# Factors Affecting the Korean Customer's Choice of Hospitals 

Mi-Joon Lee<br>Department of Healthcare Team, Kangbuk Samsung Hospital, 29 Saemunan-ro, Jongno-gu, 03181 Seoul, Republic of Korea


#### Abstract

This study was attempted to check if there would be any differences in local customer's satisfaction in choosing hospitals. The purpose of this study is to investigate the factors affecting people's choice of a hospital with persons over 20 living in a local community who notified that they were moving in. As a result of an analysis of the doctor's skills concerning satisfaction with a medical institution, the doctor's experience was the most important element of the doctor's expertise, knowledge, ability and fame, when local residents choose a hospital and of the technical capabilities for medical care, ability of medical care and quality management were the most important elements. Of the hospital's capabilities for facilities and equipment, safety procedures were the most important element. Thus, local hospitals can bring about the improvements of differentiated hospital managements for community hospitals by managing the quality of medical care as well as establishing the system in which customers can be provided with medical care services for safety procedures and bring the doctor's expertise into consideration. The results of this study will establish effective marketing strategies for the improvement of the management of local hospitals with community residents who moved into the area.


Key words: Choice of hospital, community, doctor's skills, residents, satisfaction, hospitals

## INTRODUCTION

As hospitals change to a consumer-centered competitive health care environment, it is a very important element to understand the factors of the hospital by which customers choose and visit in terms of a hospital marketing perspective. As human lifespans have expanded recently with people's interest in health and the development of medical techniques, the importance of the health and medical care industries are increasing. In addition with the development of the IT industry as people can obtain information about medical care fast through the internet and SNS, the range of consumer's choice of medical institutions has expanded (Nam, 2016). According to the status of medical care institutions by city and province, health and welfare data in first quarter (Q1) (Anonymous, 2017) for the number of medical institutions, higher than hospital levels, there were 43 tertiary hospitals, 301 general hospitals, 1,457 hospitals, 1,502 medical care hospitals and 30,482 clinics. When customers use tertiary hospitals, they should spend more time there and have more inconveniences in treatment procedures relatively compared to general hospitals and clinics. However, a lot of patients are concentrated because they expect that they can have quality service and treatment because of the modernization and specialization of facilities and equipment when they use large medical institutions (Kim et al., 2016; Park et al., 2015). Consumer's experience with a service affects a
series of behaviors such as the revisit of a service provider, the reuse of the service, the recommendation of service or recommendation to other consumers as compared to the previous services (Kucukarslan and Nadkarni, 2008).

In addition, it was found that there is a relationship between patient's expectations and the satisfaction of the patients who use the hospital (Bostan et al., 2007) which suggests that, it is necessary to approach from the patient's expectations of medical care services in terms of the business efficiency of medical institutions. By Kim and Yu (2009), customers had overall higher perceptions about the social properties, physical properties and trust in the doctor's expertise in tertiary medical institutions than in primary medical institutions in choosing a hospital. This means that, there are differences in consumer's perceptions about the choice of hospitals, according to the scale or size of medical institutions. In the results of the research conducted by Kim and Yu (2009) and Lim and Jaegal (2011), the doctor's skills and expertise took up the highest proportion of the importance for the choice of medical institutions followed by the experience of treatment and surgery ( $13.1 \%$ ) which is consistent with the expertise, the most important element for the choice.

Thus, except for large hospitals coming from the provinces, it is necessary to understand the factors by which consumers choose a hospital in the reality in which medical institutions compete, developing specialized and
subdivided marketing strategies with community consumers (Shin and Park, 2016). And also recently, Korean government has recognized that patient's safety is most important factor, so, the patient's aafety act (Anonymous, 2015) has been enforced.

This study is conducted to identify the factors affecting the impact on the choice of medical institutions, using the data drawn up directly by the residents moving in one apartment and to check the relationships among individual factors. And the concrete research purposes are summarized as follows:

- To check sociodemographic characteristics of the residents who notified their moving-in
- To check the factors affecting the choice of medical institutions in the residents who notified their moving-in
- To check the correlations among the factors affecting their choice of medical institutions


## MATERIALS AND METHODS

Study design: Based on research on the factors affecting the choice of hospitals, this study used a self-administered questionnaire method, dividing the customers who visited the community service center of area A by sociodemographic characteristics and satisfaction with the medical institution.

