Physicians and Nurses Perception of Organizational Performance and Organizational Culture in Egypt

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Abstract:A major challenge to healthcare executives is to maximize organization productivity, and providing quality of care. One of the way to established it by conducting a high level of organizational performance. This study aimed to assess organizational performance of intensive care units (ICU) and determine the interrelations between different dimensions of its. A descriptive, cross sectional used as research design. It was conducted in 19 ICUs at Alexandria University Hospital. 59 physicians and 135 nurses were participated in this study. Convenience random sampling method established. The Multidimensional Organizational Performance Questionnaire developed by Mienvielle*et al*. (2004) was translated into Arabic and was used as data collection tool. It was found a statistically significance difference between total mean score of the physicians' and the nurse' perception towards organizational culture, the four elements of the performance unit effectiveness and individual well-being dimensions of the organizational performance. It is recommended for hospital administrators to create a collaborative and constructive culture within healthcare members.

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1. Introduction

The organization of work between healthcare members in the intensive care units (ICU) is a critical issues regarding the highly interdependent team-oriented care that characterizes these units. A high level of organizational performance will lead to better outcomes (Teres *et al.*, 1998; Randal e*t al.*, 2006). Assessment of organizational performance is an important goal in ICUs because a significant percentage of health care resources are spent in ICUs and for the reason that the specificities of this specialty, such as stressful and urgent situations with a high mortality rate, high workloads, use of sophisticated equipment, and teamwork (Minvielle*et al.*, 2005).

Organizational Performance

Minvielle*et al*. (2008) defined organizational performance as the aggregation of five autonomous managerial practices: organizational learning and change, communication, coordination, problem solving, and skills developed in the relation of patient/caregivers. Different factors are correlated with this organizational performance such as cultural values, individual well-being, age, years of experience and different structural factors (Minvielle*et al*., 2008). On the other hand, Macinati (2008) stated that organizational performance should be measured using a multi-dimensional approach. In healthcare, it is measures may be divided into three major categories: financial, operational, and outcome.

Characteristics of Intensive Care Unit (ICU)

According to organizational theory, ICUs have been considered as a complex organization of services. This complexity results from great uncertainty in the process of care, rapid decision making required by an urgent situation and reduction of ICU length of stay (Minvielle*et al.*, 2005).

Review of the literature shows various aspects that ICU organization depends on. First, on cultural aspects and focuses on dimensions such as a team satisfaction-oriented culture; a people security culture. Second,managerial practices often focused on coordination, communication, problem-solving/conflict managementorganizational learning, capacity to change, and skills developed in relationships with patient and their families. Third, individual well-being aspects that focus on job burnout in epidemic proportions, a phenomenon that appears to be a sign of major dysfunction within an organization. Intensive care unit organization can cause personal stress related to excessive workload and high rates of mortality. Finally, organizational factors and management styles are increasingly recognized as key variables for explaining differences in the efficiency and quality of health care (Laporta*et al.*, 2005; Minvielle*et al.*, 2005).

Research in Intensive Care Units

Internationally, many researches were done that cover one or two of the organizational dimensions at the most in ICUs. , Le Blanc *et al.* (2001) investigated the individual well-being in ICU and presented a

validation study concerned with the stressful aspects of ICUs. Consequently, Baker e*t al*. (2003) measured aspects of organizational culture, and providing comparative data on coordination, teamwork and leadership, conflict management, unit leadership and unit. Coombs(2003) explored decision making between doctors and nurses in the intensive care environment.

Particularly in Egypt, several researches have been investigated some organizational performance aspects. Abd El Rahman (2004) studied the relationship between health care organizational culture and nurses' commitment to the work. Moreover, Zakaria (2004) has presented ethical decision-making among nurses and physicians in critical care units.

