

Studying Performance Quality of Authorities and Various Wards of Shahid Bahonar Educational Hospital from Practitioners' Perspective in 2016

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Abstract

Introduction: The increasing significance of hospitals in improving physical and mental health has led to focusing on improved quality and higher patients' satisfaction. The purpose of the present research is to determine performance quality of authorities and departments of Shahid Bahonar educational hospital from practitioners' perspectives.

Methods: This cross-sectional analytical-descriptive study was conducted in 2016. Research sample included 110 doctors of Shahid Bahonar educational hospital in Kerman. Research data were collected through a reliable and validated researcher-made questionnaire. Kolmogorov-Smirnov, Mann-Whitney, Kruskal-Wallis, and one sample t-test were used for data analysis ($p \leq 0.05$).

Results: Mean quality performance scores of hospital administrators (4.19 ± 0.62), wards (3.96 ± 0.55), quality of service delivery (3.25 ± 0.59), and working motivation in practitioners (3.61 ± 0.72) were obtained. The results also showed that younger employees ($p = 0.01$) and younger practitioners ($p = 0.01$) represented significantly better perspectives of performance quality of authorities and working motivation conditions; in addition, medical specialists showed better perspectives than general practitioners ($p = 0.02$). Quality of service delivery satisfaction and working motivation significantly reduced in individuals with over 15 years of working experiences ($p = 0.01$).

Conclusion: Results revealed that practitioners' perspectives on performance quality of authorities and hospital wards relatively developed in recent years, particularly due to in-service training and establishing a responsible system to implement health reform plan especially in hospitals.

Keywords: Quality, Performance, Authorities, Practitioners, Bahonar Hospital

Introduction

Organizational performance is turned into a national priority in international economy and hospitals of the focused centers by healthcare sector development (1). It is critically significant that service quality may lead to satisfaction and patients' loyalty, and finally, to stronger brand value and brand preference (2). Quality refers to the factors describing a product or services and represents high level of consumers' satisfaction (3). Further, it is

regarded as the ability to achieve desired objectives using legitimate methods (4), which may challenge organization management and is increasingly accepted in service sectors. Using high quality services causes cost saving and creates a satisfactory environment (5). In complex multi-specialized healthcare organizations, staffs coordination of different divisions, especially clinical, considerably contributes in organizational achievement. Healthcare organizations, especially hospitals,

are always prone to negative conflicts. Conflicts appear at individual, group, and hospital ward levels (6-7). Performance measurement is a numerical scale assesses the quality of activities in a system and measures system stability (8). Health promoting hospitals are more successful in attracting, recruiting, and retaining the employees, hence, health improvement services may decrease absence from work and enhance creativity and working quality (9). A study, conducted in a Chinese hospital to study clinical service quality, showed that medical quality of understudied wards varies, which may be categorized in various classes. The most and least quality wards were maternity and ICU wards, respectively (10). Another research comprehensively evaluated the quality of medical services in eighteen wards of a hospital. The results uncovered that the quality of surgery group is better than other understudied groups (11). Improvement of quality of services, through management strategies, showed an important role in brand preferences. This, not only causes fair distribution health services, but also causes more profit for the hospital (12). A study exhibited intermediate inconsistency level in hospitals of Tehran University of medical sciences (13). A research, carried out in Qazvin educational hospitals, represented that 60% of employees are dissatisfied about the existing conditions (14); and Kerman University of medical sciences disaster and emergency medical management center showed intermediate occupational motivation (15). Financial incentives in faculty members of Mazandaran University of medical sciences with master degree were more significant; while, organizational aspect including how to supervise was more significant to PhD and higher faculty members (16). Increase of participants' age was associated with less significance of management factor and higher significance of appreciation and cognition factors, that is, older staff have more desire for being appreciated (17). Satisfaction of the

supervisor and personnel promotion opportunities are intensified by higher education level (18). According to research findings, work nature is more important for males than females; whereas, women care more for job security and payment (17). Any organization may experience constant development and sustained success unless it is managed by an efficient competent manager or team of leaders (19). Management leading styles is one of the effective factors of increasing efficacy, efficiency, and finally, productivity in organizations. Appropriate management behavioral pattern in any organization results in strong motivation and spirit in employees and enhances occupational satisfaction. They need to motivate the employees through applying proper leadership style to improve staff performance and finally to enhance hospital productivity (20). The purpose of the present research is to determine the quality performance of authorities and various wards of Shahid Bahonar educational hospital in Kerman from practitioners' perspective.

