Original Article

Modeling the relationship between organizational culture, clinical governance, and organizational performance: A case study of Tamin Ejtemaee hospitals in Mazandaran Province, Iran

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Abstract

Background: The quality of clinical services is one of the main concerns around the world. Clinical governance as a new approach to improving the quality of care provided by the health care system plays a major role in the provision of higher quality health care services. The success of this approach depends on the existence of a strong and suitable organizational culture. The aim of this study was modeling the relationship between organizational culture, clinical governance, and organizational performance.

Materials and Methods: The purpose of this study is practical and its data collection is descriptive, but as a result it is an empirical study. This study was a correlative study based on structural equation modeling (SEM). The statistical population of this study consisted of all managers, supervisors, educational and clinical supervisors, and nurses of Tamin Ejtemaee (social security) hospitals in Mazandaran Province, Iran. Due to the limitation of the study, all individuals in the target population were selected as the study subjects. Thus, 124 questionnaires were distributed among them, and, 113 questionnaires were received. Data analysis was performed using SPSS and LISREL software. For data analysis, the Pearson correlation coefficient test and confirmatory factor analysis were used for precise measurement of the model.

Results: The results show that there is a significant and positive relationship between the components ($P < 0.01$). The role of organizational culture in establishing clinical governance estimation is desirable and the results have identified its relationship with organizational performance.

Conclusions: With the improvement of organizational culture, the establishment of clinical governance will increase and it will achieve optimal performance by continuation and localization.

Keywords: Organizational Culture, Clinical Governance, Performance

Introduction

The quality of clinical services is one of the main concerns around the world (1). Many countries consider the improvement of the quality of hospitals' performance as the main policy agenda for their health system (2). Clinical governance was introduced as a new approach to improving the quality of care and according to it a general reform program was created in the health system. Clinical governance is the system by which organizations providing health care services are constantly responsible to improve the quality of their services and maintain high standards of care by creating an environment in which excellence is realized in clinical care (3). Organizational culture, due to its impact on the different status variables within the framework of an organization, is a specific research topic in management knowledge which has never lost popularity in its research field. Organizational culture is considered as a key factor for studying different aspects of

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organizational life and research questions regarding its impact on the perception of organizational goals are increasing every day (4).

Organizational culture is used to comprehend situations that employees are faced with, and it can affect attitudes and behaviors of employees (5). The new approach of organizational culture excellence is based on the belief that organizational success depends on having a strong and appropriate organizational culture and organizations must enable themselves to create external and internal synergy for their survival. Organizational culture can be used as a powerful lever to strengthen organizational behavior, success in implementing any strategy depends largely on the support of organizational culture, and any changes in the organization cannot be effective without sufficient attention to organizational culture (6). Organizational performance is considered as the method by which to carry out missions, tasks, and organizational activities and their results. In another definition, organizational performance is achieving organizational and social goals or going beyond them and implementing organizations' responsibilities. Performance measurement is the process of ensuring that an organization follows strategies which lead to achieving goals. There are two main approaches in performance measurement (objective and subjective measures) and both approaches have their own advantages and disadvantages. Objective measures (scales), are more realistic; however, they are limited to financial data and do not account for other organizational aspects. On the other hand, subjective measures (scales), are less realistic, but they provide rich descriptions of organizational effectiveness. These scales allow the comparison of a wide range of organizations in different industries (7). Due to the importance of organizational culture, clinical governance, and organizational performance in the successful establishment of rehabilitation programs, this study investigated the modeling of the relationship between organizational culture, the establishment of clinical governance, and organizational performance in Tamin Ejtemaee (social security) hospitals in Mazandaran Province, Iran. The results can be the grounds for the successful implementation of quality improvement programs, including clinical governance and performance at hospitals. Moreover, executives with knowledge of the organizational culture of their hospital can try to remove possible errors and prepare hospitals to implement quality improvement programs and changes successfully (7).

