

Investigating the Relationship of Organizational Performance with Employment Status and Shift Work in Nurses at the Shahid Rahnemoun Hospital

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Abstract

Background: Performance evaluation in facilitating organizational effectiveness is considered an essential task of human resource management that depends on nurses' employment status.

Objectives: The present study aimed to investigate the relationship of organizational performance with employment status and shift work in nurses at the Shahid Rahnemoun Hospital, Yazd, Iran.

Methods: This descriptive-analytical study was conducted in 2018. The sample consisted of 151 nurses who were included using census. The instrument was a standard questionnaire whose content validity was confirmed by three experts, and its reliability was approved by Cronbach's alpha coefficient. Data analysis was performed using SPSS.22 software through independent t-test, one-way analysis of variance, and one-sample t-test.

Results: Among the four components surveyed in the study, the highest and lowest means and standard deviations were related to "participation and cooperation" (4.35 ± 0.48) and "infection control and prevention" (4.21 ± 0.60), respectively. There was a significant relationship between total performance and the two dimensions of "care and treatment" and "participation and cooperation" with employment status ($P < 0.05$).

Conclusions: The results showed that the type of employment of nurses would affect the organizational performance. In an organization where employees feel job security, they will be committed to that organization and perform their duties more competently, with more motivation and satisfaction.

Keywords: Performance; Nurse; Hospital

1. Background

Growth and development in each country or system, including a country's healthcare system, cannot be achieved without an efficient evaluation system. A healthcare system is robust when it can achieve its main goals within the limits of national development. Therefore, in this regard, managers and policymakers of such a system need comprehensive and accurate information about their organization's performance to monitor and plan for the future (1).

Among the practices to improve individual performance and organizational effectiveness are developing and implementing an effective employee performance evaluation program. Evaluation is one of the critical tasks of human resource management through which

the current status of human resources is examined, and its strengths and weaknesses are identified (2).

Singer defines evaluation as "the assessment of the formal process of providing positive or negative diagnostic feedback to employee performance outcomes" (3). Also, Harvey and Bowin classify the goals and objectives of performance evaluation as "establishing an optimal payroll system, improved performance, evaluating selection-related decisions, appointment, dismissal, demotion, promotion, etc., as a tool for the growth and development of human resources" (4).

Growth, development, and improvement of organizational performance are among the most critical issues for developing countries. In this regard, resources, espe-



cially human resources, are highly valued. After gaining resources, the next step of organizational performance is to use them. Given that human resources are firstly valuable and secondly limited, the issue at hand is how to use them optimally (5).

Human resources are considered the most important organizational strategic resource, and managers of organizations focus mostly on laws and regulations related to human resources, such as employment of human resources, which lacks its specific productivity in today's Iranian society. Thus, employment has become one of the dilemmas in the organizational community rather than a tool to facilitate work, enhance productivity, and improve organizational performance (6).

Today, attention is increasingly paid to human resources due to their common roles and their influence on other key factors in the organization (7). Human is the most important factor of production and service, and organizational performance depends on the productivity of individuals in an organization (8).

Although many studies (9, 10) have indicated a positive relationship between increased productivity and temporary employment, Kermaroz and Rox showed that organizational productivity and subsequently community productivity decreased in the long run (11) because temporary employment led to reducing an individual's commitment to an organization. As a result of constant changes, the organization caused motivational and communication problems (12).

According to the concept of performance involving a variety of functions concerning individuals' job description and the condition for achieving them, the best performance evaluation systems can be considered systems that provide a comprehensive perspective of employees' actual performance status through focusing on different occupational groups and paying attention to other side factors that affect employees' performance level. However, given the wide range of mechanisms and strategies applied in employee performance evaluation systems in government organizations, there are always factors that, despite having an impressive effect on employees' job performance level, have been ignored and have not been assessed as influential factors or included in performance evaluation systems (13).

Employees' employment status and shift work are among the most significant factors in an organization, and the present study aimed to investigate their relationship with employee performance. Employment status refers to the type of relationship defined between the employee and the related organization, based on which the individual is obliged to provide some services and perform a set of specific tasks. Despite the variety of individuals' employment relationships in an organization, it is usually seen that the same mechanisms are used to evaluate employee performance. Also, since the issue of job security arises regarding the type of employment relationship, individuals show different performance

depending on the degree of job security, which sometimes is not taken into account in organizational performance evaluation mechanisms. Without being aware of an employee's employment status, it may be impossible to judge their actual performance accurately. However, a limited number of studies have evaluated employee organizational performance and even the organization itself regarding employment status and shift work, which doubles the necessity of performing this study. Most previous studies only evaluated organizational performance and did not investigate employment status, shift work, and related roles.

2. Objectives

Thus, the current study was conducted to examine the relationship of organizational performance with employment status and shift work among nurses at the Shahid Rahnemoun Hospital, Yazd, Iran.

3. Methods

This is a descriptive-analytical study whose data were collected through a questionnaire at the Shahid Rahnemoun Hospital, Yazd, Iran, in 2018.

