

## The impact of job rotation on the performance of health organizations: An Applied Study in King Faisal Hospital in Makkah City

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### Abstract

The current study focuses on the impact of job rotation on the performance of health organizations, and therefore the study aimed to study the impact of senior management's interest in human resource development through job rotation, horizontal and vertical job rotation on health service performance in King Faisal Hospital in Makkah. To achieve the goals of the study, the researcher used the descriptive analytical method and the questionnaire to collect data, and it consists of two parts: the first section is personal data, and the second section is four axes according to the study variables, and the study was applied to a sample of hospital staff that reached (303) employees. Most important results of the study: There is a correlation between the higher management's interest in developing human resources through job rotation, and the performance of the health service in King Faisal Hospital in Makkah, where the correlation coefficient reached (0,826). Its ranking was the most influential in the first place, followed by the reality of the application of horizontal job rotation (0.677) , and finally the reality of applying vertical job rotation ( 0.633). Most important recommendations of the study: To hold meetings for employees who are nominated for job rotation before starting the rotation process. The necessity to develop a comprehensive plan to implement job rotation to ensure the implementation of the rotation according to the human and training needs in the hospital. Providing the opportunity for subordinates to express their views on the method of executing the work as the actual practice of these employees increases their experiences in determining the best methods to accomplish the work tasks. The necessity to take into account the capabilities, skills, and desires of employees when implementing job rotation.

**Keywords:** job rotation, horizontal job rotation, vertical job rotation, performance of the health service, management's interest in developing human resources.

## **1 Background**

Job rotation is one of the most important strategies of human resources management to develop the performance of employees or the organization, as it is considered one of the effective methods to develop the performance of employees at various levels, as it allows the employee to practice a job other than the work he does and allows him to acquire new experiences that add to his previous experiences, and also enables the management to pump Fresh blood to take on new administrative tasks (Abu Sabha, 2014 AD, p. 2).

It is considered one of the basic pillars used by organizations that seek success, continuity, and achievement of their goals, as the use of job rotation provides an opportunity for all its employees to show their capabilities and skills, which they did not have the opportunity to show these capabilities and skills, and on the other hand, organizations that seek excellence and success consider that job rotation is An area through which it can provide its employees with more knowledge in various fields, which leads to improving their performance and thus improving the performance of the organization as a whole. positions and carry out their responsibilities with high efficiency as a result of having practiced this work in previous periods and proven their success (Zaki, 2010).

From the foregoing, it is clear the importance of job rotation, especially in the health sector, since this sector represents great importance in any society and always needs continuous development, modernization, and receiving creative ideas from all its employees at all levels, whether administrative or medical. On the other hand, monitoring and evaluating the level of performance in the hospital is a priority for any administration. Through this follow-up, aspects are identified. The positive as well as the negative aspects of this performance, and then work to address the negative aspects. Job rotation is applied in two ways, as follows: (Maher, 2016, p. 55)

1. Horizontal rotation: Horizontal job rotation takes place among the employees working at one job level, so that one employee works as another employee, and then assumes the responsibilities and duties of the new job, taking into account the performance of the job tasks in the best way possible.
2. Vertical rotation: It is carried out vertically so that the employee is assigned job tasks that are higher than the level of his previous job in terms of duties and responsibilities.

Based on what was presented, the current study will focus on the impact of job rotation on performance from the viewpoint of the employees of King Faisal Hospital in Makkah.

### **The interest of senior management in the development of human resources through job rotation**

A study (Su- Yueh, et al, 2015), referred to the use of job rotation to enhance job satisfaction and organizational commitment among nurses, and concluded that job rotation positively affects job satisfaction and organizational commitment of nurses, and also helps to acquire knowledge, skills, and ideas simultaneously. The study (Evelin, et al, 2017), aimed to reveal the perceptions of workers who underwent the job rotation process as a management tool for resolving conflicts. Recognizing the activities performed by colleagues, improving interpersonal relationships as well as reducing resistance when working in other sectors.