Methods

This is a cross-sectional descriptive-analytical study conducted in Bahonar educational, research, and medical hospital of Kerman University of medical sciences in 2016. Research population was selected from all doctors of Shahid Bahonar educational hospital in Kerman. According to inclusion criteria, 110 of 145 working doctors were selected as research samples. Research inclusion criteria included (1) General practitioners and higher working in Bahonar hospital, Kerman and (2) Doctors with one and more years of working experience. Also research exclusion criteria included (1) having administrative and managerial position at hospital and (2) lack of interest in survey cooperation. Research data were collected through a researcher-made questionnaire consisting of five sections:

1. Demographic sections including personal and occupational information: age, gender, marital status, work experience, field of study, and education level.
2. Managerial quality performance survey section including head of the hospital, hospital director, nursing service director, finance and administrative vice president, administration manager, and chief financial officer. The survey consisted of 5 Likert scale items (extremely proper, proper, relatively proper, improper, and extremely improper). To verify the questionnaire reliability, 30 pilot questionnaires were distributed among doctors with alpha coefficient of 0.88 for all managerial domains. The questionnaire validity was also verified using ten experts' opinions through Kendall correlation coefficient and it scored 0.87.
3. Performance quality section surveying hospital wards including admission and treatment, training, supporting and clinical wards in a Likert scale from extremely proper to extremely improper. Reliability of admission and treatment unit using Cronbach's alpha coefficient obtained 0.91 followed by 0.9 for training, 0.92 for support, 0.92 for clinic; further, total Cronbach's alpha coefficient was 0.91. Kendall correlation coefficient for the questionnaire validity equaled 0.96.
4. Hospital quality of service survey consisting of 13 items. The questionnaire reliability was verified using Cronbach's alpha coefficient of 0.87 and Kendall correlation coefficient of 0.85.
5. Working motivation survey contains 10 questions with Cronbach's alpha coefficient of 0.84 and Kendall correlation coefficient of 0.87 to verify the questionnaire reliability and validity, respectively.

Survey items and research quantitative data normality were examined using Kolmogorov-Smirnov test. According to the test result

($p \leq 0.05$), Mann Whitney and Kruskal–Wallis non-parametric tests were used to measure mean difference among groups. In addition, mean difference of surveys with an average score of 3 Likert scale score was analyzed using One-sample t-test through SPSS; $p < 0.05$ was considered significant.

Results

110 of 145 doctors (76%) were selected as research sample and 35 individuals (24%) were excluded due to disinterest and disqualification. Mean age range was (38.8 ± 7.2) years and mean years of experience was (6.9 ± 6.4). Regarding frequency, 66.4 of research samples were male, 89.1 were married, 77.3 held specialties and higher degrees, 66.4 were below 40, and 80.9 were individuals with less than 11 years of working experience (Figure 1). Mean score of hospital head and manager performance quality survey was obtained (4.19 ± 0.62); the mean score for performance quality survey of admission and treatment, back up, training and clinic units equaled (3.96 ± 0.55). Mean score of satisfaction survey of service quality was (3.25 ± 0.59); and finally, mean score of working motivation from participants' perspective attained (3.61 ± 0.72), which was significantly larger than the intermediate Likert scale score (extremely proper, proper, relatively proper, improper, extremely improper) ($p = 0.001$). In addition, mean score of performance quality survey in several hospital units was significantly different ($p = 0.001$), where the highest score was assigned to admission and treatment unit (4.13 ± 0.53), and the least score went to the back-up unit (3.8 ± 0.64), while, doctors' perspective to hospital head and manager performance quality showed no significant difference ($p = 0.17$) (Table 1-3). Groups aged 30-40 were more significantly satisfied with performance quality of hospital head and administration manager than groups aged over 40 ($p = 0.01, 0.09$). Males showed higher satisfaction of nursing services than females ($p = 0.008$); other components

represented no significant difference. Specialists' attitude on the performance quality of head of the hospital, manager, nursing service director, as well as financial and administrative was better. Doctors with five years of working experience and less presented more agreement in all components than practitioners with over 5 years of working experience. In admission ward, married (4.17 ± 0.54 , $P = 0.02$) and general practitioners (4.34 ± 0.36 , $P = 0.008$) significantly showed better perspectives comparing singles and specialties. In back-up ward, individuals with 10 or less years of working experience (4.18 ± 0.4 , $P = 0.01$) and general practitioners (3.98 ± 0.44 , $P = 0.048$) significantly exhibited better perspective than individuals with over 10 years of working experiences and specialties. In training department, males (4.13 ± 0.63) significantly viewed better than female practitioners ($p = 0.043$). Mean score of service quality satisfaction at hospital was significantly smaller than individuals with over 15 years of working experience ($2.5 \pm$

0.6) ($p=0.01$). Satisfaction with working motivation in individuals with over 15 years of working experience (3 ± 0.18) was significantly less than other corresponding groups ($p=0.01$) (Table 4).

