

# Impact of Human Resources Information Systems on the Efficiency of Employees Performance at Health Organizations in Jeddah Region

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## **Abstract:**

*This study aimed at identifying the relationship and the impact of human resources information system in terms of outputs (accuracy, quantity, timing, flexibility) on the efficiency of the performance of employees in the health sector in the Jeddah region, as well as explores the level of importance of these variables in the health organizations under study. A questionnaire was developed and distributed to (120) employees, (103) questionnaire of which were returned and analyzed. Validity and reliability of questionnaires were computed. The results of the study refer to significant statistical effect of human resources information system on the efficiency of employee's performance. The study also shows that all correlations were statistically significant between the human resources information system and the efficiency of employee's performance, and the correlations came between them to varying degree. In the light of the findings some recommendations are given.*

**Keywords:** *Information System, Human Resources, Human Resources Information System, Efficiency of Employees Performance.*

## **I. Introduction**

In light of developments in the health organizations and breadth of their services and the complexity of their functions and the need for workers with high efficiency in a variety of disciplines, as well as human resources management has become an essential part of the organizational structure of health organizations, and its activities affect the performance of health organizations, it has become a burden on health organizations to searching for all these competencies and select them for providing the best services with high efficiency. To facilitate the implementation tasks of human resources efficiently and effectively, health organizations must provide the staff with the needed human resources information system.

Human Resources Management is one of the administrative functions, which manages the affairs of personnel in terms of planning human needs, attracting workers, selection, appointment, rehabilitation, training, developing their skills and creating favorable regulatory conditions in terms of quantity and quality to extract the best of their potential and encourage them to make the maximum amount of effort and tender.

Jackson & Schuler (2011) defined Human Resources Management as: a group of systems and controls that deal with attracting, developing, motivating and keeping employees in a way that ensures the organization's work optimally and check the continuity and growth of the organization and its employees.

The importance of human resources management stems from that it is concerned with the individual in the organization, which constitutes the main lifeline of any successful organization, being the main source of production, so this administration has evolved rapidly from a traditional management interested within files and personnel to become a management strategy using human resources information systems to ensure the improvement of the efficiency of workers, and thus, achieve the organization's goals through accurate, appropriate quantity, timely and flexible access in planning and organizing the administrative processes for individuals and for human resources department to perform its different activities and practices.

(Turban, 1999) human resources information systems have become a catalyst for main changes in the structure , operations and organization's management, this is as result of its ability to improve productivity, reduce costs,

improve decision-making and strengthen relationships with customers and develop new applications of strategies to raise organizational performance.

(Ashour, 2010) efficiency workers in the organization lead to the organization's success and longevity, so the organization develops the performance of employees through motivation and training to achieve its goals. (Edogar and Geare, 2005) found that the work associated with workers is a function for a number of human resource management practices, and that the practices of human resource management has the ability to increase the performance for both worker and employer.

Parry and others (2007) the integration of information technology with the Human Resources Management leads to increase the efficiency of human resources management processes, and affects positively the staff interaction through communication, In addition to develop and change business processes and skills required in human resources management.

Tatah (2013) Human Resources Information System correlated positively with the efficiency of the performance of employees, and there are correlations positive significant between each of the (accurate of human resources information, comprehensiveness of human resources information, flexibility of human resources information, timely human resources information) and the efficiency of the performance of employees.

Mudalls (2008) there is a role for human resources information systems in the effectiveness of the Human Resources function which appears in the correction and safety of the decisions related to the management of human resources in the organization.

The study focused on workers in the health organizations in the area of Jeddah, one of the important sectors in terms of the provision of health services to members of the community needs on an ongoing basis, and until this is done there must be a highly trained, specialized and efficient health human resources able to provide these services. To ensure the efficiency workers the organization must use human resources information system which provides information that develops, improves and increases its efficiency, and therefore the provision of health services according to the required standards.

The importance of the study stems from knowing the effectiveness of human resources information systems in health organizations in Jeddah region in order to demonstrate the use of human resources information systems to get the information characterized by accuracy, appropriate quantity, at the right time and flexibility. The importance comes due to the scope and nature of the performance of employees in the human resources management in improving the quality of staff performance, reducing work errors, raising employee's performance rates, reducing the time of implementation processes, giving employees new ways to work, reducing the cost of working in health organizations, execution of completed transactions quickly, not delaying the transaction, overcoming the obstacles of work, keeping abreast of recent developments in working methods, alleviating the daily pressures of work, reducing staff errors, improving decision-making process. It is also the first study to assess the relationship between the human resources information systems and efficiency performance of employees through the additional practices which can be reached by the results of the study and through the provision of the necessary proposals for the improvement and development of human resources information systems used in health organizations, and thus improve and develop the efficiency of employees performance in the health organizations in Jeddah region.

