Original Article

A Comparative Study of Ethical Predictability in the Public and Private Hospitals in Sari City

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Abstract

Background and Purpose: Ethical predictability is a determinant factor in patients` tendency to the public and private hospitals. Therefore, this research was aimed to a comparative study of ethical predictability in the public and private hospitals in Sari City. **Materials and Methods:** This descriptive – analytical study was conducted on the nurses of public and private hospitals from January to April 2020. Participants (n=256) were chosen through proportional stratified sampling. Data compilation was carried out through a researcher-made questionnaire. Independent Sample T-test was used for data analysis by the SPSS software for Windows version 24.0 (P-value<0.05). **Results:** The results showed that the mean score of ethical predictability and its dimensions in private hospital was significantly greater than public hospital except observance of staff 's rights that was greater in public hospital. **Conclusion:** Regarding the importance of ethical predictability in public and private hospitals, all the nurses must attempt to provide appropriate healthcare services.

Keywords: ethical predictability; hospital; nurse; Sari

INTRODUCTION

Patients as customers of healthcare services must be respected and considered regarding with observance of their rights by healthcare staff [1]. They are attempting to find the safe, effective, timely, efficient and equitable care [2, 3]. In other words, they want to achieve to a complete package of healthcare services regarding to all their rights [4]. Patients need to be sure of achieving to their full rights by going to the hospital, but how it will be realized? This is the problem we are looking for to solve it. The problem revolves around something to make the patients sure of achieving their complete rights. Something that can create a constructive interaction between the patient and the hospital. What we're talking about is a new term called ethical predictability.

Predictability implies that all aspects of the interaction design should set authentic expectations about what is going to happen – before the people make an attainment or get a service [5-7]. Predictability is a considerable activator for other important things people are searching for, like doing things faster and cheaper, delivering more with better quality and with lower risk and so on. According to Casal, achieving to a level of predictability and confidence enables us to deliver our services faster, better and cheaper than we did before, takes time, patience, determination, and especially focus. Three phases have been suggested to achieve predictability. First, focus on work in progress; second, decrease time to get work done; and third, regard how to get more done [8]. Predictability is often regarded as ability; a trait toward efficiency and desirability [9, 10].

Ethical predictability refers to two principles: ethics and predictability. Ethics is a principle that looks at the moral basis of the health of human as a guiding support put in place to maximize the welfare [11], and predictability connotes on all facets of accurate expectations about what will happen. Thus, ethical predictability is a durable feature of organizations through which stakeholders can expect all their rights will be respected and observed through a prosperous interaction [12, 13]. In other words, through respect to the beneficiaries' rights, an organization moves toward ethical predictability [14].

Based on mutual and ethical interaction, lack of ethical predictability in an organization can threaten its survival and

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How to cite this article: Abedi, Gh, Abedini, E. A Comparative Study of Ethical Predictability in the Public and Private Hospitals in Sari City. Arch Pharma Pract 2020;11(S4):77-81.

make some problems such as disagreement of beneficiaries, complex decision-making process in the organization, delays and cost increases, damage to the reputation and antiquity of the organization and problem in prioritizing and responding to the beneficiaries' demands [15]. As mentioned in reliable sources, beneficiaries are affected by and/or can affect the organizations [13]. Totally, ethical predictability leads to beneficiaries trust to the organization (healthcare centers in this study) and plays an effective role in facilitating and correcting the beneficiaries' interaction with the organization [12].

Due to the importance of ethical predictability in constructing constructive interaction between patient and hospital and providing the ability to predict access to health care services with respect to patient rights, the present study examines the status of moral predictability in public and private hospitals in Sari city, Mazandaran, Iran.