Organizational Culture and Clinical Governance

Conte et al. conducted a research with the aim of understanding how clinical governance managers in the National Health Service in England are engaging with their organizational culture to support the improvement of quality (6). They found that there is a clear interest in renewing culture and management among managers, in line with the increasing attention of national policy-makers to the promotion of alteration as a lever to change the health system. Almost all clinical governance managers (98%) considered the need to measure the local culture in order to promote change for enhanced performance. Furthermore, 85% reported that culture assessment should serve a formative (developmental) purpose, while 64% believe that it should be followed by compaction results. Almost all managers acknowledged the importance of understanding and shaping clinical governance. Marshall et al. by pointing to the fact that changing the culture of organizational health is a basic prerequisite for improving the National Health Service, have considered the importance of culture and cultural change for the implementation of clinical governance in public actions to distinguish desirable and undesirable cultural attitudes (6). As a result, senior managers considered the culture of clinical care and cultural change as fundamental aspects of clinical governance. The desired cultural characteristics included: the importance of

liability of public responsibility by staff, their willingness to cooperate and learn from each other, and their ability to criticize themselves and to learn from their errors. The main obstacles for cultural change were identified as high level of personal independence and the perceived pressure to accept rapid measurable changes in the organization. The impacts of organizational culture on other factors of the hospital have been identified in other studies (6). As an example, Tessai studied the relationship between organizational cultures, leaders' behavior, and job satisfaction among a group of nurses in Taiwan. Tessai concluded that culture within the organization is of great importance and plays a major role in the establishment of a happy and healthy work environment (5). Therefore, in communicating and promoting organizational traits to employees, its acknowledgement and acceptance can affect their occupational behaviors and attitudes. Tzeng et al. have evaluated the potency of organizational culture as a good predictors of job and patient satisfaction (6). Organizational culture affects all aspects of the organization. Studies show that culture affects development of goals and strategies, individual behavior and employee performance, motivation and job satisfaction, creativity and innovation, decision making, the involvement of the staff in affairs, commitment, and discipline (6).

H_1: Organizational culture has an impact on clinical governance.

Culture and organizational performance

Quality should be a component of organizational values and culture of hospitals. In addition, organizations moving toward quality care require a fundamental change in culture, leadership, the attitude of their staff, and organizational structure. If organizations providing health care are not successful in changing their climate and atmosphere and their performance in order to achieve clinical governance, they are doomed to fail. This issue is extremely complex, especially in hospitals where people of different cultures interact with each other (8). One of the issues

that affect the performance of the organization is organizational culture. Over the past four decades, significant studies have focused on organizational culture and organizational performance. This volume of theoretical framework represents the value of organizational culture. Previous studies show the positive impact of organizational culture on organizational performance (9). The Denison organizational culture is one of the patterns of organizational culture as its basis is the fact that culture affects organizational performance, and includes all dimensions of organizational culture. This pattern considers the cultural dimensions of organizations in four principal areas including engaging in work (participation), consistency, adaptability, and mission (10).

H_2: Organizational culture has an impact on performance.

Clinical governance and organizational performance

The main aim of clinical governance is the continuous improvement of service quality and it provides a framework within which organizations providing health care move toward growth, development, and quality assurance of clinical services for patients. The Balanced Scorecard is an appropriate approach to the measurement of hospital performance of one of the models. This model suggests that in order to assess the performance of each organization, a number of balanced indicators must be used so that senior managers can have an overview of the four important aspects of the organization. Responding to the four following basic scopes will be possible through these various aspects (dimension).

1. Client and customer aspects
2. The internal aspect and business
3. Financial aspects
4. Learning, development, and innovation aspects (11).

H_3: Clinical governance has an impact on organizational performance.

