



RELATIONSHIP BETWEEN PATIENT SATISFACTION AND HOSPITAL BRAND IMAGE: A META-ANALYTIC STUDY

Haydar HOŞGÖR*, Ekrem SEVİM**

* Assoc. Prof, Uşak University, Turkey

haydar.hosgor@usak.edu.tr

ORCID Number: 0000-0002-1174-1184

** Assist. Prof, Bandırma Onyedi Eylül University, Turkey

esevim@bandirma.edu.tr

ORCID Number: 0000-0003-0697-5899

Received:29.05.2022

Accepted: 25.07.2022

Research Article

Abstract

Aim: In this meta-analytic study, the relationship between satisfaction and brand image variables was investigated from the perspectives of patients and hospitals.

Methods: After our review of the literature which covered 2010 and 2021, 19 studies that met the inclusion criteria were analyzed with the meta-analysis method. The Comprehensive Meta-Analysis package program was used in the analysis of the data.

Results: The sample consisted of 6,038 studies on the subject. It was determined that 100% of the studies were published as articles, 68.4% were in English, 31.6% were published between 2010 and 2015, and 68.4% were published between 2016 and 2021. According to the random effect model, a statistically significant, positive, and strong relationship ($r: \sim 0.50$) was determined between patient satisfaction and hospital brand image variables.

Conclusion: According to the results of the research, a positive and strong relationship was found between patient satisfaction and hospital brand image. In this context, it can be recommended that hospital administrators who want their hospitals' brand image to be perceived by health service recipients as high should attach more importance to patient satisfaction.

Keywords: Patient Satisfaction, Branding, Hospital Image, Hospital Brand

INTRODUCTION

Today, the way for a business to survive in the long term is to achieve a competitive advantage (Porter, 1985). This issue is of critical importance in ensuring the existence, and financial sustainability of healthcare organizations in a sector such as healthcare services where a chaotic, destructive and intensely competitive environment prevails.

One of the most important ways to achieve a competitive advantage in health services is to ensure patient satisfaction, an important quality indicator (Ng and Luk, 2019). On the other hand, for a healthcare business to acquire a more competitive advantage, it is very important that has a positive corporate brand image (Hawrysz et al., 2021).

It has been shown that there is a relationship between patient satisfaction and hospital brand image concepts, and brand image affects satisfaction (Gronholdt et al., 2000). In some studies, it has been shown that patient satisfaction has positive effects on the corporate image (Bankaoğlu, 2013), while in some studies, hospital brand image has positive effects on patient satisfaction (Sukawati, 2021; Diputri and Yusuf, 2019). In the study, studies examining the relationship between patient satisfaction and brand image were subjected to meta-analysis and the relationship between them was tried to be examined.

1. BACKGROUND

The fact that the quality of health service, which is one of the elements of patient satisfaction in the health sector, cannot be fully perceived even after the service is received (Gill and White, 2009) increases the significance of the variables such as patient satisfaction and hospital brand image even more (Altaf et al., 2018). From this point of view, in the next section, the definitions of the related variables, the relationships between them, and why they are important for health care organizations were discussed.

1.1. Patient Satisfaction

The concept of satisfaction can be defined as a satisfactory situation or the degree of fulfillment of needs and it is determined by the relationship between expectations and perceived performance (Oliver, 1999). Similarly, the concept of patient satisfaction is expressed as a psychological satisfaction level between expectations and perceptions (Erdem et al., 2008). The situation where the perception exceeds the expectation level defines as satisfaction (Ng and Luk, 2019).

Although the terms "health services" and "marketing" were regarded as concepts away from each other until the 1970s, the importance of marketing health services was realized in the following periods and these concepts started to use together (Macstravic, 1990). As a result of which the patient-centered provision of services and therefore the concept of patient satisfaction have come to the fore (Afrashtehfar et al., 2020).

Patients' being satisfied with the services they receive from hospitals plays a critical role in patients' recommending the hospital to others, maintaining relations with the same health institution, continuing to use hospital services, being willing to pay more to the health institution, and complying with treatment (Hoşgör and Cengiz, 2020).

1.2. Hospital Brand Image

Brand image is the set of perceptions that emerge from the connotations in the minds of consumers about the brand (Keller, 1993). According to Zhang (2015), consumers make decisions when they purchase something mostly by considering the brand image rather than the product. Similarly, Aaker (1991) emphasized that having a good and well-established brand image could provide competitive advantage for businesses within the scope of strategic management.

Brand image, a relatively new concept for the healthcare industry, is important for healthcare organizations to gain competitive advantage (Hawrysz et al., 2021). Owing to the nature of health services, it is unlikely to evaluate the quality fully even after the services are received (Gill and White, 2009), which is made the brand image even more important for hospitals (Altaf et al., 2018).

