

# Organizational Development by Using Electronic Medical Record at Mansoura Health Insurance Hospital

<sup>1</sup>Dina Awad Mohamed, <sup>2</sup>Wessam Ahmed Elsayed, <sup>3</sup>Gehan Mohamed Ahmed

<sup>1,2</sup>Nursing Administration- Faculty of Nursing- Mansoura University- Egypt

<sup>3</sup>Nursing Administrations- Faculty of Nursing- Helwan University

---

**Abstract:** Electronic medical record system has a large impact on the day-to-day work. It will save a lot of effort and time and thus affect the quality of service offered positively which lead to organizational development. **.Aim:** The present study aimed to determine perception of nursing staff about electronic medical record, Assess organizational development categories, and explore the relation between using electronic medical record and organizational development. The present study aims to determine perception of nursing staff about electronic medical record, Assess organizational development categories, and to explore the relation between using electronic medical record and organizational development. **Methods:** Cross sectional descriptive study was used and conducted on 170 of staff nurses working at Mansoura Health Insurance Hospital, using two Tools: Nurse's perception of electronic medical record questionnaire and organizational diagnosis questionnaire **.Results:** The findings of the study showed that nurses will be satisfied when using electronic medical record and this will lead to organizational development. **Conclusion:** The study concluded that there is statistical significant correlation between nurses perception toward using electronic medical record and total assessment score of organizational categories at Mansoura Health Insurance Hospital.

**Keywords:** Electronic medical record, organizational development, Mansoura Health Insurance Hospital.

---

## 1. INTRODUCTION

Over future 20 years, a lot of data and functionalities were intercalary to the electronic medical history system so as to enhance patient care. Drug dosages, facet effects, allergies, and drug interactions became accessible electronically to doctors, facultative that data to be incorporate into electronic medical-care systems. Electronic diagnostic and treatment plans, that gave doctors data for patient care, increased and were joined into electronic medical systems. A lot of tutorial and analysis organizations developed their own processed medical history systems as tools to trace patient treatment. Overall, the applying and growth of those laptop models increase the standard of patient care that results in organization development (Mayo, 2011).

Electronic medical record (EMR) is that the documentation of patient health history. It contains notes of doctor has written, check results, medications, phone messages and different vital and private info regarding patient case history. Within the past, these records were unbroken in an exceedingly paper file that was then hold on at your doctor's workplace. It had been the most important communication and documentation tool to record the care you received (Monika, 2012). Most medical records area unit still paper-based, which implies it's troublesome to be wont to properly and steady organized care, frequently live quality, or cut back medical errors thanks to challenges with storage and difficulties to simply access or retrieve info once it's required (Janusz & Grzegorz, 2008).

EMR could be a longitudinal electronic record of patient health data generated by one or additional encounters in any supplying setting. En-closed during these data square measures patient demographics, progress notes, problems, medications, important signs, current and past medical data, immunizations, laboratory information and radiology reports (Greenhaleg, Potts, Wong & Brk 2009).

EMR technology provides several advantages to patients, that successively improves overall patient care. The foremost vital advantages square measure safer, safer medical records. These records conjointly grant an additional through patient history, permitting health-care professionals to pay less time managing records and longer providing patient care. Quality patient care becomes additional attainable as medical workers has immediate access to records that embrace essential data regarding previous treatments, conditions, prescriptions, and input from alternative health-care professionals. Also, it includes the arrival of electronic or e-prescriptions, substitution typically undecipherable written prescriptions, leading to larger accuracy and reducing the chance of patients receiving the wrong medication (Leonie & Kohl, 2013).

EMR systems modify hospitals to store and retrieve elaborate patient data to be employed by health care suppliers, and typically patients, throughout a patient's hospitalization, over time, and across care settings. Fastened clinical call support and different tools have the potential to assist clinicians give safer, more practical care than is feasible by counting on memory and paper-based systems. Additionally, electronic medical records will facilitate hospitals monitor, improve, and report information on health care quality and safety (Desroches, Campbell, & Rao, 2008).

Organizational development is associated in progress, systematic method of applying effective structure amendment. Organizational development is that the use of structure resources to boost potency and increase productivity. It may be accustomed solve issues inside the organization or as method to investigate a method and notice a lot of well-organized way of doing it (Sullivan, 2010).