Significance of the study

As a result, these single aspects of performance measures may not capture all aspects of performance. Most importantly single aspect measures can be significantly influenced by other factors that are either not considered simultaneously or not presented. So, global measures of organizational performance may offer a clearer reflection of overall performance of critical care services. Hence, a multidimensional approach to the measurement of organizational performance in ICU should cover every aspects of organizational performance such as shared cultural values, managerial practices and individual well-being (Minvielle*et al.,* 2005). Following it, this study can provide ICU with valid information that present as a first step in building up a database for ICU register, which will include information on organizational managerial, medical, and outcome performances of ICUs at Alexandria University Hospitals. This could serve as a model for improvement of ICU services in other health care organizations,

Purpose

1. Assess the organizational performance as perceived by Physicians and nurses of working in ICUs
2. Assess the organizational culture as perceived by Physicians and nurses working in ICUs
3. Assess the Managerial Practices as perceived by Physicians and nurses working in ICUs
4. Assess Individual Well-Being as perceived by Physicians and nurses working in ICUs
5. Examine the relationship between different dimensions of organizational performance as perceived by Physicians and nurses working in ICUs

2. Methods

Research Design

Descriptive, cross-sectional study used as research design in this study.

Setting

Study was conducted at Alexandria University Hospitals in different areas of ICUs specialties; coronary, Neurology, maternity, pediatrics, orthopedics

Sampling and Subjects

The subjects of the present study included 30% of the nurses (n=135), who held diploma (n=69) and who held baccalaureate (n=66). They were simple randomly selected from the total number of nurses (n=449) working in the previously mentioned settings at the time of data collection. Also, it is included 30% of physicians (n=59), who held master degree (n=5) and who held baccalaureate (n=54). They were randomly selected from the total number of residents and assistant lecturer physicians (n=196) working in the previously mentioned settings at time of data collection.

Instruments

This study used Multidimensional Organizational Performance Questionnaire developed by Minvielle e*t al*. (2004) as a data collection tool. There were two forms which were for the physicians and nurses. It is translated to Arabic language. It is consisted of 95 items to measure the principal four dimensions of organizational performance. It is geared toward assessment of the organizational performance dimensions namely: organizational cultures, managerial practices, performance unit effectiveness and individual well-being dimensions of intensive care units. The questionnaire used 5-points Likert scale. Furthermore, questions related to characteristics of ICU and also demographic characteristics of participants were added to the questionnaire.

Procedures

Research was established after getting approval from research ethical committee. The study tools were translated into Arabic language. Then the Arabic and English copies were submitted to a jury of eleven experts to test its content validity. Before distributing questionnaire, official permission was obtained from higher administrator in hospitals selected. Following it, a pilot study was carried out on 15 nurses and 10 physicians. They were selected randomly from nurses and physicians who are working in the intensive care units at Alexandria Main University Hospital . The reliability of the questionnaire was done from the pilot study using Alpha Cronbach test to measure the internal consistency of the items composing each dimension. The internal consistency coefficient alpha according to physicians was 0.9809, and according to nurses was 0.9791. After it, data were collected by distributing questionnaire directly to participants. Data collection time ranged up to one month.

Statistical analysis

The Statistical Packages for (SPSS) were used in establishing data analysis process.

3. Results and Discussion

Organizational performance assessment is an integral part of quality assurance and quality improvement activity in healthcare that can result in change related to the systems and structures of healthcare organizations. It may lead to improvement in patient care (Rhydderch*et al.*, 2005). In this study, there were two groups of participants. Regarding physicians their main demographic characteristics namely: male (72.9%); with the age of 25-29 years old (83.1%); less than 5 years experience in the hospital and in ICU (98.3% and 100%, respectively); and with baccalaureate degree (54%). On the other hand, the dominant characteristics for nurses group were: female (100%); with the age less than 25 years old (57.8%); less than 5 years experience in the hospital and in ICU (56.3% and 60%, respectively); and with diploma degree (51.1%).

Table 1. Organizational performance dimensions as perceived by Physicians and nurses of working in ICUs

Organizational Performance Dimensions	Physicians (n=59)	Nurses (n=135)	t	*p*
	Mean±SD	Mean±SD		
Organizational culture dimension	3.12±0.25	3.24±0.34	2.506*	0.013
Managerial practices dimension	3.33±0.14	3.19±0.21	2.24*	0.024
Performance unit effectiveness dimension	3.28±0.68	3.47±0.74	1.853	0.065
Individual well-being dimension	3.88±0.36	3.68±0.36	0.479	0.633
Total	13.61±1.947	13.58±1.939	0.812	0.418
Friedman X^2 Test	110.493**	221.957**		
P	0.000	0.000		