Scope of the study includes a focus on studying managers' opinions and their assistants, heads of departments and their assistants, and the staff in health sector in Jeddah region about the impact of human resource information systems on employees' performance efficiency in their organizations. Based on the above, the present study describes the nature of study's problem through the following questions:

- What is the impact of human resources information system on the efficiency of the employees' performance in the health organizations under study?  
The sub-questions are as follows:
- Is there a significant to the output of human resources information system in the health organizations under study?
- Is there a relationship between the output of human resources information systems and the efficiency of employees' performance in the health organizations under study?
- Is there an impact of the output of human resources information system on the efficiency of employees' performance in the health organizations under study?

- Does the development of human resources information system contribute to increase the efficiency of the employees' performance in the health organizations under study?

## **II. Literature review**

**2.1 Human Resources Management :**With the growth of organizations and increase of competitiveness and volume of work, and the need to regulate the production and control of the mechanisms of action even more, attention is increased to human resources management in more holistic manner, and thus the functions of the management expanded and a human resources management from a strategic perspective comes to ensure the long-term objectives of the organization, and the strategic dimension of planning resource and organization's policies that are compatible with its objectives became the most important management's activities.

The activities of human resources management intersect with all the other departments to ensure the individual's focus on doing the work assigned to him and to increase productivity, and thus this administration offers an important value added for the organization guaranteeing them excel in their work compared to competitors, where the limits of resources or financial investment of organizations working in a particular sector of the economy are convered, and characterized with one another in a manner of human resources management to achieve competitiveness feature, which is one of the most important success factors.

In general; Human resources management activities covering all stages of the individual's existence in any organization as a producer member, its activities starting since the pre-employment stage and ending with the end of individual's relationship with the organization. In general; human resource management activities can be shorten as follows: activities related to the management of individuals in an optimal way, enhancing productivity through the development of individual talent, developing work's policies and systems effectively to adjust the mechanism of action in the organization, motivating staff for innovation, creativity and measuring productivity, enhancing communication with employees and creating a healthy and safe work environment, and managing positive change in the organization .

(Rue & Byars, 2010) provide their classification which divides the human resources management activities into three main activities in a detailed practical way as follows:

- Employment and access to the labor activities: includes manpower planning so as to ensure the achievement of the organization's objectives, business and job descriptions analysis, manpower recruitment, selection of staff and determining their actions, knowing staff to organization's activities.
- Development activities: includes identifying the skills required to improve productivity, design and implementation of training and development programs, continuous measurement of the efficiency and productivity of individuals and the preparation of development plans and career relay.
- Activities related with systems and labor relations: ensures the preparation and implementation of systems, mechanisms and work's controls in line with the organization's objectives, managing activities related to salaries, wages, incentives and benefits, providing solutions to the problems facing employees and hinder the completion of the work assigned to them, implementation of disciplinary procedures and treatment of functional grievances, make sure about the presence of healthy and safe work environment, managing work relationships with staff, government and quasi-government agencies that represents them and sponsor their interests.

(Wright & McMahan, 1992) the strategic human resource management involves the planning operations of human resources activities in a way to ensure that the organization achieves its goals.

**2.2 Human Resources Information System :** Human resources information system is considered as a system that is designed to carry out the function of human resources management in the framework of the organization's operations, seeking primarily to provide information needed by managers to make decisions concerning the effective and efficient use of human resources and increase the level of its performance in order to lead its role in the achievement of organizational goals. Human Resources Information System is one of the main pillars prevailing in the process of decision-making in the various administrative levels, and is a part of an effective management information system .

(O'Brien, 2003) defined Human Resource Information System as: a set of systems that support the activities of human resources management, such as the selection, appointment and evaluation of performance. (Laudon & Laudon, 2001) defined it as a set of systems that perpetuate personnel records, develop their skills, measure their performance, training them, and development of professions and compensation. (Neo et al., 2000) defined it as a set of software and computers used for data entry, maintenance, modernization, and the use of human resources

information in order to provide it for beneficiaries and staff working in various fields, and managers to assist in strategic decisions making and avoid legal disputes and evaluation of policies, practices and support daily operations of the organization. Based on previous definitions, the human resources information system is defined as: organized procedures for collection, storage, save and retrieve the correct and effective data about human resources and individuals' activities and their characteristics in any organization to support the efficiency and effectiveness of human resources management in the completion of activities related to the human resources management at all administrative levels of the organization.