Discussion

The results of the present research demonstrated that practitioners are satisfied with performance quality of hospital staff; however, the level of satisfaction depends on the working motivation requirement as well as hospital wards (admission, backup, training, and clinic). The study of Nasiripour, entitled effective factors of employees' job satisfaction based on Herzberg theory in educational hospitals in Qazvin, showed that 60% of (administrative-financial, healthcare, and service) employees were relatively dissatisfied (14). Vail investigated Kerman University of medical sciences disaster and emergency medical management center and concluded an intermediate level of motivation to work for employees (15).

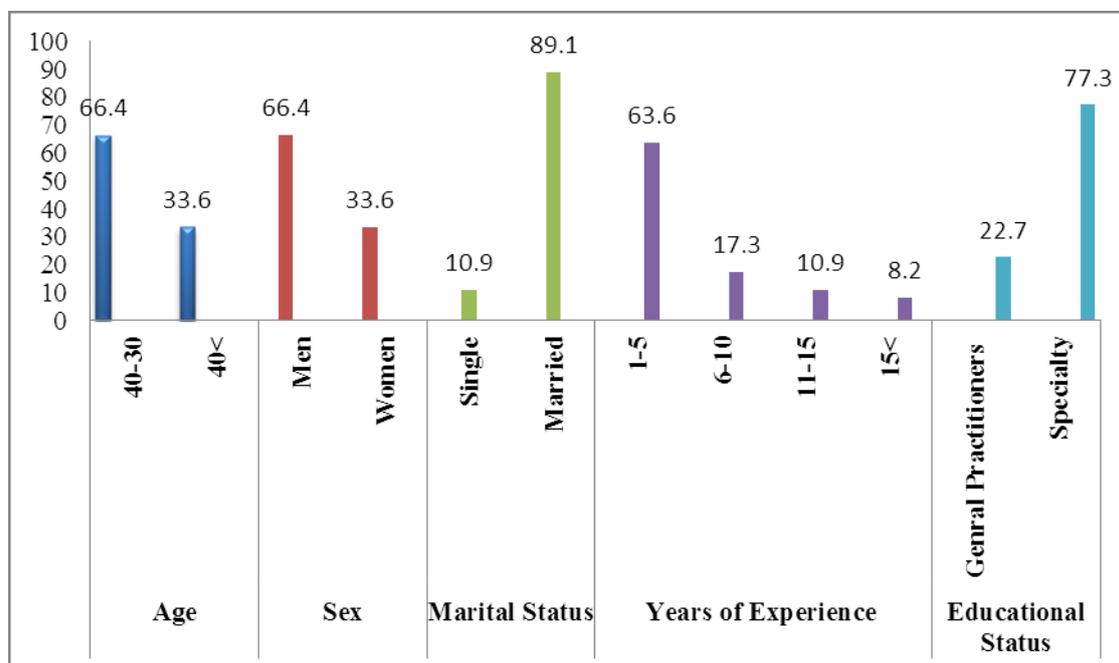


Figure 1. Frequency of practitioners respecting demographic features in Shahid Bahonar educational hospital, Kerman, 2016

Table 1. Mean survey of practitioners' perspective of hospital head and managers

Responsibilities	Survey mean score	(95% CI)		Significance level in groups (Sig)	Likert scale intermediate level	Significance level at constant score (Sig)
		Upper	Lower			
Head of the hospital	4.16±0.8	1.31	1.01			0.001*
Hospital director	4.12±0.77	1.27	0.97			0.001*
Nursing service director	4.32±0.59	1.43	1.2			0.001*
Finance and administrative vice president	4.18±0.76	1.32	1.03	0.17	3	0.001*
Administration manager	4.28±0.65	1.41	1.016			0.001*
Chief financial officer	4.08±0.73	1.22	0.94			0.001*

Table 2. Mean score of performance quality according to wards

Wards	Survey mean score	(95% CI)		Significance level in groups (Sig)	Likert scale intermediate level	Significance level at constant score (Sig)
		Upper	Lower			
Admission and treatment	4.13±0.53	1.23	1.03			0.001*
Backup	3.8±0.64	0.92	0.68	0.001*	3	0.001*
Training and clinical	4.02±0.68	1.15	0.89			0.001*
clinical	3.9±0.69	1.03	0.77			0.001*