The questionnaire was composed of 12 items including four sub-items for three groups according to satisfaction with the doctor's skills, technical capabilities for medical care and capabilities for facility/equipment capabilities. For satisfaction with medical institutions, a 5-point scale was used: 'Not satisfied at all (5 points)', 'Not satisfied (4 points)', 'Average (3 points)', 'Satisfied ( 2 points)' and 'Very satisfied ( 1 point)'. The cronbach alpha coefficient was 0.940 in this study.

Study population: The subjects of this study were residents in the community, who made a moving-in report by visiting the community service center of area A . and a survey was conducted with 143 people with the method in which a single nurse described the purpose of this study to them, for 23 days from April 5 through April 28, 2017.

Research variables: This study used sex (male and female), age group, occupation, education level and type of generation as sociodemographic variables.

For satisfaction with medical institutions, four items, including the doctor's expertise, knowledge, ability and fame were used as variables. Other variables which were
considered were: satisfaction with medical technologies and four other items including the doctor's capability of surgery, the rate of the use of patients with an advanced disease, the ability to manage the quality of medical treatment and the speed of the introduction of new medical technologies. For satisfaction with the facility/equipment capabilities of medical institutions, four items including the scale of facilities, cutting-edge medical equipment, safe procedures and pleasant facility environments were also used as variables.

Data analysis: As the methods of data analysis in this study, for sociodemographic factors, descriptive factors such as frequency, percentage, mean and standard deviation were used. For satisfaction with medical institutions, the average on a five-point scale was analyzed and the correlations among the factors affecting the choice of medical institutions were examined.

Ethical considerations for the participants: This study was conducted based on the ethical process in the Helsinki Declaration and good clinical practice related regulations which was conducted, obtaining approval of the institutional review board of Kangbuk Samsung Hospital (IRB approval number: 2017-04-020-001) and one nurse as an investigator described the consent form of participation in the research, received the participant's signatures and explained that they could cancel their participation in the research any time. All subjects were asked to draw up consent from for research participations according to their free will safety and welfare the first.

## RESULTS AND DISCUSSION

The general characteristics of subjects: For sex, 55 people were men ( $38.5 \%$ ), 88 were women ( $61.5 \%$ ). The 85 people ( $59.4 \%$ ) responded that they had an occupation, 55 people ( $38.5 \%$ ) responded that they did not and 3 people $(2.1 \%)$ did not respond. Of those with an occupation, 31 people were office workers $(21.7 \%), 29$ were housewives ( $20.3 \%$ ) and 19 were experts ( $13.3 \%$ ). The most common type of family was married couple and unmarried children, 73 families ( $51.0 \%$ ) followed by the type of family of married couple, 38 families ( $26.6 \%$ ) as the following Table 1.

Satisfaction with hospitals: As for the average of their satisfaction with the doctor's skills, the subjects attached the most importance on the doctor's specialty ( 4.33 points), followed by the doctor's ability ( 4.26 points), the doctor's knowledge ( 4.24 points) and the doctor's fame ( 4.19 points). The number of participants was 132 people who did respond as the following Table 2.

| Table 1: General characteristics of subjects |  |
| :--- | ---: |
| Variables/Classification | $\mathrm{N}(\%)$ |
| Sex | $55(38.5)$ |
| Male | $88(61.5)$ |
| Female | $85(59.4)$ |
| Occupation | $55(38.5)$ |
| Yes | $3(2.1)$ |
| No |  |
| Not answer | $3(2.1)$ |
| Education | $19(13.3)$ |
| Under elementary school | $72(50.3)$ |
| Middle and high school | $40(28.0)$ |
| Over college school |  |
| Not answer | $73(51.0)$ |
| Family type | $38(26.6)$ |
| Couple and unmarried children | $10(7.0)$ |
| Only couple | $22(15.4)$ |
| Single |  |