It can be thought that the recipients of health services who perceive the brand image of a hospital as high quality and highly prestigious, will have a positive perspective on the health institution and its services. In this context, it can be stated that the patient or their relatives will have a high level of satisfaction, quality perception and positive behavioral intentions. According

to Wu (2011), patients' having an appropriate hospital brand image strengthens their intentions to choose that hospital. Similarly, in a study conducted in Turkey (Zor and Biçer, 2020), it was reported that the hospital brand image had a significant effect on their re-preferring the hospital from which they previously received service and perceiving that the hospital is a high quality hospital.

Brand image, an important concept in the marketing literature, has a vital role, especially in the medical tourism industry (Fong and Goh, 2021). In a study on medical tourists (Cham et al., 2014), it was revealed that hospital brand image had a positive and significant effect on the variables such as perceived service quality and re-preference intention. On the other hand, in a study in which the effects of corporate image on internal customers were investigated (Huang and Lai, 2021), it was reported that training and orientation studies on brand image affected the brand value of the institution positively. It can be stated that the brand image perceived positively by internal customers will also reflect positively on external customers, which will generally improve patient satisfaction.

Literature review demonstrated that studies conducted the relationship between patient satisfaction and hospital brand image and their effects on each other are available. The effect of brand image on satisfaction has been shown in many studies, and in some studies, it has been concluded that brand image has a mediating effect on company loyalty (Zhang, 2015). As was stated by Gronholdt et al. (2000), brand image has an effect on satisfaction in many different areas such as education and health sectors.

Variables such as perceived service quality, loyalty and brand image play a crucial role in determining patient satisfaction (Vimla and Taneja, 2020). In a study (Bankaoğlu, 2013), patient satisfaction was determined to affect the corporate image positively whereas in some studies, hospital brand image was reported to affect patient satisfaction positively (Sukawati, 2021; Diputri and Yusuf, 2019). In their study, Hoşgör and Cengiz (2020) reported that brand image positively affected patient satisfaction in private hospitals, but such an effect was not significant in public and university hospitals.

2. RESEARCH METHODOLOGY

2.1. Study Pattern and Process Followed

In this meta-analytic study, the significance and direction of the relationship between patient satisfaction and hospital brand image variables were investigated. Ethics committee approval is not required for the study. In a meta-analysis, a particular subject is discussed in the axis of quantitative research on the studies that were conducted on different samples in different geographical areas (Siyonr, 2018). According to Paul and Barari (2022), meta-analysis is a collection of statistical methods that integrates the results of multiple studies to provide an aggregated summary of information in a particular research area. According to Paul and Barari the meta-analysis process consists of five stages.

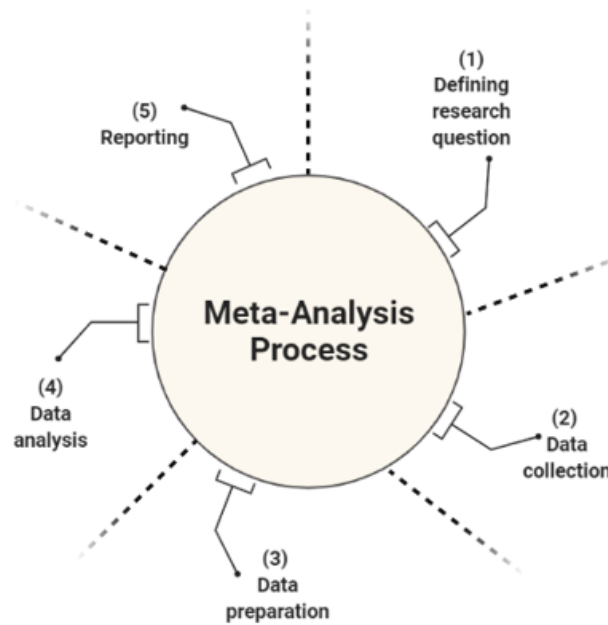


Figure 1: Meta-Analysis Process

(Created by the authors of the present study by browsing “biorender.com”)

Meta-analysis studies, which enable researchers to produce information with a high level of evidence and to process scattered data (Benligül et al., 2022), significantly contribute to the health management literature and help managers of health institutions understand the perceptions and expectations levels of the patients about services.

In the meta-analysis method, relationship-, effect- and difference-seeking studies are frequently used. In particular, the main purpose of relationship-based correlational studies is to determine the average effect size and homogeneity by combining the relevant data. As in the

present study, the calculated correlation coefficient (r) is also an effect size parameter (Gedik and Üstüner, 2017). The hypothesis of the present study is as follows:

H₁: “There is a positive and significant relationship between patient satisfaction and hospital brand image”.