The study population included all nursing staff in four groups: permanent, temporary-to-permanent, contractual, and project. In this study, no sampling was performed, and all the nurses were included using census. Given that 30% of the nurses with different employment statuses were working in fixed shift works on average, it was possible to compare performance in terms of shift work and employment status.

The instrument used to collect data was a questionnaire to evaluate organizational performance, derived from the payment instruction, based on the performance of non-medical staff working in hospitals affiliated to the University/Schools of Medical Sciences and Health Services of the Ministry of Health and Medical Education (14). This questionnaire, designed and approved by the Ministry of Health and Medical Education in 2015, consisted of two parts. The first part included background information (age, gender, service history, education degree, job group, employment status, and type of shift work), and the second part involved 24 questions regarding the areas of care and treatment practices, patient and family education, participation and cooperation with medical staff, and infection control and prevention. This study approved the instrument's content validity and reliability by three experts and Cronbach's alpha coefficient, respectively, although the Ministry of Health previously confirmed them. In order to calculate Cronbach's alpha, the valid questionnaire was distributed among 10% of the sample size ($\alpha = 0.88$), necessary arrangements were made with the officials of each ward, and then the questionnaire was given to the ward official. The relevant supervisor completed information regarding each nurse's

status. Afterward, the information was entered into SPSS software version 22. Data analysis was performed via descriptive statistics using one-sample t-test, independent t-test, and one-way analysis of variance (ANOVA).

Before distributing the questionnaire, necessary arrangements were made with the security section and nursing unit of the Shahid Rahnemoun Hospital, and the consent of medical ward matrons was also obtained. They were given sufficient explanations and assured that the collected information would remain confidential and be reported without revealing the participants' identities.

4. Results

The majority of nurses studied were under 40 years old (77.4%), female (72.2%), and married (84.1%). In terms of education and work experience, the majority of nurses had a bachelor's degree (88.1%) and less than ten years of work experience (56.3%). Regarding the shift work variable, 21.2% of the surveyed nurses worked with a fixed schedule, and the rest worked with a rotating schedule (Table 1).

Table 1. The Demographic Characteristics of the Study Population

| Variables | No. (%) |
|--------------------------|------------|
| Age gap | |
| 20 - 30 | 57 (37.7) |
| 31 - 40 | 60 (39.7) |
| 41 - 50 | 30 (20) |
| 51 - 60 | 4 (2.6) |
| Gender | |
| Male | 42 (27.8) |
| Female | 109 (72.2) |
| Marital status | |
| Single | 24 (15.9) |
| Married | 127 (84.1) |
| Education | |
| Diploma | 9 (6) |
| Associate | 5 (3.3) |
| Bachelor | 133 (88.1) |
| Master | 3 (2) |
| Doctorate | 1 (0.7) |
| Work experience | |
| 1 - 10 | 85 (56.3) |
| 11 - 20 | 44 (29.1) |
| 21 - 30 | 22 (14.6) |
| Employment status | |
| Permanent | 60 (39.7) |
| Temporary-to-permanent | 52 (34.4) |
| Contractual | 18 (11.9) |
| Project | 15 (9.9) |
| Corporate | 6 (4) |
| Shift work | |
| Fixed | 32 (21.2) |
| Rotating | 119 (78.8) |
| Total | 151 (100) |

Among the dimensions of organizational performance, the highest mean and standard deviation were related to the dimension of participation and cooperation (4.36 ± 0.49), and the lowest mean and standard deviation were

related to infection control and prevention (4.21 ± 0.61). The mean and standard deviation of total organizational performance were 4.29 ± 0.48 (Table 2).

Table 2. The Descriptive Statistics of the Organizational Performance Variable

| Variables | N | Minimum | Maximum | Mean ± SD |
|----------------------------------|-----|---------|---------|-------------|
| Care and treatment practices | 151 | 2.62 | 5.00 | 4.28 ± 0.49 |
| Patient and family education | 151 | 3.00 | 5.00 | 4.28 ± 0.55 |
| Participation and cooperation | 151 | 2.75 | 5.00 | 4.36 ± 0.49 |
| Infection control and prevention | 151 | 2.00 | 5.00 | 4.21 ± 0.61 |
| Total performance | 151 | 2.67 | 5.00 | 4.29 ± 0.48 |

In order to investigate the relationship between performance dimensions and employment status, one-way ANOVA was used. The test results revealed that total performance and the two dimensions of care and treatment practices and participation and cooperation had significant associations with employment status (Table 3).

