | Mean | S.D | Degree of freedom(df) | meaningful |
|-------------------------------|---------|------|-------|-----------------------|------------|
| availability of services | public | 3.31 | 0.647 | 359 | 0.000 |
| | private | 3.69 | 0.615 | 359 | 0.000 |
| accessibility of services | public | 3.17 | 0.628 | 359 | 0.000 |
| | private | 4.48 | 0.538 | 359 | 0.000 |
| services package completeness | Public | 3 | 0.726 | 359 | 0.000 |
| | private | 3.3 | 0.690 | 359 | 0.000 |
| quality of services | public | 3.12 | 0.704 | 359 | 0.000 |
| | private | 3.62 | 0.703 | 359 | 0.000 |
| cost of services | public | 2.81 | 0.740 | 153.94 | 153 |
| | private | 2.95 | 0.892 | 359 | 0.000 |
| speed of delivery | public | 3.11 | 0.849 | 359 | 0.000 |
| | private | 3.57 | 0.770 | 359 | 0.000 |
| utility of services | public | 3.08 | 0.556 | 359 | 0.000 |
| | private | 3.44 | 0.527 | 359 | 0.000 |

The above table shows that there is a significant difference between public and private hospitals as indicators of utility services and this rate is higher in private hospitals, but there is not a significant difference between public and private hospitals in terms of the cost of services and it is not associated with patients' tendency to public or private hospitals.

4. Discussion

The results show that the mean of service accessibility is 17.3 in public hospitals and 3.48 in private hospital. The meaningful value is 0.000 and because its value is less than 0.05, there is a significant difference between public and private hospitals in service accessibility. This rate is higher in private hospitals. In the study by khayatan et al. done termed "The effective factors for the accessibility of health care service to people in personnel's point of view in Ray". They stated that personnel have found that accessibility factor was an effective factor (6). Pirie et al. in a study titled "the reasons of the centers for choosing to visit out-patients and in-patients in the northwest of Tabriz", their results showed that accessibility was the selected reason of the most patients. The choice reasons of different insurances among the insured ones were satisfaction of the related section and the accessibility of center (7). In the study by Lux et al., they said that the most important factor in the choice of hospitals is treatment quality and the level of hospital accessibility (8). All results revealed that the other results confirm those of the present

study. Also, the results show that the mean of availability is 3.31 in public hospitals and 3.69 in private hospitals, the meaningful level is 0.000 and because its value is less than 0.05, there is a significant difference between public and private hospitals in availability. The rate is higher in private hospitals. Baldwin & Show stated in their research that special hospitals in their ability to attract potential patients are favorable due to factors such as wasting times, quality of service, availability and accessibility(9). The average of package of service completeness is 3.00 & 3.30 in public and private hospitals, respectively. The significant is 0.000 and because its value is less than 0.05, there is a significant difference between public and private hospitals in complete package of service. This rate is higher in private hospitals. The average of quality of service is 3.12 and 3.62 in public and private hospital, respectively. The meaningful level is 0.000 and because its value is less than 0.05, there is a significant difference between public and private hospitals in the quality of service. This rate is higher in private hospitals. In a research titled "the effective factors in choosing public or private hospitals by patients requiring surgery", Behboodi believed that several factors affect choosing hospitals by patients required to be admitted, especially for surgery (10). In a research done by Mostafa as "The experimental examination of patients' expectations of service quality and their satisfaction in Egypt-based hospitals". The results indicated that patients' expectations of hospital's quality service are under the influence of their satisfaction of services and

the director of hospital (public and private) (11). In a study titled "Implications of offering patients the choice for routine adult surgical referrals", Taylor et al. have concluded that easy accessibility and quality of care are emphasized. Related to patients with expensive facilities is the most important in the choice of hospital (12). Also, the average of the cost of service is 2.81 in public hospitals and 2.95 in private hospitals in this research. The meaningful value is 0.153 and because its value is not less than 0.05, there isn't a significant difference between public and private hospitals in the cost of service. Yaghoubi et al. recognized that the major factor is the price of service (4). Varmaghani et al. also stated that hospitals' cost and patients' income is the major factor in choosing hospitals (2). All results showed that the findings of the present study do not support the other findings. The average of time variability and service speed is 3.11 in public hospitals and 3.57 in private hospitals. The meaningful level is 0.000 and because the significance is 0.05 and there is a significant difference between public and private hospitals in time and speed of service. The rate is higher in private hospitals. In a research performed by Sadeghi pour Rodsari (et all.) with the title " The assessment of rate and the reasons for failure of urban households covered by health network of Islamshahr to get to the related health centers and sanitary health to get the health care services", they concluded that one of the biggest reasons for the failure of urban households to get to health center is wasting time due to congestion and crowd (13). Coulter et al. stated that wasting time made the other factors become more important for patients (14). In a research done