#### **Vertical job rotation:**

Fallatah's study (2011) indicated the importance of codifying the process of job rotation for leaders, and that it be at the expense of the organization's needs, based on previous planning that was carefully prepared. The study of Al-Shahiwi (2017), indicated the need to spread the concept of job rotation within institutions and start applying it in the right way. Job rotation goals should be clearly defined and communicated to employees.

#### **Horizontal job rotation:**

In the study of Allyso (2014), she indicated the importance of organizations seeking to include job rotation paths in each service as an area of job guarantee or becoming part of the normal work practice culture. The principles of job rotation should be used for all levels of practice and can be transferred to other staff groups such as health staff. The study of Chen, et al (2015), indicated that job rotation positively affects the organizational commitment of nurses, and job rotation among nurses leads to the use of the nursing workforce in a way that helps achieve the ultimate goals of improving the performance of the organization and encouraging them to continue working in this field, in turn, it helps to raise morale by carrying out various job tasks through job rotation.

## 2 Methodology

The current study adopted a descriptive-analytical approach. This section explains how the study was conducted in technical terms; it elaborates how the researchers conduct sample selection, the data collection instrument that was used, and research procedures among other specified tasks. The study population includes all staff of King Faisal Hospital in Makkah city. The total population is (1430). This study employed simple random sampling to select the sample. A sample comprises a group of respondents who are carefully selected to represent the population (Cooper and Schindler, 2014). Therefore, the sample was selected based on the formula used by Cooper and Schindler (2014):

$$n = \frac{n N}{N + n - 1} \cdot \text{sample} = \frac{384 * 1430}{1430 + 384 - 1} = 302$$

Accordingly, the sample size in the current study is 302.

The researchers used questionnaires to collect primary data. In designing the questionnaire for the current study, the two researchers created a questionnaire from some of the previous studies after modifying the statements in line with the current study. The questionnaire was divided into two sections. The first section captured the participants' demographics data. The second section includes the following axes the interest of senior management in developing human resources through job rotation, the reality of applying horizontal job rotation, and the reality of applying vertical job rotation and the dependent variable (health service performance at King Faisal Hospital in Makkah. Data will be analyzed using the software of the Statistical Package of Social Sciences. The following statistical methods and tests were applied to analyze the data: mean, standard deviation, and Chi-Square test.

## 3 Results

### 3.1 Impact of the interest of senior management in the development of human resources through job rotation on the performance of health organizations.

Table No. (1) shows that the general mean for all the statements is (3.22), and this value according to the relative weight criterion indicates an average degree of approval.

Averages range between (3.01 and 3.86). The statements are arranged according to the mean value: (7), (8), (6), (1), (4), (2), (5), and (3). The Chi-Square test shows that the level of statistical significance for all statements is less than the level of moral significance (0.05), and therefore we accept the alternative hypothesis, which indicates a relationship between the reality of the interest of senior management in the development of human resources through job rotation, and the performance of the health service.

**Table 1 Impact of the interest of senior management in the development of human resources through job rotation on the performance of health organizations**

S	Statements	Mean	Std. deviation	Chi-Square	Sig.
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7	One of the advantages of job rotation is the possibility of an employee being promoted to a larger position.	3.86	0.863	82,48	0,017
8	The majority of employees have positive attitudes toward job rotation	3.29	1.033	93,65	0,019
6	The employee's performance of how to perform his job duties after rotation is evaluated through prior criteria.	3.22	1.086	73,48	0,015
1	There is a clear strategy in the hospital for job rotation.	3.18	1.111	65,16	0,013
4	The hospital administration is interested in identifying the self-abilities of the employee who is nominated for rotation	3.12	1.090	74,87	0,015
2	Employees have the opportunity to undergo adequate training before job rotation	3.06	1.172	61,27	0,012
5	Job rotation in the hospital is planned, not randomly.	3.04	1.089	83,94	0,017
3	The hospital administration is keen to educate employees about job rotation before applying for it	3.01	1.122	73,91	0,015
<b>General Mean</b>				<b>3,22</b>	

### 3.2 Impact of reality of applying horizontal job rotation on Performance of health organizations.

Table No. (2) shows that the general mean of all statements (4,07) and this value according to the relative weight criterion indicates a high degree. Averages range between (4,03 and 4,11).