Table 3. Mean score of service quality and motivation survey

Variables	Survey mean score	(95% CI)		Likert scale intermediate level	Significance level at constant score (Sig)
		Upper	Lower		
Service Quality	3.25±0.59	0.36	0.14		0.001*
Conditions of Motivation	3.61±0.72	0.75	0.47	3	0.001*

Raeisi also presented employees' job satisfaction of current condition and inferred that 30.3% were dissatisfied, 65.5% were relatively satisfied, and 4.2% were satisfied (21). Baratimarani and Rad also revealed that leadership style and management team are the factor of development, increased efficiency, effectiveness, and finally, organizational productivity (19), which are consistent with

the present research results such that the current study uncovers relative growth of hospital management performance quality comparing prior studies. According to the obtained results, older practitioners with higher work experiences showed smaller survey scores than motivation to work and quality of service delivery.

Table 4. Comparing means of performance quality survey of head of the hospital and Hospital director regarding demographic characteristics

Variables		Responsibilities											
		Head of the hospital	sig	Hospital director	sig	Nursing service director	sig	Finance and administrative vice president	sig	Administration manager	sig	Chief financial officer	sig
Age	30-40	4.26±		4.21±		4.35±		4.18±		4.4±		4.1±	
		0.76	0.09	0.74	0.1	0.62	0.65	0.8	0.73	0.56	*0.001	0.75	
	40<	3.97±		3.95±		4.26±		4.16±		4.06±		4.04±	
		0.86		0.8		0.55		0.68		0.75		0.69	0.88
Sex	Men	4.09±		4.1±		4.42±		4.24±		4.22±		4.08±	
		0.85	0.33	0.79	0.78	0.53	*0.008	0.73	0.27	0.7	0.31	0.71	0.85
	Women	4.3±		4.17±		4.12±		4.06±		4.41±		4.07±	
		0.68		0.74		0.68		0.81	0.27	0.51		0.71	
Marital Status	Single	4.3±		4.25±		4.25±		4.05±		4.25±		3.9±	
		0.85	0.42	0.86	0.44	0.45	0.45	0.66	0.46	0.86	0.92	0.76	0.25
	Married	4.1±		4.11±		4.33±		4.19±		4.3±		4.1±	
		0.8		0.76		0.61		0.77		0.62		0.73	
years of experience	1-5	4.27±		4.17±		4.3±		4.14±		4.37±		4.06±	
		0.73		0.72		0.6		0.8		0.56		0.74	
	6-10	4.14±		4.1±		4.5±		4.38±		4.34±		4.14±	
		0.67	0.33	0.73	0.81	0.47	0.26	0.61	0.71	0.67	*0.075	0.67	0.7
	11-15	3.75±		4.1±		4.35±		4.05±		3.9±		4.25±	
		1.16		0.86		0.42		0.74		0.81		0.45	
	15<	3.93±		3.8±		4±		4.2±		4±		3.8±	
		0.95		1.13		0.86		0.79		0.86		1.04	
Educational Status	general	3.94±		4.08±		3.92±		4.08±		4.13±		4±	
		0.57	*0.023	0.43	0.36	0.64	*0.001	0.65	0.69	0.39	*0.05	0.53	0.79
	practitioners	4.23±		4.14±		4.44±		4.2±		4.33±		4.09±	
		0.85		0.85		0.53		0.79		0.7		0.78	

Further, Mahmoodi illustrated that age is significantly related to supervisory and appreciation- recognition factors such that as age increases, the significance of supervisory factor reduces; whereas, significance of recognition and appreciation increases, which are consistent with the results of the present study (17). Married practitioners were more satisfied about treatment wards; and males

mean score surveys of nursing service management and training performance were significantly reported higher. According to Mahmoodi, marital status is significantly related to payment factor and gender factor shows a significant relationship with payment and job security such that males more concern for work nature; while, women view job security and payment as more critical factors.