(O'Brien, 1990) said that there is a growing trend for organizations to adopt a human resources information system for use in processing vast amount of data related to human resources, and also to make the right decisions based on what it provides of appropriate information in terms of accuracy, timing, and flexibility. These systems mainly directed to support human resources management through the following:

1. Planning to meet the organization's needs of individuals.
2. Developing Employee's competences and abilities.
3. Monitoring the programs and policies of individuals.

(Maghrabi, 2006) stated that the human resources information system does not differ significantly from other management information systems, it consists of the main dimensions of any system which consists of inputs, operational processes and outputs with a feedback element. The (Sairafi 2009) said that the human resources information system is different from other information systems in diversity broad applications covered serve it.

### **2.3 Inputs of the Human Resources Information System:**

(Stain & Reynold, 2001) stated that the human resources information system needs a set of inputs to be able to produce outputs required from it, the most important of these outputs:

1. Organization's policies and what related to critical needs of human resources.
2. Rules of wages payment or forms of dealing with the process of payment of wages.
3. External sources for the workforce.
4. Internal sources for the workforce.
5. Personal data of human resources in the organization.
6. Precise description of the functions of the organization.

### **2.4 Outputs of Human Resources Information System:**

(Meinert & Davis, 1989) and (O'Brien, 2003) said that the size and type of output vary from one system to another depending on the type and size of the Organization's work, and the most important outcomes are:

3. Human resources plan.
4. Selection and demand of human resources (assistance in the timely identification of the workforce).
5. The training plan and training needs of the organization.
6. The results of the performance evaluation of employees at various levels.
7. Assists in the preparation of safety's professional reports.

Abu Rahma (2005), the human resources information systems play an important role by providing adequate, appropriate, accurate and timely data and information to ensure that the achievement of performance efficiency in the areas of human resources management.

Human resources information system achieves many advantages for organizations including the following:

3. Storage, retrieve and processing of information as soon as possible.

4. Reduce the manual handling of records and paper-based transactions.
5. Speed in completing the storage and analysis processes leading up to the speed and accuracy of the decision-making process.
6. Achieve good relationship and mutual understanding between management and employees by providing different information about the workers activities in the organization, the most important information is about the performance evaluation.
7. Human resources information system reveals many changes in the human resources in the internal and external environment; so management was able to prepare for these changes efficiently.
8. Human resources information systems achieve integration and coordination between the various human resource management activities; also help in the integration of human resources management and other administrations.

**2.5 Benefits of Human Resources Information System:** Houari and Bahi (2009) human resources information system should be employed in achieving the efficiency and effectiveness of performance in the field of human resources planning; human resources information system works to assign the administrative process in the three administrative levels through the following:

1. Helps supporting employment decisions in the organizations and determining the career path for staff in the organization.
2. Supports the planning process of the training needs and programs for staff development.
3. Assists in the preparation of human resources plan, which is to provide information about the labor force and its needs.
4. Helps in scheduling workers and preparing replacement schedules for workers in jobs.
5. Helps in management of wages and salaries and identify its levels.
6. Helps in the management of property and scientific talent available to the organization (managing intellectual capital of the organization efficiently).

Najjar (2008) the organization earns several benefits through the use of human resources information systems represented by reducing the cycle time through instant processing of information, reducing costs, improving the information's accuracy, improving the quality of human resource services and quick access to information, and improving employee's productivity by providing access to information at any time and from anywhere.

**2.6 Factors that limit the effectiveness of Human Resources Information System:** (Foster, 2008) difficulties impeding organizations in the transition to the use of human resources information systems is the lack of trust and the relationship between departmental directors and the officials of Human Resource Management. There are many factors stand about the construction of the computerized human resources information system, it is frequent errors and not modern, it is repeated since the sixties of the twentieth century, and these errors are:

1. Not determine targets of human resources information system accurately.
2. Lack of effective participation of the management of human resources in the construction and design of the information system.
3. Weak link of integration between the sub-systems of the human resources information system.
4. The existence of the complexities of relationships and interlocking system lead to multiple reports.
5. Lack of support and adequate support by senior management.
6. Rely on commissions to design the system and follow-up.
7. The use of complex technology, it is often difficult to human resources management staff to use and operate.
8. Laxity in control before and during the process of construction and design human resources information system.
9. Resistance of workers to enter the human resources information system.
10. Non-study the cost of assisting programs used accurately.