Statements are ranked according to the value of the mean: (10), (9), (14), (15), (12), (11), (16), and (13). The Chi-Square test shows that the level of statistical significance for all statements is less than the level of moral significance (0.05), and therefore we accept the alternative hypothesis, which indicates a relationship between (the reality of applying horizontal job rotation) and the Performance of health organizations.

**Table 2 Impact of reality of applying horizontal job rotation on Performance of health organizations**

S	Statements	Mean	Std. deviation	Chi-Square	Sig.
10	Job rotation helps in applying new methods of solving problems at work	4.11	0.604	51,91	0,009
9	Job rotation contributes to highlighting the abilities and skills of the new job	4.10	0.607	51,58	0,009
14	It helps in renewal at work and in reducing job routine	4.10	0.613	53,04	0,011
15	Job rotation helps in increasing employee productivity	4.08	0.603	48,52	0,010
12	Job rotation creates a stimulating work environment for the achievement	4.08	0.648	46,91	0,005
11	Job rotation improves communication and collaboration between departments	4.05	0.630	64,34	0,013
16	Job rotation contributes to reducing employees' resistance to change	4.04	0.621	50,05	0,010
13	Contributes to the distribution of employees according to work needs	4.03	0.645	49,48	0,010
<b>General Mean</b>				<b>4,07</b>	

### 3.3 Impact of reality of applying vertical job rotation on Performance of health organizations.

Table No. (3) shows the general mean of all statements (4,05) and this value according to the relative weight criterion indicates a high degree. Averages range between (3.93 and 4.10).

Statements are ranked according to the value of the mean: (18), (17), (19), (21), (20), (23), (22), and (24). The Chi-Square test shows that the level of statistical significance for all statements is less than the level of moral significance (0.05), and therefore we accept the alternative hypothesis, which indicates a relationship between (the reality of applying vertical job rotation) and the performance of health organizations.

**Table 3 Impact of reality of applying vertical job rotation on Performance of health organizations**

S	Statements	Mean	Std. deviation	Chi-Square	Sig.
18	Job rotation contributes to decision-making to encourage administrative creativity.	0,011	0,011	0,011	0,011
17	Job rotation helps to acquire leadership skills.	0,009	0,009	0,009	0,009
19	Job rotation increases innovation and continuous improvement of work	0,005	0,005	0,005	0,005
21	Job rotation allows for development and promotion to senior positions.	0,006	0,006	0,006	0,006
20	Job rotation contributes to reducing job abuse.	0,008	0,008	0,008	0,008
23	Job rotation helps in dealing with emergencies such as the absence of an employee or a sudden increase in workload.	0,006	0,006	0,006	0,006
22	Job rotation helps with time management more.	0,008	0,008	0,008	0,008
24	Continuing the manager in his place leads to favoritism to some subordinates.	0,005	0,005	0,005	0,005
<b>General Mean</b>		<b>4,05</b>			

### 3.4 The reality of health service performance at King Faisal Hospital in Makkah

Table No. (4) shows that the general mean of all statements (3,41) and this value according to the relative weight criterion indicates a high degree. Averages range between (3,25 and 3,61). Statements are ranked according to the value of the mean: (31), (25), (32), (28), (27), (29), (26), and (30). The Chi-Square test shows that the level of statistical significance for all statements is less than the level of moral significance (0.05), therefore we accept the alternative hypothesis, which indicates a relationship between (The reality of job rotation) and the Performance of health service.