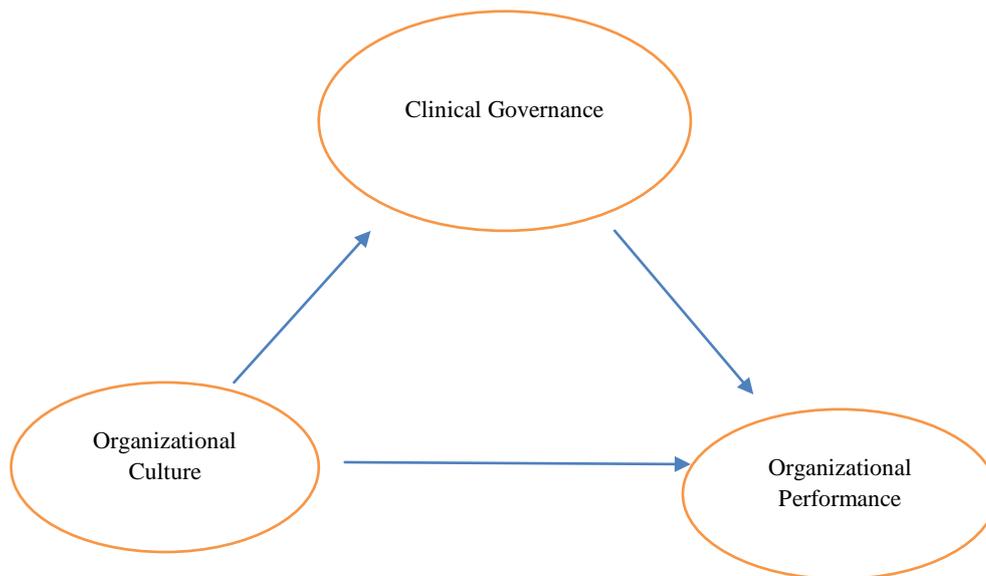The general approach of this study has been shown in figure 1.

Figure 1: The conceptual model

The present study was conducted with the aim of modeling the relationships among organizational culture, clinical governance, and organizational performance in Tamin Ejtemaee hospitals of Mazandaran Province based on data from the year 2015.

Material and Methods

This research aimed at modeling the relationship between organizational culture, clinical governance and organizational performance in social security hospitals of Mazandaran province. The purpose of this study is practical and its data collection is descriptive. This was a correlative study based on structural equation modeling (SEM).

To examine the relationship between latent and observed variables of confirmatory factor analysis and to evaluate the structural model (the relationship between latent variables), path analysis was used. Data analysis was performed using SPSS and LISREL software. For data analysis, the Pearson correlation coefficient test and confirmatory factor analysis were used for the precise measurement of the model. The statistical population (community) of this study consisted of all managers, supervisors, educational and clinical supervisors, and nurses of Tamin Ejtemaee hospitals in

Mazandaran Province. Due to the limitation of the study, all individuals in the statistical population were selected as the study subjects. After obtaining permission from the management of the Tamin Ejtemaee hospitals of Mazandaran, the questionnaires were distributed among the participants with the necessary instructions and with their consent. The participants were assured that the data would be used anonymously and collectively.

Then, 124 questionnaires were distributed among them, and, 113 questionnaires were received. The reason behind selecting the population was the involvement of managerial levels in performing clinical governance. The Denison Organizational Culture Survey was used to measure organizational culture (10).

This questionnaire emphasizes the aspects of organizational culture that seem to influence organizational effectiveness and focuses on four key traits of involvement (participatory), consistency, adaptability, and mission. Each of these four attributes is measured by three indicators. Thus, the involvement aspect is measures by the three subcomponents of empowerment, team orientation, and capability development. The consistency aspect is measured with the three subcomponents of fundamental values, consensus, and coordination. The adaptability aspect is measured by the three subcomponents of

alteration, customer orientation, and organizational learning. The mission (prophecy) aspect is measured by the three subcomponents of strategic guidance, goals, and objectives and vision. The main questionnaire contains 66 questions. In this study, 36 questions were selected according to the purpose of the study. Mirkamali

Questionnaire was used to assess clinical governance (6). This questionnaire contains 44 questions. For this purpose, specific questions were identified based on seven aspects of clinical governance and 6 questions of organizational performance were chosen based on the Balanced Scorecard (Table 1).