2.2 Literature Scanning Strategy and Inclusion Criteria

Google Scholar, Ulakbim, National Thesis Center, Science Direct, Web of Science, Researchgate, Social Science Research Network (SSRN) and PubMed databases were used to search for publications suitable for the scope of the subject. The aforementioned databases were first scanned on March 28, 2022, and necessary controls were performed on May 6, 2022. During the systematic compilation phase, the PRISMA (Preferred items for Systematic Reviews and Meta-Analyses) directive was followed (Moher et al., 2009).

While the Turkish databases were scanned, Turkish words “hasta memnuniyeti” (patient satisfaction) and “hastane marka imajı” (hospital brand image) or “hastane imajı” (hospital image) keywords were used. For articles in English, the keywords “patient satisfaction” and “hospital brand image”, or “hospital image” were used. The inclusion criteria of the study are as follows:

- Studies carried out between 2010 and 2021
- Studies addressing the relationships between patient satisfaction and hospital brand image
- Studies written in Turkish or English
- Studies in the types of articles, thesis or full-text papers
- Values that should be reported to carry out meta-analysis (Pearson correlation coefficient or sample size with standardized regression coefficient)

The titles, abstracts and full texts of the publications on the subject were scanned by the authors of the study independent of each other. Cohen Kappa coefficient of agreement between raters was 0.87. According to Landis and Koch (1977), a coefficient above 0.80 is interpreted as a perfect fit. From the 1877 studies; 1848 studies were excluded from the evaluation due to the fact that they are outside the health sector, there are deficiencies in statistical reporting, and they are in

the form of a summary conference statement. After the scanning process, 19 publications that met the inclusion criteria were subjected to the meta-analysis process.

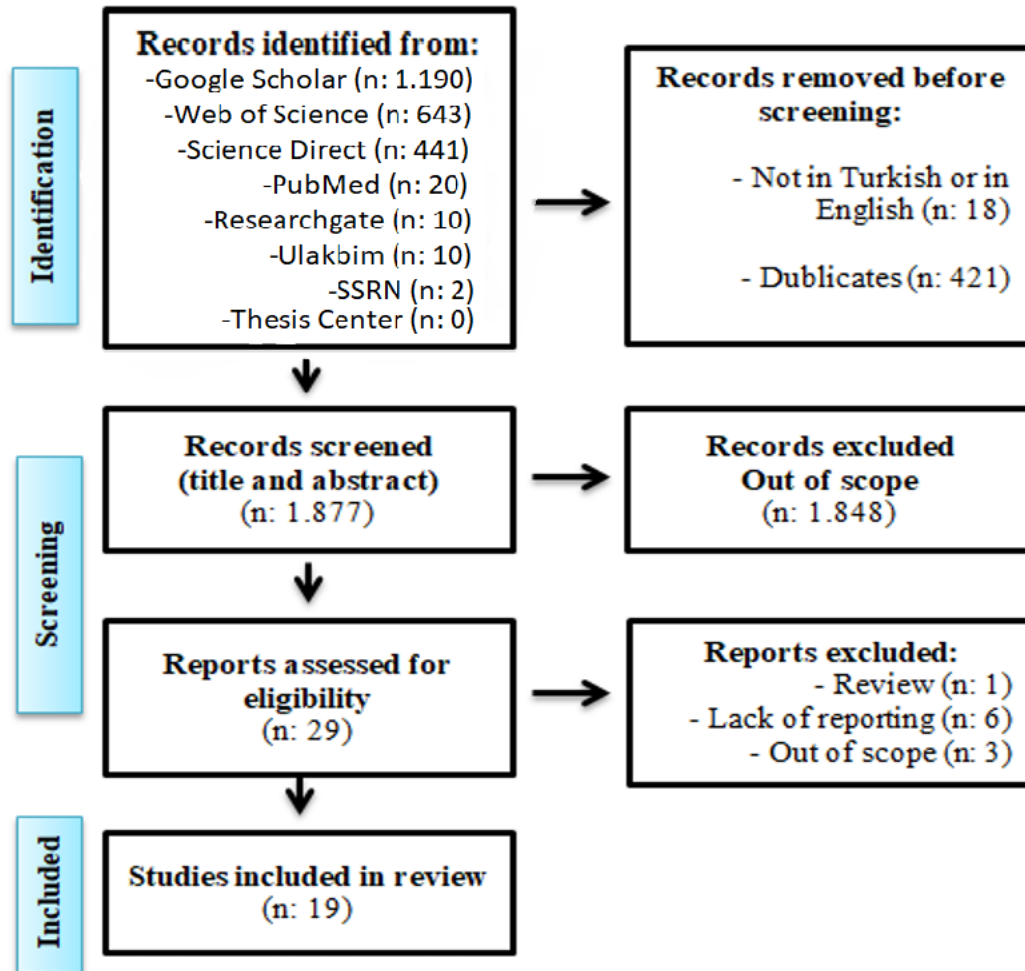


Figure 2: Preferred items for Systematic Reviews and Meta-Analyses (PRISMA) Flow Diagram