**2.7 The efficiency of the employees' performance:** The concept of performance links with the behavior of the individual and the organization, it occupies a special place in any institution as the final output of the outcome of all the organization's activities. (Campbell, 1990) defines performance, according to the theory of work performance as: the behavior or conduct of the human element that affects the performance of the organization. Work performance in terms of quantity and quality expected from each worker in the organization, and these standards are the basis for performance evaluation. (Khojah, 2004) defines the performance efficiency as:

achieving best value by using the available resources. Schuler and MacMillan, 1984) stated that the effective resource's management enhances the organization's ability to attract workers with high-quality and keep them, so that they can be motivated to increase their performance, leading to increased profitability, reduce job turnover rate, high product quality, lower production costs and more fast in the implementation of the organization's strategy.

### **2.8 Performance Elements:**

(Razzouk, 2009) Stated that the performance generally consists of several elements can be summarized as follows:

1. Knowledge of job requirements: Include professional skill, technical know-how and general background for the job and related fields.
2. The quality of work: This includes precision, order, technical mastery, the ability to organize work and to be free from errors.
3. The amount of work: Includes the volume of work done in normal conditions and fast delivery.
4. Perseverance and trust: The dedication and hard work and the ability to take responsibility and complete the work on time, and the need for supervision and guidance.

**2.9 Performance Importance:** (Hiti, 2003) Stated that the individual's efficiency is measured by what is produced by employee in his work and expected business in the future, his experience and skills increased in making decisions, and the motivation of the individual towards the work associated with the existence of an effective system of material and moral incentives, and the successful performance associated with job security for employees, so, the staff with low performance are always threatening to dispense of their services. (Ruahn, 2013) to develop the performance of staff is a major focal point in human resources management in all organizations. The performance evaluation process and the study of output processes in the organization is working to re-edit or correct inputs of administrative process which increases the efficiency of the production process or service sectors alike. (Ashour, 2010) Stated that the organizations concerned with business performance through training and staff development, and constantly motivate them to achieve their goals.

**2.10 Determinants of Performance:** The human behavior is the exact job performance, and it is the outcome of the interaction between the nature of the individual and the upbringing and the situation that exists in it, and the performance does not appear only as a result of the forces or pressure stem from within the individual himself, but as a result of a process of interaction and compatibility between internal forces of the individual and external forces surrounding it. The ability and desire to work interact together in determining the level of performance, it means that the ability to work at the performance level depends on the degree of the desire of the person at work, and vice versa, the effect of the desire to work at the performance level depends on the ability of the person to do the work.

(Pinder, 2008) and (Farrookh, 2006) stated that the model Porter and Lawler (1968) summarizes the performance determinants in the three main factors:

1. Effort, which reflects enthusiastic degree of individual to perform the work.
2. Individual's capabilities and past experience which specify the degree of effectiveness of the effort.
3. Individual recognizing his career, impressions and perceptions about the behavior and activities that make up his work, and how it should be exercised by his role in the organization.

### **2.11 Impact of Human Resources Information System on the employees' performance efficiency:**

Organization's efficiency linked to its human resources efficiently, and that efficiency must be refined with the information technology and the use of means and methods that support the technology, So as to lead to effective decision-making, creativity, new ways of production, inventions, developmental research for organization. And information is the formation of an integrated management tool, and a tool to develop and diagnose, and a tool to curb the excesses and human error, and a tool to build and restructure the forms of organization, as well as a key engine for its development in a competitive, difficult and complex environment.

(Amoudi, 2007) Human Resources Information System affects Integration in the access to databases through the expansion of available information and increase access to individual databases through electronic gates. (Sabri, 2002) has shown that the human resources information system plays an active role for organizations with the strategic direction that seek to enhance the competitiveness through enhancing the efficiency and effectiveness of the performance, as the distinctive and efficient organizations today must be characterized by possessing information technology to be able to achieve high performance through its products and advanced services, as

well as, improved production processes and marketing, cost reduction and quality improvement in an environment where global competition is growing.

(Kutler, 2000) stated that the performance is the final outcome of any activity, it includes knowing what should be performed, when should be performed, as well as, How to be evaluated? Since when human resources information systems is used in achieving these results, and how the employee performs what is required by him through the use of those technologies and programs will improve work and performance to achieve the organization's and individual's goals of excellence and growth.

(Doya, 2008), the lack of human resources information system led to a lack of precision in the selection of administrative leadership, one of the factors that affect the performance of employees in terms of their lack of interest, lack of work flexibility and speed in tactical decision-making.