Table 1: Components and the questionnaires of organizational culture, clinical governance, and organizational performance

Subject	Components	Number of questions
Organizational culture	Involvement (empowerment, team orientation, and capability development) Consistency (fundamental values, consensus, coordination)	36 questions
Clinical governance	Training and management of staff Patient and community (population) participation Risk management and patient safety Clinical audit Data management Clinical effectiveness Management and leadership	44 questions
Organizational performance	Financial aspects Internal aspect of the business (internal processes) client and customer aspects growth and learning aspects	6 questions

To determine the validity of the Denison Organizational Culture Survey (10), despite the use of domestic and foreign research, second-order analysis validity was conducted on the questionnaire. The root-mean-square error (RMSE) was equal to 0.09. The reliability of the data for the entire questionnaire was approved through internal consistency method (Cronbach's alpha = 0.95). The Mirkamali Clinical Governance Questionnaire has been made based on the seven aspects of clinical governance and was reviewed and modified by five experts of clinical governance in hospitals and the Clinical Governance Committee De Guilan University of Medical Sciences, Iran. Its validity was confirmed in this study. After the initial implementation and modifications, in the final stage of implementation, the indicators of estimation of the verified model obtained by the LISREL (RMSE = 0.07)

software confirmed the validity of the model and the structural validity of the questionnaire. The internal consistency of the whole questionnaire (Cronbach's alpha = 0.97) and the organizational performance questionnaire, using the Balanced Scorecard method, was approved (Cronbach's alpha = 0.89).

Results

The average age of participants was 37.47 ± 6.28 years and 85 had a bachelor's degree and 28 had a master's degree. Moreover, 55 participants were supervisors of nurses, 34 were managers, 19 were supervisors, and 5 were nursing directors. The average work experience of the participants was 15.26 ± 7.25 years. The results presented in table 2 show that there is a positive and significant correlation between components ($P < 0.01$).

Table 2: correlation matrix of clinical governance, organizational culture and organizational performance

| Row	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Training and management of staff	1														
2	Patient and community participation	0.75	1													
3	Risk management and patient safety	0.78	0.65	1												
4	Clinical audit	0.74	0.56	0.81	1											
5	Data management	0.57	0.54	0.80		1										
6	Clinical effectiveness	0.80	0.77	0.80	0.82	0.71	1									
7	Management and leadership	0.54	0.51	0.60	0.57	0.55	0.62	1								
8	Involvement	0.38	0.40	0.39	0.43	0.37	0.44	0.46	1							
9	Stability and integration	0.44	0.38	0.49	0.50	0.42	0.42	0.68	0.79	1						
10	Conformity	0.52	0.43	0.48	0.52	0.37	0.47	0.65	0.76	0.90	1					
11	Mission	0.45	0.44	0.48	0.49	0.45	0.46	0.66	0.85	0.94	0.87	1				
12	Internal processes	0.40	0.48	0.40	0.47	0.38	0.52	0.49	0.87	0.72	0.79	0.78	1			
13	Clients and customers	0.49	0.43	0.47	0.36	0.40	0.32	0.51	0.61	0.79	0.81	0.74	0.67	1		
14	Growth and learning	0.43	0.38	0.36	0.36	0.34	0.43	0.50	0.83	0.77	0.86	0.78	0.81	0.75	1	
15	Financial aspects	0.22	0.16	0.29	0.30	0.27	0.21	0.24	0.77	0.60	0.54	0.69	0.51	0.34	0.57	1