2.3. Analysis of Data

In the analysis of the data, the CMA (Comprehensive Meta-Analysis) V.3.0 package program was used. The author(s), publication years, correlation coefficients and sample numbers of each study were entered into the program. For each study, the data entered is automatically calculated by the program for the lower and upper correlation values, z values and p values. Especially in studies in which regression analysis or structural equation modeling is used, standardized regression coefficients were used as an alternative to correlation coefficients.

3. FINDINGS

The total number of the participants in the samples within the scope of the studies was 6,038, and all of the studies consisted of article type publications. Of the studies, 100% were published as articles, 68.4% were in English, and while 31.6% were published between 2010 and 2015, 68.4% were published between 2016 and 2021. According to Palamutçu et al. (2016), the p value of the Q statistic being less than 0.05 and the I² value being at least 70% which are an indicator of heterogeneity and require the random effect should be taken as a reference. Therefore, Q (630.934) and I² (96.208) values, which include homogeneity results, indicate that all the variables have a high level of heterogeneity. Therefore, the random effect model was taken as the basis for the assessment of the mean effect size and confidence interval levels (Table 1).

Table 1. Descriptive Analysis of the Studies Analyzed and the Results of the Homogeneity Test

Variables (n)	Total Number of the Participants	Type of Publication		Languages Used in Publications		Year Range of the Publications	
		Article	Other	Turkish	English	2010-2015	2016-2021
<i>Patient Satisfaction</i> *	6.038	Article	Other	Turkish	English	2010-2015	2016-2021
<i>Hospital Brand Image</i> (n: 19)	n (%)	19 (100%)	0 (0%)	6 (31.6%)	13 (68.4%)	6 (31.6%)	13 (68.4%)
<i>Homogeneity Test</i>	Q	Q(df)		p		I²	
	630.934	18		0.000		96.208	

The effect sizes calculated according to the Fixed and Random Effect Models and the statistics related to the studies are given in Table 2. According to the random effect model, there is an effect of ~0.50 between patient satisfaction and hospital brand image variables. According to Cohen (1992), if a coefficient is at least 0.50, it indicates a high level of effect size. At the 95% confidence interval, the effect size was between 0.477 and 0.515 in the fixed-effect model. In the random effect model, the effect size varied between 0.377 and 0.604. Therefore, H₁ was confirmed.

It is possible to summarize some of the study results used in the confirmation of the H₁ hypothesis as follows: Sukawati (2021) showed in his study that patient satisfaction has a positive effect on hospital brand image, and that service quality has a mediating role on patient satisfaction

in relation to hospital brand image. Hoşgör and Cengiz (2020) showed that brand image positively affects patient satisfaction in private hospitals. However, they reported that there was no such significant effect in public and university hospitals. Biçer (2020) showed that hospital brand image has a positive effect on perceived service quality, patient satisfaction and loyalty. Haque (2020) study showed that there is a strong and direct relationship between service quality and hospital image. It has been shown that service quality has a partial effect of 21.7% on patient satisfaction and the partial effect of hospital image on patient satisfaction is 49.5%. Hosseini and Behboudi (2017) conducted a study to examine the effects of brand trust and brand image on health care users, and it has been shown that the most effective items with the greatest impact on customer satisfaction and utilization of health services are brand image, staff's sincerity towards their patients, interactions with physicians, and closeness.