**Table 4 The reality of health service performance at King Faisal Hospital**

S	Statements	Mean	Std. deviation	Chi-Square	Sig.
31	The level of performance is measured in the tasks and actions assigned to the employees.	3.61	0.953	183,74	0,038
25	The hospital administration sets accurate criteria for evaluating the performance of employees.	3.57	0.974	160,91	0,034
32	The employee's good use of the resources available in the hospital is measured.	3.46	1.008	123,38	0,025
28	The hospital administration is keen to provide an adequate number of doctors to cope with the increase in the number of patients.	3.39	1.086	98,43	0,020
27	The new staff is trained to maintain the quality of services provided by the hospital.	3.38	1.042	89,12	0,018
29	The hospital administration is keen to provide an adequate number of nursing staff to cope with the increase in the number of patients.	3.34	1.177	91,90	0,019
26	The hospital administration provides the opportunity for all hospital employees to participate in training courses that contribute to raising their professional level.	3.31	1.077	79,09	0,016
30	The hospital administration is keen on qualifying department managers in the field of hospital management.	3.25	1.002	160,97	0,034
<b>General Mean</b>		<b>3,41</b>			

## 4 Discussion

The relationship between study variables shows that there is indeed an impact on (Dimensions of job rotation and performance of health services).

**the interest of senior management in the development of human resources through job rotation** Chi-Square test value is (1162,91), with a degree of freedom of (868) and statistical significance of (0,041). Therefore, we accept the alternative hypothesis, which is that there is a moral effect on (the interest of senior management in the development of human resources through job rotation) and the performance of health services. The correlation coefficient equals (0,826).

**Horizontal job rotation** Chi-Square test value is (1140,78), with a degree of freedom of (588) and statistical significance of (0,038). Therefore, we accept the alternative hypothesis, which is that there is a moral effect on (Horizontal job rotation) and the performance of health services. The correlation coefficient equals (0,677).

**Vertical job rotation** Chi-Square test value is (1133,00), with a degree of freedom of (588) and statistical significance of (0,037). Therefore, we accept the alternative hypothesis, which is that there is a moral effect on (Vertical job rotation) and the performance of health services. The correlation coefficient equals (0,633).

**Table 6 Results of the Chi-Square test**

independent variable (job rotation)	Dependent variable (Health services Performance)				
	Chi-Square	DF	General mean	Sig.	Correlations
<b>The interest of senior management in the development of human resources through job rotation.</b>	1162,91	868	3,22	0,041	0,826
<b>Horizontal job rotation.</b>	1140,78	588	4,07	0,038	0,677
<b>Vertical job rotation.</b>	1133,00	588	4,05	0,037	0,633

Table 6 shows the interest of senior management in the development of human resources through job rotation. Had the highest correlation (0,826) among dimensions of job rotation. It is closely followed by horizontal job rotation (0,677), and vertical job rotation (0,633).

Through the current study, the results concluded that the interest of senior management in the development of human resources, with a correlation coefficient of 0,826, is in the most influential ranking. This result is consistent with a study (Evelin, 2017), which indicated that the job rotation process was positive about factors that help in resolving conflicts, such as increasing knowledge, skills, and recognition of the activities performed by colleagues, and this agrees with the findings of the current study that job rotation in the hospital It is carried out in a planned manner and not randomly, as it also agrees with the study (Wageeh, 2014) in what it indicated that job rotation is the most important approach for policies to develop human capital and increase the capabilities of employees, and this is partially consistent with the results of the current study of the hospital management's keenness to Paying attention to educating employees about job rotation in terms of its concept and objectives, and that employees have the opportunity to train before job rotation.

As for the second result, which indicates that there is a correlation between horizontal job rotation, as one of the dimensions of job rotation, on the performance of health services, where the correlation coefficient reached 0,677, is consistent with the study (Lee, and Kim, 2012), which emphasized that job rotation needs to be planned based on the individual position, opinion, specialization, and ability in the nurse. Other job tasks, this is also consistent with the study (Allyso, 2014), which indicated that the use of the principles of job rotation for all levels of practice can be transferred to other employee groups, and this is also consistent with the results of the current study, which concluded that job rotation improves communication and cooperation This is also consistent with the study (Chen, 2015), which concluded that job rotation leads to an improvement in the performance of the organization, and helps to raise morale by performing various job tasks, which is consistent with the results of the current study, which concluded that rotation Job rotation helps in increasing the productivity of the employee, and job rotation helps in renewing work and reducing job routine, and creates a work environment that stimulates achievement.