*significant value at the p ≤0.05 level

Table 1 Shows physicians' and nurses' perception towards the dimensions of the **organizational performance**. There was no statistical significant difference observed between **total** mean score of the physicians' and the nurses' perception towards the four dimensions of the organizational performance (t= 0.812 *p*> 0.05). But the table revealed statistical significant difference between the physicians' and the nurses' perception towards each of the organizational culture dimension and the managerial practices dimension of the organizational performance (t= 2.506, 2.24 respectively *p*<0.05). This finding could be related to the fact that various professionals have different cultures i.e. medical and nursing cultures. Also, organizational culture focuses on the demographic and the culture profile the workplace affecting what the individuals do and how they behave (Marquis & Huston, 2003).

Table 2. Organizational Culture Dimensionsas perceived by Physicians and nurses working in ICUs

Organizational Culture Dimensions	Physicians (n=59)	Nurses (n=135)	t	*p*
	Mean±SD	Mean±SD		
Team-satisfaction orientation (constructive)	3.82±0.77	3.67±0.84	1.097	0.274
Lacking people-security orientation (lacking passive/defensive)	2.85±0.56	3.05±0.66	1.993	0.055
Lacking task-security orientation (lacking aggressive/defensive)	2.7±0.5	3.01±0.63	3.251**	0.001
Total	9.37±0.75	9.73±1.04	2.506*	0.013
Friedman X^2 Test	42.245**	29.591**		
P	0.000	0.000		

**significant value at the p ≤0.05 level*
***significant value at the p ≤0.01 level*

The present study indicated that there was statistical significant difference between total mean score of the physicians' and the nurses' perception towards organizational culture dimension (t= 2.506 *p*<0.05). The highest mean score was devoted to the element "team-satisfaction orientation" according to both the physicians' and the nurses' perception 3.82±0.77 and 3.67±0.84 respectively, while the lowest mean score was devoted to the element "lacking task-security orientation" according to both the physicians' and the nurses' perception 2.70±0.50 and 3.01±0.63, respectively (Table 2).

Regarding the element of team-satisfaction orientation (constructive cultural style), this finding might be due to the fact that the physicians and the nurses, who were employed in the intensive care units, they pay attention to the quality of human relations within the unit. These findings were in the same line with Ingersoll e*t al.* (2000), ACME Corporation (2000), and Abd-El Rahman (2004) findings who indicated that organizations are in alignment regarding preference for constructive and satisfaction-driven interaction, also they indicated that the constructive cultural style was the most dominant among the studied subjects, who were working in critical and intensive care surgical and medical unit. Furthermore, Marquis *et al.* (2003) recommended that leaders must create a constructive culture, which is a characteristic of a healthy organization, and they should assist subordinates in understanding their organization's culture. Furthermore, Hemmelgarn e*t al.* (2006) found that the positive organizational culture supports the effectiveness of organizations. Concomitantly, Zazzali*et al.* (2006) indicated that culture was found to be significantly related to several measures of organizational effectiveness in relation to physicians' perception.

While, in relation to the lacking task-security orientation (lacking passive-defensive cultural style) it reflects that both the physicians and the nurses endeavor to be perfectionists, remain cool and collected in all circumstances, and exert their authority to the full. Parallel with this, Abd El Rahman (2004) indicated that the people-security and task-security orientation showed lower expectations of employees working in organizations.

Table 3. Managerial Practices Dimension of the Organizational Performance as perceived by Physicians and nurses working in ICUs

Managerial Practices Elements	Physicians (n=59)	Nurses (n=135)	t	*P*
	Mean±SD	Mean±SD		
Relations and communication within the unit	3.46±0.28	3.42±0.39	0.545	0.587
Skills developed in the relation with patient/caregivers	3.51±0.37	3.09±0.56	4.398**	0.000
Coordination of the unit	3.01±0.4	2.99±0.48	0.167	0.868
Organizational learning and change	3.12±0.38	3.05±0.42	0.978	0.329
Problem solving/conflict management	3.57±0.52	3.43±0.52	0.492	0.624
Total	16.67±0.72	15.98±1.07	2.24*	0.024
Friedman X^2 Test	206.124**	433.689**		
P	0.000	0.000		

**significant value at the p ≤0.05 level*
**significant value at the p ≤0.01 level

In regards to the problem-solving/conflict management, the present study revealed that it had the highest mean scores within the managerial practices dimension as perceived by both physicians and nurses 3.57±0.52 and 3.43±0.52 successively (Table 3). From this finding it could be assumed that physicians and nurses do not avoid solving conflicts whether between the groups or within the group. Iacono (2000) stated that conflict resolution and staff counseling sessions are best facilitated with honest, open communication in an orderly, focused manner. Furthermore, Gibson and Cohen (2003) indicated that the effective conflict resolution depends on the degree of resonance between the subsequent actions of the various participants.