Table 2. Average Effect Size of the Relationship between Patient Satisfaction and Hospital Brand Image

Model	Study name	Statistics for each study					Sample size Total	Correlation and 95% CI									
		Correlation	Lower limit	Upper limit	Z-Value	p-Value		-1,00	-0,50	0,00	0,50	1,00					
	Sukawati_2021	0,580	0,414	0,709	5,851	0,000	81										
	Bicer_2020	0,570	0,507	0,627	14,290	0,000	490										
	Vimla & Taneja_2020	0,340	0,214	0,454	5,095	0,000	210										
	Hosgor & Cengiz_2020	0,150	0,046	0,251	2,815	0,005	350										
	Haque et al._2020	0,830	0,791	0,862	20,476	0,000	300										
	Zor & Bicer_2020	0,350	0,264	0,430	7,552	0,000	430										
	Asmaryadi et al._2020	0,340	0,163	0,496	3,663	0,000	110										
	Tosyali et al._2019	0,260	0,185	0,332	6,637	0,000	625										
	Diputri & Yusuf_2019	0,600	0,533	0,659	13,811	0,000	400										
	Emül & Naldöken_2019	0,740	0,691	0,782	18,504	0,000	382										
	Novela et al._2018	0,330	0,182	0,464	4,227	0,000	155										
	Hosgor et al_2017	0,340	0,205	0,463	4,737	0,000	182										
	Hosseini & Behboudi_2017	0,540	0,444	0,624	9,301	0,000	240										
	Juhana et al._2015	0,230	0,120	0,335	4,036	0,000	300										
	Sener_2014	0,830	0,792	0,862	20,716	0,000	307										
	Cham et al._2014	0,380	0,293	0,461	7,971	0,000	400										
	Izci & Saydan_2013	0,420	0,317	0,513	7,370	0,000	274										
	Wu_2011	0,200	0,108	0,288	4,223	0,000	437										
	Solayappan & Jayakrishnan_2010	0,760	0,713	0,800	18,954	0,000	365										
Fixed		0,497	0,477	0,515	42,136	0,000											
Random		0,499	0,377	0,604	7,095	0,000											

After this stage, the issue to which attention should be paid is whether there is publication bias. Here, the methods used in the literature most are as follows: Funnel Plots, Rosenthal's Fail-Safe-Number (FSN), Begg and Mazumdar Rank Correlation Test, Egger Regression Test, Duval and

Tweedie Trim and Fill Test. As is seen in Figure 3, most of the studies are at the top of the figure and close to the combined effect size symmetrically. Within this context, although limited, it can be stated that there is no publication bias in the studies.

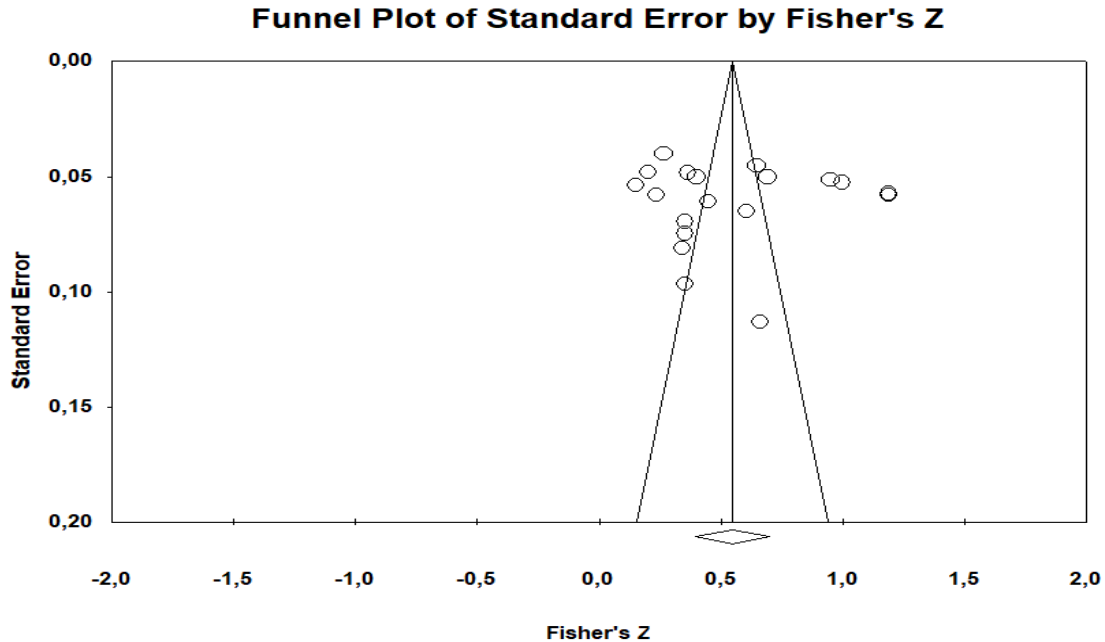


Figure 3: Funnel Plot of the Relationship Between Patient Satisfaction and Hospital Brand Image

Rosenthal's Fail-Safe-Number is the other piece of evidence for publication bias in studies. According to Rosenthal (1979), if $N/5k+10 > 1$, the results of the meta-analysis are strong and there is no publication bias. The “k” in the formula represents the number of studies included in the meta-analysis (k: 19), and “N” represents the total number of the participants in the samples of all the publications included in the study (N: 6.038). In this case, the result of the formula in the present study is 57.5, which is greater than 1, and this can be interpreted as the absence of publication bias in the studies.