Table 5. Comparing means of performance quality survey of admission, backup, training and clinical wards, regarding demographic characteristics

Variables		Clinical wards							
		Admission and Treatment	sig	Backup	sig	Training and Clinical	sig	Clinical	sig
Age	30-40	4.12±0.55	0.88	3.81±0.62	0.55	4.06±0	0.17	3.96±0.69	0.21
	40<	4.15±0.51		3.78±0.67		3.95±0.61		3.78±0.68	
Sex	Men	4.19±0.49	0.074	3.85±0.68	0.12	4.13±0.63	*0.042	3.95±0.72	0.33
	Women	4.01±0.59		3.31±0.54		3.8±0.72		3.18±0.61	
Marital Status	Single	3.75±0.26	*0.008	3.61±0.75	0.34	4±0.53	0.56	3.75±0.41	0.61
	Married	4.17±0.54		3.18±0.62		4.03±0.69		3.92±0.71	
Years of Experience	1-5	4.098±0.58	0.14	3.73±0.58	*0.001	3.99±0.7	0.037	3.91±0.67	0.59
	6-10	4.26±0.22		4.18±0.4		4.41±0.36		3.9±0.62	
	11-15	3.94±0.17		3.7±0.36		3.95±0.09		3.65±0.36	
	15<	4.36±0.81		3.6±1.28		3.6±1.03		4.16±1.15	
Educational Status	general practitioners	4.34±0.36	*0.02	3.98±0.44	*0.048	4.09±0.55	0.76	4.14±0.78	0.1
	specialty	4.06±0.56		3.7±0.68		4±0.71		3.83±0.65	

Table 6. Comparing means of quality survey of service and working motivation respecting demographic characteristics

Variables		Service Quality	sig	Conditions of Motivation	sig
Age	30-40	3.32±0.49	0.11	3.61±0.72	0.33
	40<	3.12±0.75		3.6±0.75	
Sex	Men	3.19±0.62	0.4	3.5±0.7	0.28
	Women	3.37±0.52		3.7±0.76	
Marital Status	Single	3.59±0.55	0.2	3.9±0.44	0.16
	Married	3.27±0.6		3.57±0.74	
Years of Experience	1-5	3.28±0.49	*0.01	3.59±0.71	*0.016
	6-10	3.45±0.76		3.86±0.79	
	11-15	3.3±0.52		3.81±0.75	
	15<	2.5±0.6		3±0.18	
Educational Status	General practitioners	3.39±0.57	0.32	3.43±0.9	0.13
	specialty	3.21±0.6		3.66±0.66	

These results are consistent with the results of the present study; in general, male and female practitioners are almost similar in all aspects excluding nursing service performance quality

in which males were more satisfied than females (17). Mean score of backup performance quality was reported reasonable. The maximum score dedicated to admission

ward and the minimum to the backup. Considering that backup ward is responsible for constructional, equipment, and maintenance issues, employees are more sensitive to this unit comparing others. According to the old and probably worn out equipment and facilities, backup ward requires more attention, accessibility, and accountability. According to a study conducted in a hospital in China to explore clinical service quality, medical quality of understudied wards varied, which may be categorized in various classes (10). The results of this study are consistent with the results of national studies in terms of lack of timely remuneration payment and other advantages (14, 15, 18). Mean score of surveying specialties in performance quality of head of the hospital, administration manager, and nursing service manager was significantly larger than general practitioners; whereas, mean score of surveying general practitioners in performance quality of hospital wards (backup and care units) was significantly reported higher than specialties. Results of Dashti demonstrated that increased level of education significantly intensifies satisfaction of the supervisor and personnel promotion opportunities (18). Ranjbar also represented that financial motivational factors are more significant in faculty members of at least master degrees; whereas, PhD and higher level faculty members more considered organizational aspects such as how to supervise (16), which are mainly consistent with the current research results.

Conclusion

Research results revealed that practitioners' attitude to performance quality of the authorities and different wards has relatively grown comparing prior years due to in-service training and establishing a responsible system implementing health reform plan, reconstruction and renovation of public centers and practitioners' working environment, as well as increased medical service tariffs. On

the other side, history of the center as the largest trauma center in south-east of the country, as well as managerial stability have remarkably influenced practitioners' satisfaction despite late payment. Disagreement of younger practitioners probably stems from lack of experience to compare the current situation with earlier years and or their idealism, which deserves to be used for improving performance quality of the related authorities. In cases where the attitudes were nonfunctional, it is required that practitioners and officials regularly discuss to ultimately satisfaction is relatively attained. With increased motivation of the practitioners, quality of medical services would improve and satisfy the patients who are major criteria of healthcare system measurement. It is recommended that further phenomenological qualitative studies should be conducted through deep interviews by experts such that hospitals performance quality and strategies are effectively enhanced.

Ethical issues

Ethics committee of Kerman University of Medical Sciences confirmed the present research (IR.KMU.REC.1396.06). Research objectives and research method were explained to all participants. In addition, research confidentiality and the right to withdraw the research were also described for the participants.

Authors' contributions

All authors equally contributed to the writing and revision of this paper.

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