The structural model with freedom degree of 81 ($X2 / df = 2.11$) and root-mean-square error of approximation (RMSEA) of 0.09 showed that estimation of the conceptual model of organizational culture in establishing clinical governance is desired. Regression coefficients (R) of each of the components of clinical governance, and organizational culture and performance are illustrated in figure 2. Regression analysis of organizational culture on clinical governance and performance was significant and positive. For a better understanding, the conceptual model and coefficients of each component are reported in figure 3. The structural model results also showed that the estimation of conceptual model of the role of organizational culture in the establishment of clinical governance is desired. According to figure 2, the regression coefficient of organizational culture on clinical governance is positive and significant.
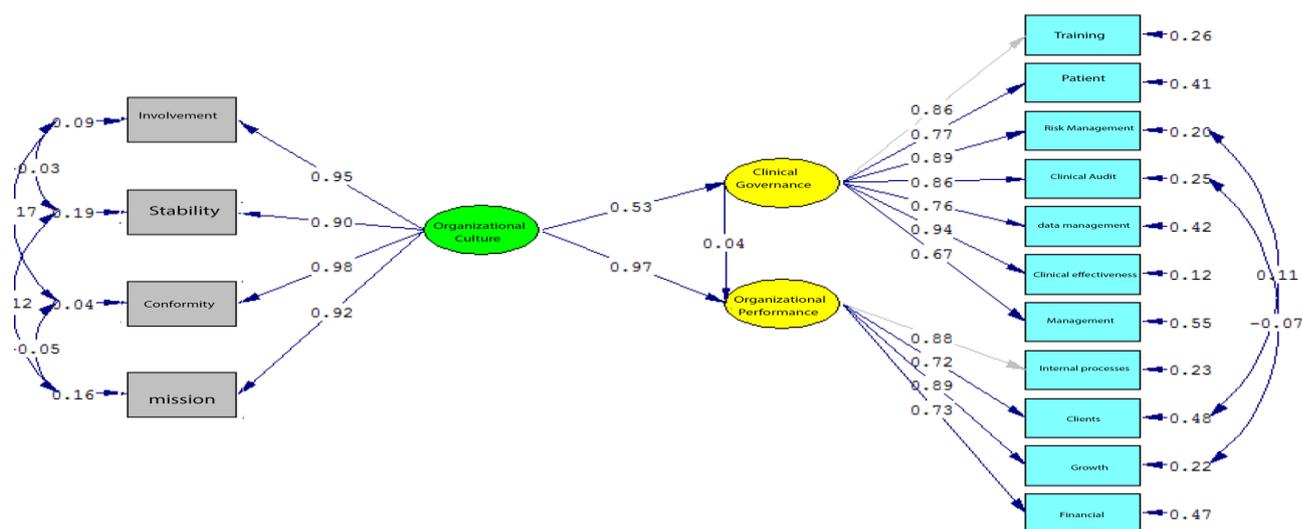
Chi-Square=187.56, df=81, P-value=0.00000, RMSEA=0.084

Figure 2: Standardized coefficients
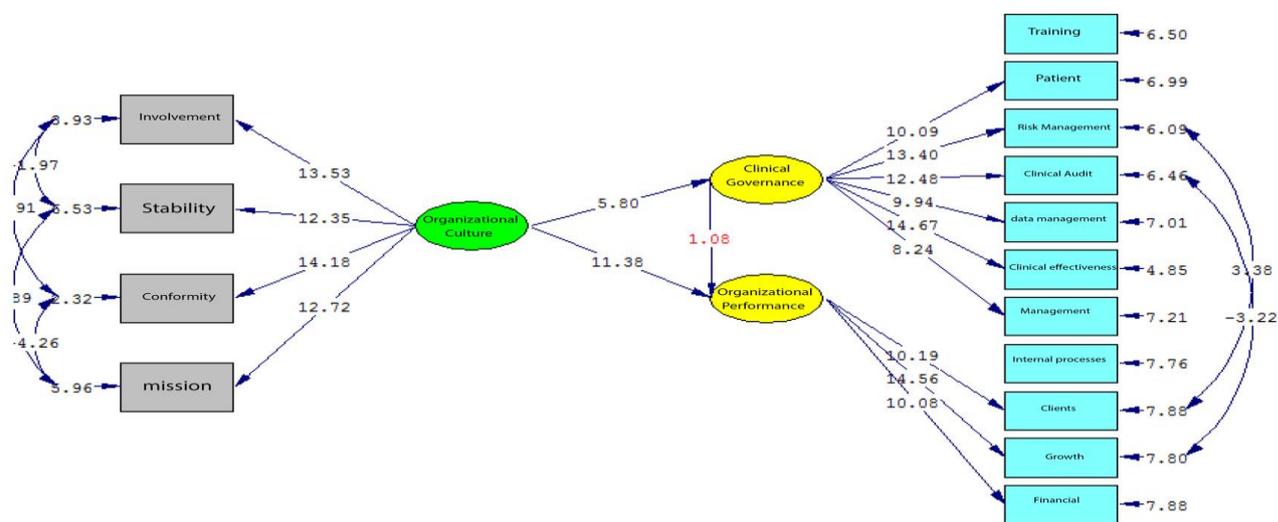
Chi-Square=187.56, df=81, P-value=0.00000, RMSEA=0.084