In the rank correlation test, which is another test method for the absence of bias (Begg and Mazumdar, 1994), the two-tailed p value of the Kendall test is calculated. If the p value is greater than 0.05, there is no publication bias. Considering that the Tau value was 0.169 and the p value was 0.31 in the present study, it can be said that there is no publication bias in the studies.

The results of Egger's Regression Test are the other parameter about whether the funnel plot is asymmetrical or not. If this test yields the p value as >0.05 , this confirms that there is no publication bias. Considering that the p value in the present study was 0.83, it can be said that there was no publication bias in the studies.

Another test used to assess publication bias is Duval and Tweedie's trim and fill parameters. According to these test results, if publication bias is to be avoided, there should be no difference between observed and corrected values. The fact that the difference between the observed and corrected values was zero in the present study indicates that there was no publication bias. In brief, the results of the five different methods clearly indicated that there was no publication bias in the present study.

4. CONCLUSIONS AND RECOMMENDATIONS

In this study, the significance and direction of the relationships between patient satisfaction and hospital brand image variables were tested. After the review process carried out to cover 2010 and 2021, 19 studies that met the inclusion criteria were analyzed with the meta-analysis method. The sample consisted of 6,038 studies on the subject. It was determined that 100% of the studies were published as articles, 68.4% were in English, while 31.6% were published between 2010 and 2015, 68.4% were published between 2016 and 2021. According to the random effect model, a statistically significant, positive and strong relationship ($r: \sim 0.50$) was determined between patient satisfaction and hospital brand image variables, which confirmed the H_1 . Of the patients who were satisfied with the results of the health service they received, those whose satisfaction level was high perceived the brand image of the hospital more successfully. In other words, it is possible to state that the recipients of health service who perceived the brand image of the hospital from which they received service as superior and successful had a significantly higher level of satisfaction.

In general, it is seen that hospital image increases patient satisfaction (Sukawati, 2021; Diputri and Yusuf, 2019). In addition, Hoşgör and Cengiz (2020) reported that brand image had a positive effect on patient satisfaction in private hospitals, but not such a significant effect in public and university hospitals. Besides Biçer (2020) showed that hospital brand image has a positive effect on perceived service quality, patient satisfaction and loyalty.

The results of the study can be evaluated in terms of hospitals and patients. When evaluated in terms of hospitals; it can be considered as strong evidence that hospital managers who want to

position the hospital's brand image levels at a high point should attach more importance to patient satisfaction. In addition, hospitals with a high brand image can use this situation as a preference criterion.

When evaluated in terms of patients; in today's competitive environment, there are many alternatives for individuals who demand service in the sector where there are many service providers. When individuals perceive the brand image of the institution, they receive service to be high, their satisfaction levels will also increase. This will make it easier for individuals to make decisions on financially and morally exhausting issues such as minimizing uncertain situations in choosing a healthcare provider and seeking a hospital or physician.

Research results show that there is a positive and strong relationship between patient satisfaction and hospital brand image. It has been concluded that individuals who are satisfied with the service they receive have higher hospital images. In addition, it is possible to say that the satisfaction levels of individuals who perceive the brand image as superior and successful are significantly higher than the others. Based on the analysis of the results obtained within the scope of the present study, it can be recommended that hospital administrators who want their hospitals' brand image to be perceived by health service recipients as high should attach more importance to patient satisfaction. Thus, it is very important to measure the satisfaction and brand image perception levels of healthcare service recipients systematically and periodically with valid and reliable measurement tools and to report the results of the measurements to the hospital senior management objectively. In addition, hospital administrations can establish online or physical systems within the institution and/or at the hospital website, where health service recipients can freely state their opinions, suggestions and complaints.

Conflict of Interest: The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding: This research was not supported by any institution.