| Table 2: Importance of the doctor's skills at the medical institution |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Not <br> Variables all | Little | Average | Much | Very <br> much | Mean |  |
| Doctor's <br> expertise | 1 | 1 | 18 | 47 | 65 | 4.33 |
| Doctor's <br> knowledge | 1 | 2 | 21 | 48 | 60 | 4.24 |
| Doctor's <br> skills | 1 | 1 | 25 | 41 | 64 | 4.26 |
| Doctor's <br> fame | 1 | 0 | 30 | 43 | 58 | 4.19 |

Satisfaction with the skills of hospitals: As for the average of satisfaction with technical capabilities for medical care, the subjects attached the most importance to medical team's surgery and ability of medical care quality management ( 4.03 points), respectively followed by the speed of the introduction of new medical care techniques ( 3.95 points) and the use of patients with an advanced disease ( 3.92 points) which was the lowest of the four factors. The number of the participants was 128 persons, excluding 15 persons who did not respond as the following Table 3.

Satisfaction with facilities in medical institutions: As for the average of satisfaction with capabilities for facilities and equipment, the subjects responded that a pleasant environment is most important ( 4.08 points), followed by safe procedures ( 4.02 points), the latest medical care equipment ( 3.98 points) and the size of the facilities (3.95 points) which was the lowest of the four factors. The number of the participants was 132 persons, excluding 11 persons as the following Table 4.

Effect of the hospital choice factors on the choice of hospitals: To check the causal relations among the factors of the choice of hospitals, this study conducted an analysis of the correlations among the independent variables. As a result of the analysis with three independent variables as seen in Table 5, the correlation

Table 3: Importance of the medical institution's technical capabilities for

| medical care |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Not <br> at all | Little | Average | Much | Very <br> much | Mean |
| Variables | 0 | 4 | 37 | 47 | 40 | 3.97 |
| Surgical <br> ability | 1 | 5 | 49 | 40 | 33 | 3.78 |
| Severe patient <br> utilization | 0 | 1 | 39 | 47 | 42 | 4.02 |
| Quality |  |  |  |  |  |  |
| management <br> ability |  |  |  |  |  |  |
| New medical <br> care techniques | 1 | 1 | 39 | 51 | 37 | 3.98 |

Table 4: Importance of the medical institution's capabilities for facilities/equipment

|  | Not <br> at all | Little | Average | Much | Very <br> much | Mean |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Variables | acility scale | 1 | 5 | 38 | 43 | 45 |
| New medical | 2 | 3 | 38 | 42 | 47 | 3.98 |
| equipment |  |  |  |  |  | 38 |
| Safe procedure | 2 | 2 | 39 | 37 | 52 | 4.02 |
| Pleasant <br> environment | 1 | 0 | 37 | 43 | 51 | 4.06 |

Table 5: Correlation among the factors of the choice of hospitals Satisfaction with Satisfaction
Independent Satisfaction with the hospital's with the

| variables | the hospital | skills | hospital'sfacilities |
| :--- | :--- | :---: | :---: |
| Satisfaction with | 1 | $0.466^{* *}$ | 0.029 |

the hospital's
doctors
$\begin{array}{lll}\text { Satisfaction with } & 1 & 0.087\end{array}$
the hospital's skills
Satisfaction with the
1
hospital's facilities
**Correlation is significant at the level of 0.01 (2-tailed)
coefficient among the independent variables was 0.466 , and it was found that of the correlation coefficients among the independent variables only satisfaction with medical institutions and satisfaction with the skills of medical institutions had very significant correlations at the significance level of 0.01 , statistically.