The last result of this study indicated that there is a correlation between vertical job rotation. as one of the dimensions of job rotation, where the correlation coefficient reached 0,633, which is consistent with the study (Marlina, 2017) and a study (Faisal, 2017), which indicated that the application of job rotation leads to an increase in the sense of belonging to the hospital, and

increases the enthusiasm of employees in performing their job duties, and reduces boredom from the job and organizes the efforts of employees towards the goals of the hospital, and this is consistent with the results of The current study concluded that job rotation helps in applying new methods to solve problems at work, contributes to highlighting abilities and skills in the new job, and contributes to the distribution of employees according to work needs. It is also consistent with the study (Falata, 2011), which indicated the importance of codifying the job rotation process and that it be under a well-studied action plan that contributes to reducing its negative aspects, which is consistent with the findings of the current study that there is a clear strategy for job rotation in the hospital, and that the management of The hospital is interested in determining the availability of the necessary capabilities that help the employee in performing other job tasks, and it is also consistent with the study (Al-Shahiwi, 2017), which indicated the need to spread the concept of job rotation, clearly define the goals of job rotation, and inform employees of this, which is consistent with the results of the current study that She indicated that the hospital administration is interested in educating employees about job rotation in terms of its concept and objectives. It also agrees with the study (Mansour, 2018), which showed the need to provide employees with the opportunity through job rotation for its role in improving performance and its impact on career advancement, which is consistent with the results of the study. The current study showed the agreement of the study sample that job rotation contributes to obtaining a promotion to a higher position, and the presence of a high response among employees to accept the job rotation method.

From the foregoing, we conclude that the current study is consistent with many previous studies in terms of results on the impact of applying job rotation concepts on health services performance.

## **5 Conclusion**

The study reached conclusions, the most important of which is the employees' acceptance of the job rotation method and their conviction that it contributes to obtaining a promotion to a higher position. The contribution of horizontal job rotation in the application of new methods to solve work problems, highlighting the capabilities and skills of employees, and creating a stimulating environment for achievement. Vertical job rotation also contributes to the acquisition of leadership skills, increased innovation, and continuous improvement of work, and helps in dealing well, especially with unexpected cases such as the absence of one of the employees to work, or the unexpected increase of hospital auditors.

that the hospital administration ensures that meetings are held for employees nominated for job rotation before starting the job rotation process, during which the employee is given a clear explanation of the goals that the hospital seeks through job rotation, in addition to informing the employee nominated for job rotation about the nature of the job duties for the job that he will be responsible for, as the participation of Employees increase their enthusiasm to perform their job duties more effectively because they feel that they have participated in planning this method of executing the work. The need to develop a comprehensive plan for the implementation of job rotation in a way that leads to the success of the application of job rotation and achieving the goals on which it was used, with the need for all workers to participate in their various specializations in working on the success of using this administrative method. Giving the opportunity to subordinates to express their views on the method of carrying out work, as the actual practice of these employees increases their expertise in determining the best methods for accomplishing work tasks. The need to take into account the capabilities of the employee who will undergo the job rotation process, because this guarantees the success of the rotation and achieves its goals. This is done by giving the employees more opportunity to carry out some tasks by delegating to them some of the powers of their superiors, because of this's impact on increasing their self-confidence.

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## **Authors' Contributions**

All authors contributed to the revision of the manuscript and approved the final version of the manuscript prior to its submission.

## **Data Availability Statement**

The datasets generated during and/or analyzed during the current study are not publicly available due to privacy, confidentiality, and other restrictions, but are available from the corresponding author on reasonable request.

## **Compliance with Ethical Standards**

Institutional Review Board Opinion Letter, H-02-K-076-0620-318.

**Informed consent:** Consent was secured from all the respondents who participated in the study.

**Conflict of interest:** No conflict of interest.

**Ethical approval:** Institutional Review Board Opinion Letter, H-02-K-076-0620-318.

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