(Turban et. al, 2000) stated that the need for human resources information systems and computer use are clearly shown in the performing of work better, the technology has become in the world is not just a substitute for communication and invent the style of the infrastructure made available to the employees, but it aims to achieve high levels of performance, it helps and enables managers to bring about improvements in the super-organized business through the provision of information to take effective decisions that support the achievement of effective organizational performance. (Chartered Institute of Personnel and Development "CIPD", 2006) human information systems affect in improving the quality of information, speed of the information's availability, reduce costs and expenses and improve the quality of services provided to employees.

Afram (2008) there is a positive correlation between the human resources information system and providing high-quality of invest time and cost in charting career paths, job replacement and increase the efficiency of the performance of employees. The lack of human resources information system would lead to higher costs as a result of the adoption of the wrong criteria in hiring. (Alqudhah, 2008) Human Resources Information System contributed to the integration of all the functions, the exploitation of the available resources effectively and efficiently, and reducing the costs of recruitment.

(Shilpa and Gopal, 2011) The interest of the use of human resources information systems is determined in the control of documents and thus increases the transparency and flexibility, and increases the ability of senior management to control the various businesses in the organization. (Lawzi, 2002) stated that the human resources information systems have a role in modernizing and developing the performance of organizations, they lead to the creation of new types of jobs and work areas and a variety of activities in work environments. As they can be seen through the following:

1. Assist in providing an effective work force within the organization.
2. Lead to increased administrative channels of communication between the various departments.
3. Help in achieving effective control of the operational processes and reduce the size of the administrative regulations.
4. Help in saving time to senior management and a full-time to more important business.

(Abu Laila, 2010) there is a strong correlation between the use of human resources information systems and the efficiency of employee's performance, when the organization uses human resources information systems, this leads to increase the efficiency of the performance of employees. (Turban, 1999) stated that the human resources information system gained its importance because of its effective role in improving productivity and motivate employees and managers to make intense intellectual efforts to find new things lead to increase performance and make it more efficient, and use it to support and promote knowledge management's activities for administrative decision-making, and knowledge's discovery and analysis through the use of search engines and databases and find appropriate ways to set goals and put the technology in its suitable place.

Abu Rahma (2005) human resources information systems provide information related to employee at high rates of accuracy systems. Hussain & Others (2006) the human resources information systems provide human resources management, as well as senior management with accurate information in a timely manner to be used in supporting the strategic decision-making.

### **III. Methodology**

Descriptive and analytical approach is used in this study to understand the relationship and the impact of human resources information systems on the efficiency of employees' performance through looking at field and theoretical research and studies. A questionnaire used for the purpose of disclosure of the views of managers and staff on a number of variables and assumptions that are the basis of this study, based on the statistical

methods and the relations and differences in accordance with the fundamental variables of the study, designed primarily to try to answer the research questions.

### **3.1 Population and the Research Sample:**

Research's population represents (4) Four health organizations in Jeddah region, a random sample of managers and employees was taken, number of questionnaires distributed (120), questionnaires retrieved (103) at a rate (86%).

### **3.2 Research Problem:**

The importance of health organizations has been growing in the last two decades, and they have increased in number and size significantly as a result of increased demand for health services, as a result the departments in health organizations have had introduced of information technology to assist them in the implementation of many of the businesses and activities, this technology represented by human resources management systems, where health organizations need information that is characterized by accuracy, proper quantity, timeliness and flexibility to be used in improving the efficiency of the performance of employees and thus the implementation of the functions and activities of the organization .From here the problem of the research highlights the identification of human resources information systems and their impact on the efficiency of employees' performance in health organizations, so the research's problem concentrates on the answer to the following question: What is the impact of human resources information systems on the efficiency of employees' performance in health organizations in Saudi Arabia?

### **3.3 Research Questions:**

- What is the impact of human resources information system on the efficiency of the employees' performance in the health organizations under study?
- Is there a significance to the output of human resources information system in health organizations under study?
- Is there a relationship between the output of human resources information systems and the efficiency of employees' performance in health organizations under study?
- Is there an impact of the output of human resources information system on the efficiency of the employees' performance in health organizations under study?
- Does the development of human resources information system contribute to increase the efficiency of the employees' performance in health organizations under study?