Table 4 Individual Well-Being Dimensions of the Organizational Performance as perceived by Physicians and nurses working in ICUs

Individual Well-Being Dimensions	Physicians (n=59)	Nurses (n=135)	t	*p*
	Mean±SD	Mean±SD		
Psychological working condition	3.43±0.8	3.65±0.71	1.488	0.139
General job satisfaction	3.95±0.88	3.77±1.1	1.023	0.308
Intention to stay	4.27±1.05	3.64±1.31	3.242**	0.001
Total	11.65±1.08	11.06±1.09	0.479	0.633
Friedman X^2 Test	108.736**	220.184**		
P	0.000	0.000		

**significant value at the p ≤0.01 level

In scope of the individual well-being dimensions, the result of the current study indicated had the highest mean score as perceived by the physicians and the nurses who were working in ICUs (Table 4). This finding might be related to the fact that both physicians and nurses have general job satisfaction and intention to stay, effective work relationships, and personal accomplishment. It is the same with study by Keeton e*t al.* (2007) who claimed that cooperative work relationships, training courses, and team supervision are important in preventing burnout syndrome.

Consequently, the present study reflects that the element intention to stay was the highest element perceived by physicians, while was the lowest item perceived by nurses regarding the individual well-being dimension (Table 4). This finding could be attributed to that the physicians had higher level of job satisfaction than the nurses, and this situation made the significant difference between physicians' and nurses' perception towards intention to stay. This was supported by Carayon*et al.* (2005) that concluded that physicians were more satisfied with their job and reported less fatigue than nurses and other staff. Moreover, Heijden e*t al.* (2007) referred that there is extended evidence suggesting dissatisfaction with the work situation is an important precursor of employees' decision to leave the organization or the profession. Besides that, it was found that work-related variables, such as job satisfaction, are related to the decision to retire. Based on these findings, it was expected that job satisfaction to be an important aspect for nurses to consider in decisions to leave healthcare (Heijden e*t al.*, 2007). Zurn*et al* (2005) inferred an obvious relationship between job satisfaction and intention to leave the profession. It was lower the satisfaction, the higher the intention to leave.

Recommendation for further research

It is recommended for further studies to investigate strategies and factors that promote teamwork and participation, and that support the team culture of the workers. Moreover, future studies could explore doctor-patient communication from perspectives of patients, their family and members, and intensive care workers with conduct observation of the relationship between physician and patients. Following it, another study could be conducted to investigate characteristics of magnet hospitals that enhance recruitment and retention of the nurses and physician.

Implication for nursing practice

Some recommendation for hospital administrators could be addressed from this study. First, the hospital directors and nursing managers should create a collaborative and constructive culture within healthcare members through increased self-expression, cooperation, and staff development of intensive care health team (physicians and nurses). Secondly, hospital administrators should enhance the efforts to realize better coordination within intensive care through clear written rules, procedures and schedule. Thirdly, enhance the coordination between the intensive care units and the other units in hospital through constructive working relationships. Last, encourage intensive care health team to learn and change, and clarify importance of learning and change in improvement of quality care through participation in training sessions and scholarly conferences.

Conclusion

To conclude, there was no statistically significance difference of perception between physicians and nurses regarding assessment of organizational performance. The organizational culture dimension of organizational performance was the lowest dimension perceived by physicians whereas for nurses it was the managerial practices dimension. Furthermore, for the managerial practices there was statistically significance difference perception between physicians and nurses. In the perception towards the performance unit effectiveness of organization performance, nurses' perception was higher compared with physicians. Consequently, both physicians and nurses perceived the individual well-being as the highest dimension of organizational performance. In a nutshell, the organizational performance was fair.

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