Materials and Methods

This descriptive – analytical study was conducted from January to April 2020 in Sari, Mazandaran, Iran. Statistical population was included of nurses of public (H1) and private hospitals (H2) (N=773). Sample size was calculated by Cochran`s formula (n=256). Participants were chosen through proportional stratified sampling so that, the sample size of H1 and H2 hospitals were obtained 160 and 110, respectively. Inclusion criteria were work experience equal or more than 3 years and intent to participate in the study. Participants were excluded if they were not consent to participate. For the compilation of data, a researcher-made questionnaire was used. It was verified through face, content and construct validity as well as reliability (internal consistency), formerly. In this study, the Cronbach`s alpha was obtained 0.81. The questionnaire was consisted of two sections: demographic information (4 questions about age, gender, job, work experience) and ethical predictability (138 items) included of seven categories: Observance of Patients` rights (28 items), observance of family members` rights (18 items), patient management (19 items), quality of health care (36 items), observance of employees' rights (15 items), adherence to laws (9 items), and transparency (13 items). The instrument used a 5 point Likert response scale (1= very low, 2= low, 3= moderate, 4= high, and 5= very high). The range of ethical predictability score is between 138 (minimum) and 690 (maximum). The SPSS software for Windows version 24.0 was used to perform all statistical analyses. Independent sample T-test was used for data analysis. Significant level was considered 0.05. This study was in accordance with the ethical rule of Mazandaran University of Medical Sciences (MAZUMS), and all processes and instruments were proved by ethical committee of MAZUMS. The ethical code was ir.mazums.rec.96.2845.

Results

The results showed that 42.4% of participants were male and 57.6% were female. The full sample's average age was 32.4±2.5 years (range 21-54 years). Sample's average work experience was 10.4±4.2 years (range 2-33 years).

Table 1. Distribution of the mean score in the general dimension of moral predictability and seven dimensions according to the studied hospitals

Variable	Hospital		
	Public	Private	Total
	$\bar{X}$±SD	$\bar{X}$±SD	$\bar{X}$±SD
Observance of patients' rights	3.85±0.80	4.86±0.42	4.35±0.61
Observance of family members' rights	3.44±0.76	4.12±0.72	3.78±0.74
Patient management	3.26±0.78	3.78±0.44	3.52±0.61
Quality of healthcare services	3.75±0.77	4.33±0.45	4.04±0.61
Observance of staff' s rights	3.92±0.80	3.20±0.80	3.56±0.8
Adherence to law	3.72±0.60	4.24±0.60	3.98±0.60
Transparency	3.10±0.64	3.92±0.64	3.51±0.64
Ethical predictability	3.57±0.73	4.06±0.58	4.13±0.65

Distribution of the mean score of the ethical predictability and seven dimensions showed that the private hospital had the higher average in all dimensions, except of the observance of staff' s rights. In the public hospital, the highest average was belonged to the observance of staff' s rights (3.92±0.80) and the lowest was belonged to the transparency (3.10±0.64). In the private hospital, the highest and lowest average were belonged to the observance of patients' rights (4.86±0.42) and observance of staff 's rights (3.20±0.80), respectively (Table 1).

Table 2. T-test results of the differences between public and private hospitals in ethical predictability and dimensions

Ethical predictability	Leven`s test for Equality of Variances		T-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std.Error Difference	95%Confidence Interval of the Difference	
								Lower	Upper
Observance of patients' rights	2.663	0.103	5.707	268	0.000	1.01	0. 42	-0.84	2.86
Observance of family members' rights	5.112	0.024	1.494	268	0.001	0.68	0. 60	-0.60	1.96
Patient management	4.039	0.000	3.397	268	0.001	0.52	0. 42	-0.48	1.52
Quality of healthcare services	6.950	0.009	8.077	268	0.000	0.58	0. 46	-0.82	1.98
Observance of staff' s rights	5.214	0.023	-11.962	268	0.000	-0.72	0. 33	-1.82	0.38

Adherence to law	19.830	0.000	11.999	268	0.000	0.52	0. 36	-0.36	1.40
Transparency	3.079	0.779	7.787	268	0.000	0.82	0. 43	-0.43	2.07
Ethical predictability	6.712	0.009	9.285	268	0.020	0.49	0.52	-0.71	1.69

As seen in table 2, Independent Sample T-test showed that there was a significant difference between public and private hospitals in ethical predictability and its dimensions such that the mean score of ethical predictability and dimensions in private hospital was significantly higher than public hospital except observance of staff 's rights that was higher in public hospital. The ethical predictability of private hospital was significantly greater than public one (P-value < 0.05), and the highest difference between the two hospitals was in terms of observance of patients' rights.