### **3.4 Research Importance:**

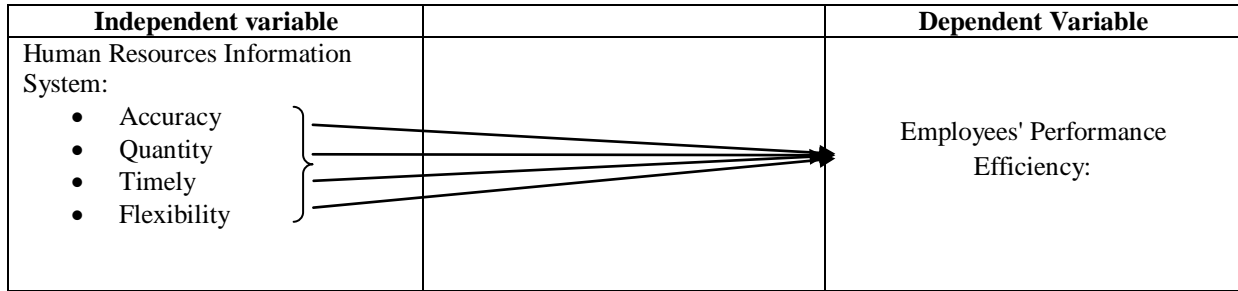
The importance of the research comes through the following:

- Knowing the existence of human resources information system in health organizations in the area of Jeddah and its impact in increasing the efficiency of employees' performance.
- Knowing the importance of human resource information system in improving and developing methods and procedures for human resources management.
- Activating human resources management style, and directing the performance of human forward better levels.
- The importance of human resource information system and its impact on the implementation of administrative functions in health organizations by increasing the employees' efficiency and thus improve the organization's efficiency.
- The importance acquired by this subject because of the development in the field of health services in the Saudi Arabia health sector, and that call attention to human resources as a determinant key to the success or failure of health organizations.
- It is the first study according to the knowledge of the researcher to evaluate the relationship between human resources information system and the employees' efficiency of performance in Jeddah region.

### **3.5 Research model and hypotheses**

In the light of problem and objectives of the study, the researcher presents the following model, which reflects the independent variable Human Resources Information System. It also reflects the dependent variable Employees' Performance Efficiency.





**3.5.1 Scale of the study model:**

Model's scale consists of (6) six paragraphs to indicate the general characteristics of respondents, and (8) paragraphs to indicate the human resources information systems, (13) paragraphs to indicate the employees' performance efficiency.

- What is the relationship between the output of human resources information systems and the employees' performance efficiency in the health organizations under study?
- What is the impact of human resources information system on the employees' performance efficiency in the health organizations under study?

**3.5.2 Study's Hypotheses:**

**First Hypothesis:**

**Ho1:** There is no relationship between human resources information system and the employees' performance efficiency in the health organizations under study.

**Second Hypothesis:**

**Ho2:** There is no impact of human resources information system on the employees' performance efficiency in the health organizations under study.

**3.6 Methods of Data Collection:**

The secondary data is obtained by reviewing the researches, articles, books, and literatures related to the study. The primary data, where the study conducted on to clarify the phenomenon throughout the collection of data as follows: structured interviews with some of the directors, assistant directors, employees to complete and clarify the study's variables addressed by the study, and questionnaire was designed and contained general information about the respondents, it also includes an independent variable human resources information system, and the dependent variable is the employees' performance efficiency in the health organizations surveyed.

Likert Scale was used, and the weights assigned for approval are: (5) Strong Agree (4) Agree (3) Neutral (2) Disagree (1) Strong Disagree. The study relied on specific criteria in the interpretation of the degree of approval depending on the values of arithmetic means. The researcher has tested the stability of the measurement tool: internal consistency coefficient though the use of (Cronbach's alpha), (SPSS Version 20.0) was used to extract the internal consistency coefficient of the different paragraphs of the measurement tool to find the total stability coefficient for the questionnaire, which is (92.5%) this percentage considered a strong indicator of the stability of the measurement tool, table (1).

**3.7 Statistical Methods Used:**

SPSS version 20.0 was used for the analysis of data collected through the questionnaire devoted to this study, descriptive statistical methods were used (percentages, arithmetic mean and standard deviation). The criteria have been identified to explain the degree of approval, depending on the values of the arithmetic means are: (0 - < 1.5: very weak, 1.5 - < 2.5: weak, 2.5 - < 3.5: Average, 3.5 - < 4.5: High, 4.5 - ≤ 5: very high).

The inference statistical techniques were used like nonparametric tests/ Spearman's correlation coefficient to measure the strength and direction of relations between the independent and the dependent variables. The three criteria adopted for the classification of the relation's strength are: (0- < 0.3: Weak, 0.3- < 0.7: Average, 0.7- ≤ 1.0: Strong).

A stepwise regression analysis was used to measure the level of the impact of independent variable on the dependent variable. Multiple regression analysis was used in order to reach the value of statistical test and the degree of confidence, as well as access to the coefficient of determination to demonstrate the impact of independent variables on the dependent variables.