Organizational development is an attempt planned, organization wide, and managed from the highest, to extend organization effectiveness and health through planned interventions within the organization's processes, exploitation Behavioral-science data .It supported a collection of values, mostly humanistic; application of the activity sciences; and open systems theory, organization development may be a system wide method of planned modification aimed to boost overall organization effectiveness by manner of increased equivalence of such key structure dimensions as external setting, mission, strategy, leadership, culture, structure, info and reward systems, and work policies and procedures (Burke, 2008).

The objective of organizational development is to boost the organization's capability to handle its internal and external functioning and relationships. This includes improved social and cluster processes, more practical communication, and improved ability to manage with structure issues of all types. It additionally involves more practical call processes, additional applicable leadership, improved ability in handling negative conflict, furthermore as developing improved levels of trust and cooperation among structure members (Sullivan, 2010).

Organizational development is laid low with structure culture that begins from its nature and its content. Structure culture is outlined as a system of assumptions, values, norms, and attitudes, established through symbols that the members of a corporation have developed and adopted through mutual expertise and that facilitate them confirm that means of the planet around them and the way to behave in it (Janićijević, 2011).

Organizational development needs creating structure identification which needs shaping and employing a style for understanding structure issues, knowledge assortment and analysis and drawing assumptions supported the findings with the aim of creating necessary changes and doable changes. This structure identification may be a cluster method which means it needs the presence of common and similar approaches and functions. There are unit six classes won't to perform an organizational diagnosis: functions, structure, relationships, rewards, leadership and useful mechanisms (Cummings, 2005).

#### **Aim of the study:**

The present study aims to determine perception of nursing staff about electronic medical record, Assess organizational development categories, and explore the relation between using electronic medical record and organizational development.

## 2. SUBJECTS AND METHODS

### Design of study:

Cross sectional descriptive design was used.

### Setting:

This study was carried out at Mansoura Health Insurance Hospital. This hospital provides care for all patient categories. Total hospital bed capacity (360) beds. It consists of seven floors, the first floor is for emergency Dept. and dialysis Dept. (21) beds, the second floor is for surgical operations and surgical intensive care units(8 beds), the third floor is for coronary care unit (9) beds, urology Dept.(24) beds and obstetric Dept.(29) beds, the fourth floor is for surgical Dept.(54) beds, the fifth floor is for pediatric Dept.(29) beds, the sixth floor is for orthopedic Dept.(32) beds, and the seventh floor is for medical departments (54) beds.

### Subjects of the study:

The subject of this study will include all available staff nurses at the time of study. Who have either diploma; technical or baccalaureate degree with at least one year of experience.

### Tools of data collection:

The data of the study were collected by using two tools:

#### Tool I: Nurse perception of electronic medical record and patient care questionnaire.

This tool developed by (Parente & McCullough, 2009) and modified by researcher. It aimed to identify the role of electronic health record in improving patient care .it consist of 2 parts personal characteristics, electronic medical record.

##### 1-Personal characteristic

It contains 4 elements. It focuses on personal characteristic: experience, education, position, and setting.

##### 2-Electronic medical record;

It contains 31items which divided into 6 major elements. It focus on computer skills (2elements), experience (5elements), availability of computer in hospital (2elements), satisfaction with electronic medical record (5 major elements: content, accuracy, format, ease to use timelines), benefits of electronic medical record (5elements), and comparison between use of paper based record and electronic medical record (5elements).

### Scoring system:

- Unsatisfied =  $\leq 60\%$
- Partially satisfied = 60-70%
- Satisfied =  $> 70$

#### II-Tool: Organization diagnosis questionnaire:

This tool developed by (Robert, 2011). It aims to assess organizational development categories. It includes 35items which divided into (7) major categories: purposes (5items), structure (5items), leadership (5items), Relationship (5items), rewards (5items), helpful mechanisms (5items), and attitude toward change (5items).

### Validity:

It was established for face and content validity by a panel of five experts in nursing administration field from Faculty of Nursing at Mansoura University who revised the tools for clarity, relevancy, applicability, comprehensiveness, understanding, and ease for implementation and according to their opinions minor modifications were applied. The opinions of the experts for each item were recorded on a two point scale: relevant, not relevant.