## CONCLUSION

An analysis was conducted on the doctor's skills of satisfaction with the hospital, when local residents choose a hospital and as a result, of the doctor's expertise, knowledge, ability and fame, the doctor's expertise was the most important element. Of the technical capabilities for medical care, the ability to manage the quality of medical care was the most important element. Of the capabilities for the facilities and equipment of the hospital, safe procedures were the most important element. The survey was conducted at one community service center of one district, downtown Seoul and it was noted that 111 ( $77.6 \%$ ) out of 143 households consisted of married couples and married couples and their
unmarried children. In addition, of the participants, 85 persons (59.4\%) responded that they had a job and 81 persons ( $77.9 \%$ ) out of 103 persons, excluding 40 persons who did not respond had the level of education of college graduation or higher. They showed the typical characteristics of urban households who were nuclearized and had high education level.

This study was found that, sex affected the quality of the services provided by the medical team and the fame of the hospital the level of education, the quality of the services provided by the medical team, the fame of the hospital and the internal/physical environments of the hospital age, the external/physical environments of the hospital. This was the result, same as that of this study. And yet, it turned out that the quality management system did not affect the choice of hospitals which was different from the result of this study. It is judged that there was a difference in the choice because the age range of the subjects of this study was over 20 while that of the previous study was over 60, the age of the elderly.

In the results of this study, the most important elements in the resident's choice of medical institutions were the ability to manage the quality of medical care and safe procedures. The patient's safety act aims to protect patients by autonomous reporting and analysis by medical personnel when a patient safety accident takes place. It is necessary to establish a systematic management process, improving the capabilities of management of the quality of medical care and abiding by safe procedures. Paying careful attention, so that, patients can be treated in safe environments could be a marketing factor differentiated from other medical institutions, improving the ability to manage the quality of the patients and naturally increasing patient's and their familie's satisfaction.

Thus, hospitals that provide a medical care service for community residents should have a differentiated strategy preferentially with expertise, the element that can increase customer satisfaction by specialized centers at the hospital.

## ACKNOWLEDGEMENTS

We thank the study participants who were managed in factors to choose of korean hospital in local customers, Life Insurance Social Contribution Committee,

Community Chest of Korea, Korea Medical Assistance Foundation and Samsung Life that provided program financial support.

## REFERENCES

Anonymous, 2015. Patient safety law in Korea. Ministry of Health and Family Welfare, South Korea. http://www.law.go.kr/lsInfoP.do?lsiSeq=167782\&efYd= 20160729.

Anonymous, 2017. Status of medical care institutions by city and province. National Health Insurance Corporation, Seoul, South Korea. http://kosis.kr/ statHtml/statHtml.do?orgId=354\&tblId=DT_MIRE01.
Bostan, S., T. Acuner and G. Yilmaz, 2007. Patient (customer) expectations in hospitals. Health Policy, 82: 62-70.
Kim, E.H. and S.Y. Yu, 2009. The hospital selection study according to the hospital characteristic of the medical consumer: Focus on medical advertising implication. Korean J. Consum. Advertising Psychol., 10: 401-417.
Kim, M.K., D.C. Lee, S.J. Kim and M.J. Kang, 2016. [Effects on users utility value of hospital choice to the patients satisfaction and intention of re-visit in Busan (In Korean)]. J. Korean Data Anal. Soc., 10: 3387-3398.
Kucukarslan, S.N. and A. Nadkarni, 2008. Evaluating medication-related services in a hospital setting using the disconfirmation of expectations model of satisfaction. Res. Soc. Administrative Pharm., 4: 12-22.
Lim, D.G. and D. Jaegal, 2011. [A study on factors in selecting hospital of the elderly in Andong (In Korean)]. Soc. Sci. Res. Rev., 27: 121-139.
Nam, S.Y., 2016. Customer friendly image towards regional general hospitals. J. Korea Contents Assoc., 16: 509-519.
Park, K.M., J.H. Yang and D.M. Chang, 2015. The effects of hospital choice factors on customer satisfaction and revisiting intention in general hospitals. J. Korea Contents Assoc., 15: 375-388.
Shin, S.H. and H.I. Park, 2016. The relationship of the inner opinion will according to the medical service using experience and choice action intention: Mediating effects of the emotional attachnent and patient satisfaction level. Korean J. Bus. Administration, 2016: 550-570.