#### **IV. Results**

##### **4.1 DEMOGRAPHIC:**

In view of the results set forth in the above table (2), it is noted that the sample included directors and heads of departments; where numbered (41) represents (40%) of the respondents, the sample included the staff; where numbered (62) employees represents (60%) of the respondents. In terms of gender; number of male respondents (61) represents (59%), while the number of female respondents (42) represents (41%). In terms of age respondents number less than (40) years was (59) represents (57%), and the number of respondents with ages more than (40) was (33) represents (44%). According to the educational level the number of respondents who hold doctoral and master reached (18) represents (17%), holds a bachelor's degree (49) represents (48%), while the number of respondents who hold a diploma or below it (36) represents (34%). In terms of total experience, the number of respondents who have experience more than (10) years was (57) represents (55%), while the rest of the respondents was number (46) represents (45%).

The above results show that the sample was representative of the target groups that the study focus, and that both genders are represented satisfactorily, either with regard to the reconstruction of respondents sample with ages less than the (40) years and the experience of more than (10) years, this means that the majority of respondents were young people with long experience and intellectual maturity and different experiences, making them able to accommodate environmental variables, understand it and handle it good. With regard to the scientific level the number of respondents who hold bachelor's degree and above (67) represents (65%), this means that the respondents have competencies, higher-level skills and educational levels, which were reflected positively on all the functions and activities in the health organization.

Table (3) shows answers of respondents on paragraphs of availability of Human Resources Information System that represents an importance (Strongly Agree and Agree) was (34%), and the neutral answers (12%), and the answers (Disagree and Strongly Disagree) by (54%). Based on these rates, the researcher concluded that Human Resources Information System are found in the organizations surveyed, but they are used proportionately from all organizations surveyed, where it is used in the organizations surveyed that recognize the importance of the application of methods and tools of management control to improve the employees' performance efficiency.

As shown in the table (4) above, the relative importance of the availability of human resources information systems outputs according to the respondents, the order of the relative importance of the paragraphs that reflect the availability of human resources information systems in the surveyed organizations are as follows: Accuracy, Flexibility, Timely and finally Quantity. It was explained that the arithmetic means of availability human resources information systems outputs paragraphs ranged from (2.1 to 2.5), reflect Average degree of approval. The standard deviation of the different paragraphs demonstrates the severity of answers and their agreement that the human resources information systems outputs are available in their health organization, it ranged between (1.3 to 1.6), which means that the most of answers were not centered around the middle and dispersion.

Researcher finds through the answers of respondents as contained in the table (4) that all the outputs of human resources information systems are available, but some of them are not practiced, because of the variation in the answers of respondents about the availability of human resources information systems in organizations surveyed.

Researcher concludes that despite of the availability of human resources information systems outputs, there are numbers of respondents who do not know the availability of human resources information systems mentioned in the output table (4). This affects the use of human resources information systems outputs in the health organizations surveyed, because the human resources information systems outputs must be characterized by availability and understandability to all employees in the health organizations, to feel that it is means to help them improve their performance in work, and thus reflected on improving the employees' efficient performance in health organizations.

#### **4.2 EMPLOYEE PERFORMANCE EFFICIENCY:**

The table (5) shows respondents' answers on the paragraphs of the relationship of human resources information systems with the employees' performance efficiency, the answers of importance (OK strongly OK) were increased (44.8%), and the answers neutral rate (3.8%), and the answers (not OK and not OK strongly) by (51.4%). Based on these rates, the researcher concludes that the respondents in the surveyed organizations did not feel the impact of human resources information systems on employees' performance efficiency, due to non-application of human resources information systems widely by some of the organizations surveyed.

As shown in table (6) above, it was explained that the arithmetic means of human resources information systems to raise the level of employees' performance efficiency of health workers, paragraphs ranged from (2.0 to 3.0), it reflects average degree of approval, the standard deviation of the different paragraphs demonstrates the severity of answers and their agreement that human resources information systems raise the level of employees' performance efficiency of health workers, it ranged between (1.4 - 1.8), which means that the most of answers were not centered around the middle and dispersion.

Researcher finds through the answers of respondents as contained in the table (6) that the human resources information systems in the health organizations surveyed improve the level of employees' performance efficiency of health organizations, the overall average rate for answers to paragraphs (2.7) which shows average importance of the paragraphs' content, and the total average value of standard deviation (1.6) demonstrates the lack of concentration and dispersion of answers.

#### **4.3 TEST HYPOTHESIS:**

- **First hypothesis Ho1:** There is no correlation between Human Resources Information System and the employees' performance efficiency in the health organizations under the study at the level of significance ( $\alpha = 0.01$ ).