Some expertise made modification in translation of tool of data collection, modification in arrangement of tool elements and the final form of the tool.

**Reliability:**

| Reliability Statistics |            |
|------------------------|------------|
| Cronbach's Alpha       | N of Items |
| .891                   | 67         |

**Pilot study:**

A pilot study was carried out on 10% of total study sample that were excluded from the main sample (17) staff nurses to test the clarity, feasibility of the questions and whether they were understandable, and to determine the time needed to fill-in questions, which assess nurses perception toward using electronic medical record and organizational development. The tools were handed to participants to fill them in and collected by the researcher.

**Statistical Design:-**

Data entry and statistical analysis were done using Statistical Package for Social Science (SPSS), version 16.0. Data were presented using descriptive statistics in the form of means and standard deviations. Pearson Correlation (r) test and p-value was used to test the closeness of association between two variables. Statistical significance was considered at p-value <0.05 while, p-value of <0.001 indicates a high significant result.

**3. RESULTS**

**Table: (1): Personal characteristics of studied sample (n=170)**

| Items                       | Studied sample (n=170 ) |       |
|-----------------------------|-------------------------|-------|
|                             | No                      | %     |
| <b>Qualification</b>        |                         |       |
| Diploma                     | 97                      | 57.1% |
| Technical diploma           | 45                      | 26.5% |
| Baccalaureate               | 28                      | 16.5% |
| <b>Years of experiences</b> |                         |       |
| 1-<5y                       | 47                      | 27.6% |
| 5-<10y                      | 41                      | 24.1% |
| ≥10y                        | 82                      | 48.2% |
| <b>Position</b>             |                         |       |
| Staff nurse                 | 148                     | 87.1% |
| Head nurse                  | 15                      | 8.8%  |
| Supervisor                  | 2                       | 1.2%  |
| Other                       | 5                       | 2.9%  |
| <b>Setting</b>              |                         |       |
| Medical department          | 44                      | 25.9% |
| Surgical departments        | 42                      | 24.7% |
| Others                      | 84                      | 49.4% |

Table (1) shows the demographic characteristics of studied sample according to this table, the most percent of studied sample were diploma degree (57.1%) while the least were baccalaureate degree (16.5%) also, most studied sample were staff nurses (87.1%) and had more than ten years of experience (48.2%) in addition, they working in other department neither medical nor surgical department (49.4%).

**Table: (2): Perception of studied sample about electronic medical record (n=170)**

| Items   | Studied sample (n=170 ) |      |
|---|-------------------------|------|
|   | No                      | %    |
| <b>1.Computer skills</b>                                  |                         |      |
| A- How would you rate your computer skills and knowledge? |                         |      |
| Poor  | 66                      | 38.8 |
| Fair  | 56                      | 32.9 |

International Journal of Novel Research in Healthcare and Nursing

Vol. 5, Issue 2, pp: (193-204), Month: May - August 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

|  |     |      |
|--|-----|------|
| Good   | 45  | 26.5 |
| Excellent  | 3   | 1.8  |
| <b>B</b> -how many fingers do you use when typing? |     |      |
| Two  | 104 | 61.2 |
| Three or more                                      | 31  | 18.2 |
| All or touch                                       | 35  | 20.6 |

This table shows the perception of studied sample about electronic medical record, according to this table, most studied sample had poor knowledge about computer skills (38.8%), while the least had excellent knowledge about computer skills (1.8%). Also most of them use two fingers when typing (61.2%).

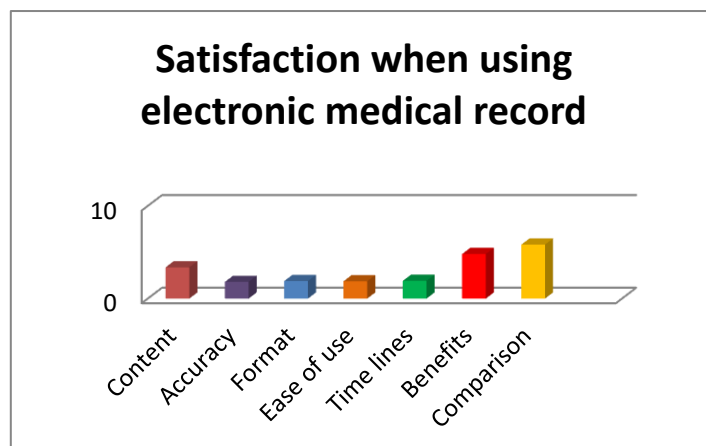


Figure (1): Total score of satisfaction of studied sample when using electronic medical record:-

Figure (1) shows total score of satisfaction of studied sample when using electronic medical record. According to this table, most percent of studied sample were satisfied with comparison between electronic medical record and paper record (mean, SD: 5.82±0.72), while the least were satisfied with accuracy of electronic medical record (mean, SD: 1.80 ±0.52).