by Saad Abdullah al Ghanim called " Factors influencing the utilization of public and private primary health care services in Riyadh", the researcher wrote the way that the number of providing-related variables (waiting list and accessibility of service) was the main factor in terms of data to determine variables on the choice of public health centers and private outpatient clinics. This study considered remarkable factors caused patients to use clinics free from private care centers free of charge in Saudi Arabia. Understanding these factors is important for providing health policies and using health care (15). All results show that the other findings confirmed the present findings. According to the main hypothesis, there is a significant difference between the utility of service with patients' tendency to public and private hospitals. The results indicated that there is a meaningful difference between public and private hospitals in the utility of service because the significance is 0.05. This rate is higher in private hospitals. As mentioned above, there was a significant difference among the important and effective variables of utility in all variables including service accessibility, service availability and service package completeness, time and speed of service in public and private hospitals. They were affected by patients' tendency to public and private hospitals and they were associated with patients' tendency. The relation was higher in private hospitals. There was no significant difference between public or private hospitals only in cost of service. This variable had not affect public and private hospitals that it had no relation with patients' tendency to hospitals.

References

1. Healy, J. McKee, M. The evolution of hospital systems. In: McKee M, Healy J, editors. Hospitals in a changing Europe. Oxford, Open University Press, 2001; 104.
2. Varmaghani, M and et al. The effective factor on the choice of public hospitals in Tehran in order treatment. Site of hospital manager, 2011;10(1), 45-52.
3. Nasiripur, AA and et al. Design of estimated modeling of public hospitals with the use of balanced estimated way. Research-Science journal of medical science of Arak, 2009; 12(1), 95-106.
4. Yaghoubi, M and et al. Factors affecting patient's preferences in choosing a hospital based on the mix marketing components in Isfahan. Journal of hakim research, 2011; 14(2), 106-114.
5. Shojai tehrani, H. Preventive and social medicine. Samat publication,1993; 4 Ed, volume 2, 149-165.
6. Khayatan, M and et al. effective factors on accessibility of people to providing service in view point of personnel in the centers of city health care of selected of health and care net of Ray. Research Journal paramedical of medical university of Tehran (payavarde salamat), 2010;4(3&4), 18-27.
7. Pirie, Z and et al. reasons of centers choice with outpatient and inpatient in habitants of North West of Tabriz. Research Journal of medical university of Tabriz, 2003; 25(3), 37-42.
8. Lux, MP. Fasching, PA. Schrauder, M. Lohberg, C. Thiel, F.Bani, MR. et al. The era of centers: the influence of establishing specialized centers on patients' choice of hospital. Arch Gynecol Obstet, 2011; 283(3), 559-68.
9. Baldwin, E. Shaw, C. Buildings patient choice. Pick and mix. Health Service Journal, 2005; 115(5940), 38.
10. Behboodi, F. Effective factors on selection of governmental or private hospital of with surgical patients. Gilan university of medical science, journal of medical science, 2000; 9 (35&36), 34-40.
11. Mostafa,M. Mohamed, A. Empirical study of patients expectations and satisfactions in egyptian hospitals.international journal of health care quality assurance,2005;18(7),516-532.
12. Taylor, R. Pringle, M. Coupland, C. Implications of offering patient choice for routine adult surgical referrals. London. The University of Nottingham, 2004; 1-61.
13. Sadeghi pour rodsari, " Assessment of rate and the reasons of failure to urban households covered by health network of Islamshahr to related health centers and sanitary health to get the health care services". Research Journal medical of medical university of Tehran, 2005; 63(2),141-150.
14. Coulter, A. Henderson, L. Le Maistre, N. Patients' experience of choosing where to undergo surgical treatment. Evaluation of the London Patient Choice Scheme, Oxford: Picker Institute,2005; 1-100
15. Saad abdullah al-ghanim. Factors influencing the utilization of public and private primary health care services in Riyadh city. JKAU: Econ&adm, 2004; 19(1), 3-27.