References

* Studies Included in Meta-Analysis

- Aaker, D. A. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. New York, Free Press, 411-423.
- Afrashtehfar, K. I., Assery, M. K. A., & Bryant, S. R. (2020). Patient Satisfaction in Medicine and Dentistry. *International Journal of Dentistry*, 2020, 1-10.
- Altaf, M., Tabassum, N., & Mokhtar, S. S. B. (2018). Brand Equity and the Role of Emergency Medical Care Service Quality of Private Cardiac Institutes an Empirical Investigation. *International Journal of Pharmaceutical and Healthcare Marketing*, 12(1), 44-60.
- *Asmaryadi, A., Pasinringi, S. A., Thamrin, Y., & Muis, M. (2020). Influence of Patient Experience and Hospital Image on Patient Loyalty in Meloy Public Hospital of Sangatta, East Kutai Regency. *Open Access Macedonian Journal of Medical Sciences*, 8(2), 147-151.
- Bankaoğlu, E. (2013). Hasta Memnuniyetinin Kurumsal İmaj Üzerindeki Etkisi: Antalya Eğitim ve Araştırma Hastanesi Üzerine Bir Araştırma. Akdeniz Üniversitesi Sosyal Bilimler Enstitüsü Yüksek Lisans Tezi.
- Begg, C. B., & Mazumdar, M. (1994). Operating Characteristics of a Rank Correlation Test for Publication Bias. *Biometrics*, 50(4), 1088-1101.
- Benligül, E. M., Bektaş, M., & Arslan, G. (2022). Meta-Analizi Anlamak ve Yorumlamak: Hemşireler İçin Öneriler. *Dokuz Eylül Üniversitesi Hemşirelik Fakültesi Elektronik Dergisi*, 15(1), 74-86.
- *Biçer, D. F. (2020). Marka İmajı ile Algılanan Kalite, Memnuniyet ve Bağlılık İlişkisinin Yapısal Eşitlik Modeliyle İncelenmesi: Bir Hizmet İşletmesi Örneği. *Turkish Journal of Marketing*, 5(2), 158-178.
- *Cham, T. H., Yet Mee, L., & Nai-Chiek, A. (2014). A Study of Brand Image, Perceived Service Quality, Patient Satisfaction and Behavioral Intention Among the Medical Tourists. *Global Journal of Business and Social Science Review*, 2(2), 32-43.
- Cohen, J. (1992). A Power Primer. *Psychological Bulletin*, 112(1), 155-159.
- *Diputri, D. R., & Yusuf, A. (2019). The Effect of Service Quality and Hospital Image on Patient Satisfaction (Survey on Outpatients at Saraswati Cikampek General Hospital). *Manajemen Bisnis*, 9(2), 168-175.
- Erdem, R., Rahman, S., Avcı, L., Demirel, B., Köseoğlu, S., Fırat, G., Kesici, T., Kırmızıgül, Ş., Üzel, S., & Kubat, C. (2008). Hasta Memnuniyetinin Hasta Bağlılığı Üzerine Etkisi. *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 31, 95-110.
- Fong, C., & Goh, Y. (2021). Why Brand Equity is so Important for Private Healthcare? View from an Emerging Market. *International Journal of Healthcare Management*, 14(4), 1198-1205.
- Gedik, A., & Üstüner, M. (2017). Eğitim Örgütlerinde Örgütsel Bağlılık ve İş Doymu İlişkisi: Bir Meta Analiz Çalışması. *E-Uluslararası Eğitim Araştırmaları Dergisi*, 8(2), 41-57.
- Gill, L., & White, L. (2009). A Critical Review of Patient Satisfaction. *Leadership in Health Services*, 22(1), 8-19.
- Gronholdt, L., Martensen, A., & Kristensen, K. (2000). The Relationship between Customer Satisfaction and Loyalty: Cross-Industry Differences. *Total Quality Management*, 11(4/5&6), 509-515.
- *Haque, R., Rahman, A., & Kow, A. P. A. (2020). Factors Affecting Customer's Satisfaction and Loyalty in Hospitals in China. *Asian Journal of Technology & Management Research*, 10(1), 101-115.