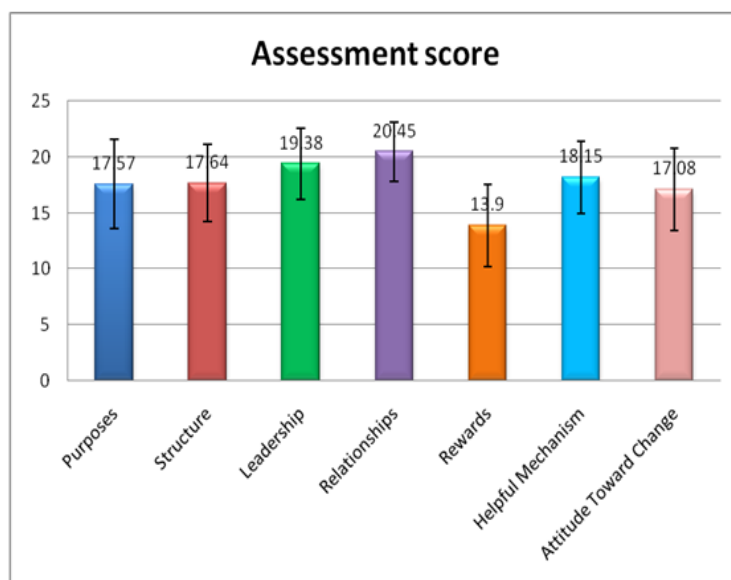


Figure (2): Total assessment score of organizational categories:-

Figure (2) shows assessment score of organizational categories. According to this table, most percent of studied sample show high score in relationships between staff nurses (mean, SD: 20.45±2.61), while the least were in rewards (mean, SD: 13.90±3.66).

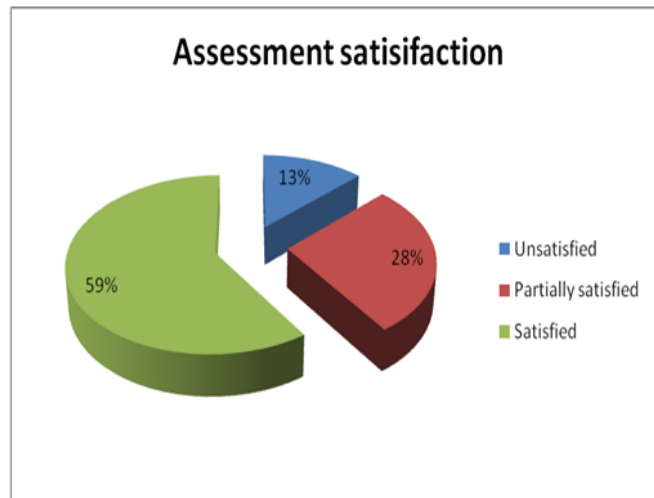


Figure (3): Assessment satisfaction of studied sample when using electronic medical record:-

This figure shows assessment satisfaction of studied sample when using electronic medical record. According to this table, most nurses were satisfied when using electronic medical record (59.4%), while the least were unsatisfied (12.9%)

Table: (3): Correlation between satisfaction when using electronic medical record and total Assessment score of organizational development:-

| Item             | satisfaction when using electronic medical record score |       |
|------------------|---|-------|
|                  | R   | P     |
| Assessment score | 0.357   | ≤.001 |

Table (3) shows correlation between satisfaction when using electronic medical record and total Assessment score of organizational development .According to this table, there was a positive statistically significant correlation between satisfaction when using electronic medical record and total Assessment score of organizational development (p=≤.001) .