Discussion

Present study was carried out to determine and compare the ethical predictability and its dimensions in public and private hospitals from the nurses' viewpoint in Sari, Mazandaran, Iran. The results showed that ethical predictability was higher in private hospital rather than public one. This difference is due to the better situation of private hospital in dimensions of observance of patients' rights, observance of family members' rights, patient management, quality of healthcare services, adherence to law, and transparency over the public hospital. Moreover, the results indicated that ethical predictability in observance of patients' rights dimension was higher than other dimensions and transparency dimension had the lowest mean. No other relevant studies have been carried out in line with the the subject of ethical predictability. Looking at the background of the research, we found that prior studies were conducted only to evaluate one dimension or one type of hospital. However, the present study assessed the complex of factors involved in ethical predictability in public and private hospitals.

The results showed that observance of patients' rights (the ethical predictability dimension) was higher rather than other dimensions and this was higher in private hospital compared to public hospital. This may be due to the lower number of patients in private hospitals and the health staff make more attention to the patients. Sookhak et al. maintain that observance of patients' rights is important and essential in providing patient-centered services [16]. A study by Berghout et al. showed that improving observance of patients' rights was a top priority, and focusing on this aspect is more effective than other aspects [3], which is in line with the findings of the current study. Abedi et al. found that the most important ethical issue in a hospital is patients' rights that should be more considered by physicians, nurses and all personnel in the (public and private) hospital [17]. Dadashi et al. concluded that observance rate of patients' rights charter according to the dependency type of hospitals (governmental - private - public - charity) in all clauses of the patient rights charter was statistically significant [18]. The reason for this discrepancy is increasing patient's awareness about their rights is a priority.

This study showed that observance of family members' rights, as another dimension of ethical predictability, was higher in private than public hospital. This can be due to the high number of visits to public hospitals. Excessive noise, overcrowding, and busy health care personnel are other factors that can lead to a lack of observance of family members' rights. Family members' rights dimension refers to their engagement preconditions in care procedure. Frivold et al. found that the family members must be supported during care giving and decision making about care procedures of patients [19]. Shorofi et al. Concluded that the patient's family sought to ensure adequate patient care and information about the patient, prognosis, and treatment process [20]. In their study, they did not compare this variable in public and private hospitals, which is why it is different from the present study. In their study, Mohammadpour et al. Concluded that 22.2 percent of the Ministry of Health's standards on the patient's family rights had been met, and that much time was needed to achieve full compliance [21]. From a general point of view, the observance of family members' rights is an important dimension of ethical predictability that should be taken into account.

This study showed that the ethical predictability of the private hospital in terms of patient management was higher than the public hospital. Patient management refers to medication error monitoring, patient blood management, medical errors monitoring, and control of nosocomial infections. Gharahi et al. concluded that patient management could be improved by reducing waiting time and increasing human resource capacity [22], but did not compare it to private and public hospitals. Guptill showed that patient management involves assessing risks of pathogen transmission, identification of patients either suspected of or proved to be infected with a transmissible infectious disease agent, and the implementation of measures that minimize the likelihood of transmission of the infectious agent [23], whilst did not occur any comparison between public and private hospitals.

Quality of healthcare services as fourth dimension of ethical predictability was higher in private hospital than public one. This finding supports the results from most of the published studies, including results from Iran, Pakistan, Turkey and Saudi Arabia [24-27]. Alumran et al. concluded that patients at private hospitals perceived a higher level of quality of the health care services [28] that is coincide with this study. All these results indicate that private hospitals provide higher quality health care services than do public hospitals.

The present study showed that observance of staff `s rights in public hospital was higher than private hospital. This result may be obtained because of government`s support of public hospitals and therefore, the staff have better conditions in salaries, benefits and welfare. Regarding this finding, Aguiar

do Monte [29] concluded that public sector workers do not tend to do unpaid overtime work comparable to those in private sector. On the other hand, workers are more supported from public sector than private one. Whilst Kaur and Lomash found no significant differences between public and private hospitals regarding to the observance of staff `s rights, especially in terms of staff empowerment [30]. Hugree, Penissat and Spire [31] believed that working in the public sector still creates a set of specific characteristics: a particular relationship with the state, public interest, or even public life, perceptible in cultural, trade union and political practices such that these features were not seen in the private sector.

Adherence to law was the other dimension of ethical predictability that was higher in the private hospital than public one. Adherence to law refers to the extent to which the all of hospital wards staff observe the rules and regulations governing the hospital. This result may be obtained because of higher seriousness of the private hospital in doing things. Basu, Andrews, Kishore et al. [32] showed significant public spending getting used to manage the private sector so as to enhance patient care quality, and with limited effectiveness. The effectiveness of those regulations of the private sector was found to vary, often counting on public monitoring and enforcement.