- Hawrysz, L., Gierszewska, G., & Bitkowska, A. (2021). The Research on Patient Satisfaction with Remote Healthcare Prior to and during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, 18(10), 1-14.
- *Hosseini, S. H. K., & Behboudi, L. (2017). Brand Trust and Image: Effects on Customer Satisfaction. *International Journal of Health Care Quality Assurance*, 30(7), 580-590.
- *Hoşgör, H., & Cengiz, E. (2020). İlişkisel Pazarlama Stratejileri, İlişkisel Kalite Unsurları ve Davranışsal Niyetler Arasındaki İlişkilerin İncelenmesi. *Hacettepe Sağlık İdaresi Dergisi*, 23(3), 465-484.
- *Hoşgör, H., Memiş, K., Gündüz Hoşgör, D. & Koç Tütüncü, S. (2017). Kurumsal Hastane İmajı, Algılanan Fiyat Uygunluğu, Hasta Tatmini ve Sadakati Arasındaki İlişkilerin Yapısal Eşitlik Modeliyle İncelenmesi. *International Journal of Academic Value Studies*, 3(16), 439-453.
- Huang, C., & Lai, C. (2021). Effects of Internal Branding Management in a Hospital Context. *The Service Industries Journal*, 41(15-16), 985-1006.
- *İzci, F., & Saydan, R. (2013). Algılanan Hizmet Kalitesi Kurumsal İmaj ve Sadakat İlişkisi (Van Bölge Hastanesi Uygulaması). *Cumhuriyet Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 14(1), 199-219.
- *Juhana, D., Manik, E., Febrinella, C., & Sidharta, I. (2015). Empirical Study on Patient Satisfaction and Patient Loyalty on Public Hospital in Bandung, Indonesia. *International Journal of Applied Business and Economic Research*, 13(6), 4305-4326.
- Keller, K. L. (1993). Conceptualizing, Measuring and Managing Customer-Based Brand Equity. *Journal of Marketing*, 57(1), 1-22.
- Landis, J. R., Koch, G. G. (1977). The Measurement of Observer Agreement for Categorical Data. *Biometrics*, 33, 159-174.
- Macstravic, R. S. (1990). The End of Health Care Marketing?. *Health Marketing Quarterly*, 7(1/2), 3-12.
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *Annals of Internal Medicine*, 151(4), 264-269.
- Ng, J. H. Y., & Luk, B. H. K. (2019). Patient Satisfaction: Concept Analysis in the Healthcare Context. *Patient Education and Counseling*, 102(4), 790-796.
- *Novella, S., Polla, J. R., Dharma, O. M., & Walia, P. (2018). The Influence of Service Quality, Perceived Value and Corporate Image Toward Inpatient Satisfaction on Private Hospital. *Social Economics and Ecology International Journal*, 2(1), 9-17.
- Oliver, R. L. (1999). Whence Consumer Loyalty?. *Journal of Marketing*, 63, 33-44.
- Palamutçuoğlu, B. T., Çavuşoğlu, S., & Terzi Palamutçuoğlu, A. (2016). Örgütsel Adalet ile İş Tatmini Arasındaki İlişkiye Meta Analitik (Meta Analitical) Bir Yaklaşım. *Alanya İşletme Fakültesi Dergisi*, 8(2), 203-216.
- Paul, J., & Barari, M. (2022). Meta-Analysis and Traditional Systematic Literature Reviews—What, Why, When, Where, and How?. *Psychology & Marketing*, 39(6), 1099-1115.
- Porter, M. E. (1985). *Competitive Advantage*. New York, Free Press.
- Rosenthal, R. (1979). The File Drawer Problem and Tolerance for Null Results. *Psychological Bulletin*, 86(3), 638-641.
- *Solayappan, A., & Jayakrishnan, J. (2010). Key Determinants of Brand-Customer Relationship in Hospital Industry. *Petroleum-Gas University of Ploiesti Bulletin, Economic Sciences Series*, 62(4), 119-128.

- Söyler, S. (2018). Sağlık Çalışanlarının Maruz Kaldıkları İş Stresi ile İş Doyumu İlişkisinin İncelenmesi: Bir Meta-Analiz Çalışması. *Online Türk Sağlık Bilimleri Dergisi*, 3(4), 190-205.
- *Sukawati, T. G. R. (2021). Hospital Brand Image, Service Quality, and Patient Satisfaction in Pandemic Situation. *Journal: JMMR (Jurnal Medicoeticolegal dan Manajemen Rumah Sakit)*, 10(2), 120-127.
- *Şener, H. Y. (2014). Improving Patient Satisfaction in Health Services: An Application at Dumlupınar University Kutahya Evliya Celebi Education & Research Hospital. *European Journal of Business and Management*, 6(30), 172-181.
- *Tosyalı, H., Sütcü, C. S., & Tosyalı, F. (2019). Patient Loyalty in the Hospital Patient Relationship: The Mediating Role of Social Media. *Erciyes İletişim Dergisi*, 6(1), 783-804.
- *Vimla, & Taneja, U. (2020). Navigating from Brand Image to Patient Loyalty: Mediating Effect of Service Quality and Patient Satisfaction. *Journal of Health Management*, 22(3), 430-445.
- *Wu, C. C. (2011). The Impact of Hospital Brand Image on Service Quality, Patient Satisfaction and Loyalty. *African Journal of Business Management*, 5(12), 4873-4882.
- Zhang, Y. (2015). The Impact of Brand Image on Consumer Behavior: A Literature Review. *Open Journal of Business and Management*, 3(1), 58-62.
- *Zor, M. G., & Biçer, D. F. (2020). Hastaların Sağlık Kuruluşu Tercihlerinde Marka İmajının Etkisi. *Business & Management Studies: An International Journal*, 8(3), 3655-3689.