Table 3. Assessing the Relationship Between the Nurses' Performance Dimensions and Employment Status a. b

| Performance Dimensions and Employment Status | Mean ± SD | P-Value |
|--|-------------|---------|
| Total performance | | 0.31 |
| Permanent | 4.26 ± 0.47 | |
| Temporary-to-permanent | 4.18 ± 0.52 | |
| Semi-contract | 4.57 ± 0.35 | |
| Project | 4.33 ± 0.43 | |
| Corporate | 4.51 ± 0.40 | |
| Care and treatment practices | | 0.042 |
| Permanent | 5.25 ± 0.49 | |
| Temporary-to-permanent | 4.18 ± 0.53 | |
| Semi-contract | 4.56 ± 0.35 | |
| Project | 4.32 ± 0.47 | |
| Corporate | 4.53 ± 0.36 | |
| Patient and family education | | 0.13 |
| Permanent | 4.25 ± 0.56 | |
| Temporary-to-permanent | 4.20 ± 0.55 | |
| Semi-contract | 4.58 ± 0.53 | |
| Project | 4.27 ± 0.45 | |
| Corporate | 4.38 ± 0.61 | |
| Participation and cooperation | | 0.010 |
| Permanent | 4.35 ± 0.45 | |
| Temporary-to-permanent | 4.21 ± 0.51 | |
| Semi-contract | 4.64 ± 0.41 | |
| Project | 4.45 ± 0.42 | |
| Corporate | 4.63 ± 0.59 | |
| Infection control and prevention | | 0.114 |
| Permanent | 4.20 ± 0.57 | |
| Temporary-to-permanent | 4.08 ± 0.74 | |
| Semi-contract | 4.48 ± 0.40 | |
| Project | 4.31 ± 0.39 | |
| Corporate | 4.44 ± 0.34 | |

^a One-way ANOVA test

^b Significant at the significance level of $P < 0.05$.

According to the independent t-test results, no significant relationship was observed between the nurses' organizational performance and shift work (Table 4).

Table 4. Assessing the Relationship Between the Nurses' Performance Dimensions and Shift Work a, b

| Performance Dimensions and Shift Work | Mean ± SD | P-Value |
|---|-------------|---------|
| Total performance | | 0.27 |
| Fixed | 4.21 ± 0.44 | |
| Rotating | 4.31 ± 0.49 | |
| Care and treatment practices | | 2.37 |
| Fixed | 4.22 ± 0.46 | |
| Rotating | 4.30 ± 0.50 | |
| Patient and family education | | 0.20 |
| Fixed | 4.17 ± 0.53 | |
| Rotating | 4.31 ± 0.55 | |
| Participation and cooperation | | 0.28 |
| Fixed | 4.28 ± 0.43 | |
| Rotating | 4.38 ± 0.50 | |
| Infection control and prevention | | 0.30 |
| Fixed | 4.11 ± 0.49 | |
| Rotating | 4.24 ± 0.61 | |

^a t-test.

^b Significance level $P < 0.05$.

5. Discussion

Based on the results, the average score obtained was more than three, indicating the appropriate performance status among the nurses. Consistent with the present study results, Khalifehzadeh et al.'s study revealed that the majority of employees believed that their performance level was in a desirable condition (15). Similarly, McCracken et al. (16) and McDonagh (17) showed in their studies that the performance of hospital staff was in a desirable condition. However, according to the results of the present research and studies mentioned above, the improvement of organizational performance in a hospital is not an issue that can be neglected. Thus, performance measurement is a critical and necessary factor in promoting care, especially within the healthcare system.

Among the four components surveyed, the highest mean and standard deviation were related to the dimension of participation and cooperation, and the lowest mean and standard deviation were related to infection control and prevention. Izadi et al.'s study showed that nurses had the highest score in care and coordination activities and the lowest score in clinical research and response to conflicts (18). In Ghamari et al.'s study on evaluating nurses' performance quality in cardiac wards, the comparison of performance level in different areas showed that nurses' educational and communication performance was weaker than their other functions, while their therapeutic performance had a higher quality than their other functions. However, in terms of total performance, unlike the existing findings,

nurses' performance quality level was 28% poor, 64% moderate, and only 8% good (19).

The results also revealed that total performance and the two dimensions of performance were significantly related to employment status. Gholipoor et al. in their study showed that employment type affected staff productivity, but observed no difference between the productivity of contractual and permanent human resources; instead, the main difference was found between the productivity of permanent and contractual staff as well as other temporary and permanent employment with a long work experience, which could be due to other fundamental factors (20). In a study entitled "The Elements Contributing to Manpower Productivity in Agro-Industrial Cooperatives: A Case Study of Kermanshah Province," Farshadfar showed that human resource productivity was negative and its value was equal to -0.46. Also, seven factors, including education, motivation and initiative, work ethic, employment status, the rule of law and order, frugality, and proper payroll system, affected human resource productivity (21).

Evaluating nurses' performance from the perspective of matrons and using performance tools of the Ministry of Health were among the current study's strengths. However, performing the study only in one hospital and limited sample size were some of the problems leading us to be cautious in generalizing the results and considering them in future studies.

5.1. Conclusion

There is a significant relationship between organizational performance and employment status. Therefore,

according to the results of the present study and other relevant studies, it can be concluded that nurses' employment status of any type will definitely affect organizational performance. In an organization where employees are more likely to survive, consider their organization a safe place, and feel job security, they will also feel committed to that organization and perform their duties better and with more motivation and satisfaction. As a result, since the job nature of employees is sensitive in organizations, such as health and medical organizations, such organizations should pay attention to their employees' employment status and do not assume that employment status and the degree of job security do not affect their performance.

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