Table (4): correlation matrix of nurse’s score about assessment of organizational categories (n=170):-

| Items                  | Correlation coefficient | Purposes | Structure | Leadership | Relationship | Rewards | Helpful Mechanism | Attitude Toward Change |
|------------------------|-------------------------|----------|-----------|------------|--------------|---------|-------------------|------------------------|
|                        |                         | r        | p         | r          | p            | r       | p                 | r                      |
| Purposes               | r                       | 1        | .521**    | .217**     | .140         | .264**  | .194*             | .329**                 |
|                        | p                       |          | .000      | .005       | .068         | .001    | .011              | .000                   |
| Structure              | r                       | .521**   | 1         | .411**     | .327**       | .319**  | .512**            | .493**                 |
|                        | p                       | .000     |           | .000       | .000         | .000    | .000              | .000                   |
| Leadership             | r                       | .217**   | .411**    | 1          | .410**       | .505**  | .551**            | .387**                 |
|                        | p                       | .005     | .000      |            | .000         | .000    | .000              | .000                   |
| Relationships          | r                       | .140     | .327**    | .410**     | 1            | .256**  | .396**            | .250**                 |
|                        | p                       | .068     | .000      | .000       |              | .001    | .000              | .001                   |
| Rewards                | r                       | .264**   | .319**    | .505**     | .256**       | 1       | .537**            | .380**                 |
|                        | p                       | .001     | .000      | .000       | .001         |         | .000              | .000                   |
| Helpful Mechanism      | r                       | .194*    | .512**    | .551**     | .396**       | .537**  | 1                 | .536**                 |
|                        | p                       | .011     | .000      | .000       | .000         | .000    |                   | .000                   |
| Attitude Toward Change | r                       | .329**   | .493**    | .387**     | .250**       | .380**  | .536**            | 1                      |
|                        | p                       | .000     | .000      | .000       | .001         | .000    | .000              |                        |

Table (4) shows correlation matrix of nurse’s score about assessment of organizational categories. According to this table, there were statistical significant between goals of organization and leadership, reward, and helpful mechanism (p=.005, .001, .011).Also there were statistical significant between leadership and purposes of the organization, relationships inside the organization, rewards, helpful mechanism and attitude toward change at (p=.005, .000) .In addition, there were statistical significant between relationships and reward and attitude toward change (p=.068, .001).

**Table (5): correlation matrix of nurses score about perception of electronic medical record (n=170)**

| Items              | Correlation coefficient | Content | Accuracy | Format | Ease of use | Time lines | benefit | Comparison |
|--------------------|-------------------------|---------|----------|--------|-------------|------------|---------|------------|
| <b>Content</b>     | <b>r</b>                | 1       | .512**   | .433** | .113        | .373**     | .149    | .150       |
|                    | <b>p</b>                |         | .000     | .000   | .142        | .000       | .052    | .050       |
| <b>Accuracy</b>    | <b>r</b>                | .512**  | 1        | .390** | .283**      | .479**     | .211**  | .300**     |
|                    | <b>p</b>                | .000    |          | .000   | .000        | .000       | .006    | .000       |
| <b>Format</b>      | <b>r</b>                | .433**  | .390**   | 1      | .163*       | .312**     | .213**  | .267**     |
|                    | <b>p</b>                | .000    | .000     |        | .033        | .000       | .005    | .000       |
| <b>Ease of use</b> | <b>r</b>                | .113    | .283**   | .163*  | 1           | .392**     | .366**  | .329**     |
|                    | <b>p</b>                | .142    | .000     | .033   |             | .000       | .000    | .000       |
| <b>Time lines</b>  | <b>r</b>                | .373**  | .479**   | .312** | .392**      | 1          | .346**  | .327**     |
|                    | <b>p</b>                | .000    | .000     | .000   | .000        |            | .000    | .000       |
| <b>Benefit</b>     | <b>r</b>                | .149    | .211**   | .213** | .366**      | .346**     | 1       | .597**     |
|                    | <b>p</b>                | .052    | .006     | .005   | .000        | .000       |         | .000       |
| <b>Comparison</b>  | <b>r</b>                | .150    | .300**   | .267** | .329**      | .327**     | .597**  | 1          |
|                    | <b>p</b>                | .050    | .000     | .000   | .000        | .000       | .000    |            |

\*\* . Correlation is significant at (p= 0.01) &\* . Correlation is significant (r=0.05)

Table (5) shows correlation matrix of nurse’s score about perception of electronic medical record. According to this table, there were statistical correlations between content of electronic medical record and ease of use and benefits of electronic medical record (p=.142, .052).Also there was statistical correlation between accuracy of electronic medical record and its benefits (p= .006).In addition ,there were statistical correlation between format and ease of use and benefits(p=.033, .005).Also there was no statistical correlation between comparison (between electronic medical record and paper record) and content of electronic medical record (p=.050).