The present study showed that transparency as the seventh dimension of ethical predictability was higher in the private hospital than public one. This finding may be due to the transparency in hospital resources and expenses as well as rely on direct revenue from patient referrals. Buzarjomhari et al. [33] showed that the transparency of hospitals' performance for the people is one of the growing global trends that has been made possible with the help of information and communications technology tools. In other words, with increasing public awareness, countries have moved towards improving the transparency of their performance in health care. Transparency—of the prices, costs, quality, and effectiveness of healthcare services and products—has been identified as a key tool to lower costs and improve outcomes [34].

Conclusion

In summary, this study indicated that there was a significant difference between public and private hospitals in ethical predictability and its dimensions such that the mean score of ethical predictability and dimensions in private hospital was significantly higher than public hospital except observance of staff 's rights that was higher in public hospital. The ethical predictability of private hospital was significantly greater than public one.

Ethical approval

Our study was approved by the Mazandaran University of Medical Sciences (MAZUMS) Ethical Committee of Mazandaran, Iran. No animal was used in this study. The ethical code was ir.mazums.rec.96.2845.

Acknowledgments

The authors thank all the participants for their participation in this study. This research was supported by Mazandaran University of Medical Sciences (MAZUMS).

Conflict of interest

The authors declare no real or perceived vested interests related to this article that could be construed as a conflict of interest.

References

1. Rowe K, Moodley K. Patients as consumers of health care in South Africa: the ethical and legal implications. BMC Medical Ethics 2013; 14(15): 1-9.
2. Abedi G, Abedini E. Prioritizing of marketing mix elements effects on patients' tendency to the hospital using analytic hierarchy process, International Journal of Healthcare Management 2016; 10(1): 34-41. DOI: 10.1080/20479700.2016.1231435
3. Berghout M, Van Exel J, Leensvaart L, Cramm JM. Healthcare professionals' views on patientcentered care in hospitals. BMC Health Services Research 2015; 15: 1-13. [DOI 10.1186/s12913-015-1049-z]
4. Mosadeghrad AM. Healthcare service quality: Healthcare service quality towards a broad definition. International Journal of Health Care Quality Assurance 2013; 26(3): 203-2019. [DOI 10.1108/09526861311311409]
5. UI design. Predictability: 5 Principles of Interaction Design To Supercharge Your UI (4 of 5) 2014. Available from www.givegoodux.com/predictability-5-principles-of-interaction-design-to-supercharge-your-ui-4-of-5/.
6. Antony MM, Craske MG, Barlow DH. Mastering your fears and phobias: Workbook. (2nd ed.). New York, Oxford University Press 2006.
7. O'Donohue W, Ferguson KE. The psychology of BF Skinner. Sage; 2001 Mar 15.
8. Linders B. Achieving Predictability in a Complex World 2019. Available from www.infoq.com/ news /2019 /08 /predictability-complex-world/?p13nId=55454401&p13nType=followUser.
9. Blair JD, Whitehead CJ. Too many on the seesaw: Stakeholder diagnosis and management for hospitals. Hosp Health Serv Adm 1988; 33(2): 153-66. pmid: 10302490
10. Osing R. Is "Being Predictable" essential for remarkable success? THE GLOBE AND MAIL 2019. Available from https://gethppy.com/talent-management/predictable-essential-remarkable-success.
11. Barrett DH, Bernier RH, Sowell AL. Strengthening public health ethics at the centers for disease control and prevention.; Centers for Disease Control and Prevention Public Health Ethics Committee Steering Group. Journal Public Health Management Practice 2008; 14(4): 348-53.
12. Faramarz Gharamaleki A. Ethical predictability of organization and human resource development. 3rd Conference of Human Resource Development, Tehran 2006. (Persian)
13. Jones TM, Felps W, Bigley GA. Ethical theory and stakeholder-related decision: The role of stakeholder culture. Academy of Management Review 2007; 32(1): 137–155.
14. Harkiolakis N. Leadership Explained: Leading Teams in the 21st Century (1st ed.). Taylor & Francis 2016.
15. Brugha R, Varvasovszky Z. Stakeholder Analysis: a review. Health Policy and Planning 2000; 15(3): 239–246. doi:10.1093/heapol/15.3.239.
16. Sookhak F, Bazrafshan M R, Ahmadi A, Kavi E. Nurses' Level of Awareness and Observance of Patients' Rights. JCCNC. 2019; 5 (3): 167-174. URL: http://jccnc.iums.ac.ir/article-1-201-en.html
17. Abedi G, Shojaee J, Moosazadeh M, Rostami F, Nadi A, Abedini E, Palenik CJ, Askarian M. Awareness and Observance of Patient Rights from the Perspective of Iranian Patients: A Systematic Review and Meta-Analysis. Iran J Med Sci. 2017;42(3):227-234.
18. Dadashi M, Habibi RA, Alipour S, Ghoreishi SR, Abbasi N, Soltani-Kermanshahi M. Awareness and observance rate of the patients' rights