Figure 3: Non-estimate coefficients

Discussion

Consideration of the quality of clinical services is possible through the implementation of programs such as clinical governance. Clinical governance is a systematic, integrated approach in which the health care providers are responsible for continuous improvement of the output quality and safety of patient care through revision and ensuring of clinical responsibilities, presenting methods to prevent and reduce clinical errors, and maintaining a high level of service standards. However, in recent decades, different levels of organizational performance have been attributed to the type of organizational culture. Organizational culture can act as a source for creating sustainable competitive advantages.

Lack of attention to organizational culture and individuals' beliefs and values is the cause of failure and inability to achieve the organization's goals and vision. This lack of attention will create numerous problems in the process of the organization's activity and result in the wasting of much energy to solve problems caused by the incompatibility of predicted targets with the common culture of the organization. Organizational culture is a complex phenomenon that has an important

role in accelerating the development and transformation of the organization.

Therefore, lack of attention to the culture of the organization and its dimensions and parameters can cause basic problems. Modeling the relationship between organizational culture, clinical governance, and organizational performance in Tamin Ejtemaee hospitals of Mazandaran Province showed that organizational culture in these hospitals is in good condition, because their scores are higher than average. Furthermore, the results showed that the dominant organizational culture of the studied hospitals was cooperative or involvement culture and the establishment of clinical governance is in good condition. Nevertheless, organizational performance obtained a lower score compared to other components. Hence, greater attention to this component is required in the establishment of this relationship. In explaining this conclusion, it can be said that due to the lack of an efficient system such level of performance was predictable. In the case of the relationship between culture and the establishment of clinical governance, this study confirms the results of some previous researches (12, 13). The cooperative organizational culture is recognized as the most appropriate culture for the implementation of total quality management (TQM) and other plans for quality enhancement. It can be stated that the impact of organizational culture on the establishment of clinical governance is significant. With the improvement of organizational culture, the further establishment of clinical governance will be achieved. In addition, the relationship between dimensions of organizational culture and clinical governance in Tamin Ejtemaee hospitals of Mazandaran Province was positive and significant. The overall improvement of the above results leads to more sustainable establishment of clinical governance which causes the improvement of organizational performance. Given that hospitals are the main organizations that provide healthcare services in the country, establishing an appropriate

organizational culture results in hospitals' greater flexibility when responding to the needs of clients and patients, which ultimately leads to client satisfaction and fulfilling the core mission of hospitals.

Conclusion

In all developed and developing countries, health systems and governments must adopt mechanisms and procedures to ensure the quality of healthcare services. It seems that devising a national strategy to improve health quality is not considerably difficult, yet implementing this strategy can prove problematic. Clinical governance is the adopting of a comprehensive strategy for continuous quality improvement of clinical services so that everyone is accountable for providing these services. Achieving this goal is not possible without taking into account the issues of culture and performance.

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Conflict of interest: None declared

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