Table (7) shows the existence of a strong positive correlation of (0.70 to 0.87) respectively are statistically significant at the level of importance ( $\alpha \leq 0.01$ ) between the human resources information system and the employees' performance efficiency paragraphs.

The calculated value of (t) ranged from (15.3 to 18.2) at the level of significance ( $\alpha \leq 0.01$ ) and degrees of freedom (7 and 102) are greater than the tabulated value of (t) (1.67). Null hypothesis is rejected and the alternative hypothesis is accepted.

- **Second hypothesis Ho2:** There is no statistically significant impact at the level of significance ( $\alpha \leq 0.01$ ) for the management control on the job performance efficiency in the health organizations under the study.

Table (8) shows the results of regression analysis test in order to demonstrate the impact of human resources information systems on the employees' performance efficiency in the health organizations surveyed.

The human resources information systems have been interpreted (49%-72%) of the variance in the employees' performance efficiency paragraphs, the calculated value of (F) ranged from (20.4 to 37.2) at the level of importance ( $\alpha \leq 0.01$ ) and greater than tabulated value of (F) (4.5) which is statistically significant, and this means that there is an impact of human resources information systems on employees' performance efficiency. Null hypothesis is rejected and the alternative hypothesis is accepted.

## **V. Discussion of results**

Study's results include:

1. Human resources information systems are available, but they are used in various degrees in the health organizations surveyed.
2. All the outputs of human resources information systems are available, but some of them are not practiced in the health organizations surveyed.
3. Human resources information systems are characterized by the production of accurate information, proper quantity, timeliness and flexibility in various degrees.
4. There are some of the respondents who do not know the availability of human resources information systems outputs.

5. Respondents did not feel the impact of human resources information systems on the employees' performance efficiency in health organizations surveyed.
6. Human resources information systems in the health organizations surveyed improve the employees' performance efficiency of their staff.
7. There is a strong positive relationship between human resources information systems and employees' performance efficiency.
8. Human resources information systems have a positive impact on the employees' performance efficiency with various degrees.

#### **Recommendations:**

1. Make human resources information systems available in all health organizations to achieve maximum benefit from it.
2. Effective application of all the functions of human resources information systems extensively to get information used by health organizations in the implementation of the functions of health organizations in the development and improvement operations.
3. Increase awareness of employees to the importance of human resources information systems in improving the employees' performance efficiency.
4. Training employees of health organizations to deal with human resources information systems so that they feel they are ways to help them improve their performance, and thus reflected on improving the employees' performance efficiency in health organizations.
5. Using human resources information systems to create a comprehensive data and information base and making them available for employees, and thus reflect positively on the employees' performance to increase their efficiency.
6. Continuous development and improvement of human resources information systems through the technological developments.

#### **VI. Conclusion:**

The impact and the relationship between human resources information systems on the employees' performance efficiency in health organizations are the theoretical foundations of this study. Study's model used helped to clarify the impact of human resources information systems on each employees' performance efficiency indicators in health organizations. The experimental validation of the model applied on a sample of (103) directors and employees showed that there is a positive impact and a strong positive relationship between resources information systems on employees' performance efficiency in health organizations.

The results of the study confirmed the results of previous studies that have confirmed the positively affect of human resources information systems on the employees' performance efficiency. Previous studies have examined the impact of human resources information systems on the employees' performance efficiency indicators separately. This study showed the importance of human resources information systems and their impact on the employees' performance efficiency indicators combined, and explored the relative impact on the employees' performance efficiency of health organizations indicators.

The results showed that health organizations have human resources information systems and these systems provide them with accurate, suitable quantity, timely and flexible information. This corresponds with the results of the previous studies of (Tatah (2013), (O'Brien, 1990), (Shilpa and Gopal, 2011), (Abu Rahma, 2005) and (Hussain & Others, 2006).

The results showed that health organizations with human resources information systems are able to improve the quality of staff performance, reduce work errors, raise employee performance rates, reduce the time of implementation processes, give the staff new ways of working, reduce the cost of labor in the health organization, rapid implementation of completed transactions, non-delay of the transaction, contributis in overcoming obstacles at work, keeping pace with modern developments of working methods, alleviating the daily pressures of work, leading to reduce staff errors and helping to improve decision-making process. This corresponds with the results of the previous studies of (Sabri, 2002), (Doya, 2008), (Doya, 2008), (Turban et. al, 2000), (CIPD, 2006), (Afram, 2008), (Alqudah, 2008), (Lawzi, 2002), (Abu Laila, 2010) and (Turban, 1999). Although the results presented by this research, further studies can be conduct to illustrate the impact of the demographic characteristics of staff on human resources information systems and employees' performance efficiency in health organizations.

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