charter in general hospitals; the perspectives of Iranian patients. Hospital Topics. 2019 Apr 3;97(2):66-72.
19. Frivold G, Slettebo A, Heyland DK, Dale B. Family members' satisfaction with care and decision- making in intensive care units and post- stay follow- up needs—a cross- sectional survey study. Nursing Open 2018; 5: 6-14. DOI: 10.1002/nop2.97
20. Shorofi SA, Jannati Y, Roohi Moghaddam H. The psychosocial needs of the families of the patients admitted to intensive care units: A review of literature. J Clin Exc 2014; 3(1): 46-57 (Persian).
21. Mohammadpour A, Mahdipour Y, Karimi A, Abdollahi Z. Ministry of Health's Patient and Family Law Standards Compared to the International Commission's Hospital Accreditation Standards. Journal of Ethics and Medical History 2010; 3(5,1): 42-50. (Persian)
22. Gharahi A, Kheirkhah AH, Bagheri A, Ahmadi M. Improving Patient Flow Management Process in Emergency Department Using Simulation and PROMETHEE Method. Journal of Health Management 2014; 17(57): 11-25. (Persian)
23. Guptill L. Patient Management. Vet Clin North Am Small Anim Pract . 2015; 45(2):277-98, v-vi. doi: 10.1016/j.cvsm.2014.11.010.
24. Abedi G, Rahmani Z, Abedini E, Rostami F. Surveying the impact of services marketing mix components (7Ps) on patients` disposition towards the public and private hospitals of Sari City. Journal of Hospital 2013; 13(4): 63-71. (Persian)
25. Khan T. Comparative study of service performance in saudi hospitals: the government versus the private healthcare system international journal of economics, Commerce and Management 2018; 5: 124–136.
26. Shabbir A, Malik S, Malik SA. Measuring patients' healthcare service quality perceptions, satisfaction, and loyalty in public and private sector hospitals in Pakistan. International Journal of Quality & Reliability Management 2016; 33: 538–557.
27. Taner T, Antony J. Comparing public and private hospital care service quality in Turkey. Leadersh Health Serv 2006; 19: 1–10.
28. Alumran A, Almutawa H, Alzain Z, Althumairi A, Khalid N. Comparing public and private hospitals' service quality. Journal of Public Health. 2020 Jan 13:1-7.
29. Aguiar do Monte P. Public versus private sector: Do workers' behave differently? EconomiA 2017; 18(2): 229-243.
30. Kaur G, Lomash H. Do Public and Private Sector Employees Differ in Empowerment Perceptions? A Comparative Study. International Journal of Social Science and Humanity 2015; 5(11): 907-911. DOI: 10.7763/IJSSH.2015.V5.578
31. Hugree C, Penissat E, Spire A. Differences between Public and Private Sectors Employees Following the Managerial Turn in European States. Revue française de sociologie 2015; 56(1): 47-73. DOI: 10.3917/rfs.561.0047
32. Basu S, Andrews J, Kishore S, Panjabi R, Stuckler D. Comparative Performance of Private and Public Healthcare Systems in Low- and MiddleIncome Countries: A Systematic Review. PLoS Med 2012; 9(6): e1001244. DOI:10.1371/journal.pmed.1001244
33. Bouzarjomehri H, Akbari-Sari A, Jafari-Pooyan E, Herandi Y, Rajaie S. Comparative study of hospitals' transparency in eight countries. Hakim Health Sys Res. 2019; 22(4): 273-283. (Persian)
34. Fung CH, Lim YW, Mattke S, Damberg C, Shekelle PG. Systematic review: The evidence that publishing patient care performance data improves quality of care. Annals of Internal Medicine. 2008;148(2):111–123. [PubMed]