#### 4. DISCUSSION

Electronic medical record (EMR) can improve data integrity in which it makes the information more readable, organized ,and more accurate .EMR can increase the productivity through it make the caregivers have the ability to make timely decision based on appropriate data. EMR can improve quality of care in which it supports clinical decision making process for physicians and nurses. Additional benefits for EMR, it increases satisfaction for caregiver through informal accessing of client data and other services which increase organizational effectiveness and development (**Kierkegaard, 2011**).

The aim of the present study is to assess nurse’s perception toward using electronic medical record, organizational development and explore the relation between using electronic medical record and organizational development at Mansoura Health Insurance Hospital.

The aim of the current study is to assess nurse’s perception toward using electronic medical record, organizational development and explore the relation between using electronic medical record and organizational development at Mansoura Health Insurance Hospital.

**The result of the present study will be discussed under two main categories:-**

1-Result related to electronic medical record.

2-Result related to organizational development.

**1-Result related to electronic medical record.**

The present study revealed that (59.4%) of the studied sample were satisfied when using electronic medical record which reflects increase nurses perception of electronic medical record. This may be due to belief of nurses that using electronic medical record will provide sufficient information, the system will be more accurate, the system is more useful format, easy to use ,provide updated information ,will improve nursing documentation ,and the system is preference to most of nurses. This will help in improving patient care and developing the organization.

This result is congruent with the study conducted in London by **Butin, Burke, Hoaglin & Blumenthal, (2011)** who reported that implementation and use of the EMR system lead to improve strategy as a means of identifying the stakeholders, security of data and the priorities area of investigation. Moreover, **Lundberg, Balfors, & folkeson, (2009)** who reported that about of 70% of nurses believed that EMRs had enhanced the quality of documentation. They thought that electronic recording would lead to improve security and patient care.

Other studies focused on nurses' perceptions of computer use. **Desroches, Campbell & Rao, (2008)** found that nurses perceived an inability to capture the spirit of nursing with computerized documentation. In contrast **Lee, (2006)** found that nurses' knowledge, experience, and judgment were enhanced through computer technology **Lee, Mills, Bausell & Lu, (2008)**. Studied nurses' perceptions of a nursing information system one year post implementation and found dissatisfaction with hardware, software, and interpersonal relationships.

According to the present study, (88.8%) of nurses didn't had prior experiences about electronic medical record and didn't used computers as information system and for nursing practices .This result is accorded with **Lee, Mills, Bausell & Lu, (2008)** who found that experience of nurses about electronic medical record increase group collaboration to obtain in-depth information .

**Morton, (2008)** revealed that preceding experience with EMR aid recognition when using it. There are particular features, including computer knowledge, task suitable and easing circumstances, influence on acceptance. However task-fit and simplifying circumstances are certainly affect the growth of computer literacy has undesirable influence on individual's continuance activities.

According to the present study, just (28.2%) of studied sample had computers in their office and only (7.6%) used it. This may delay acceptance to electronic medical record. This congruent with **Van nistelrooij & Sminia, (2010), Morton, (2008) & Studier, (2005)** who discovered that Poor computer system availability and value were a key cause of hindrance and an obstacle to accomplishment in numerous studies .If technology infrastructure is insufficient, usage of the EMR is less than optimum. **Studier, (2005)** established that, even if charting quality improves, and documentation time on the EMR does not increase, nurses will still be unsatisfied if the whole system is slow and ungainly to use.

The present study revealed that (81.2%) of nurses will be satisfied with content and accuracy of electronic medical record when used .This result is agreed with **Lee, (2006)** who explored that how content design affects nurses' perception of the documentation experience that will lead to increase nurses satisfaction with EMR .Also the present study revealed that (95.3%) of nurses will be satisfied about easy of using and time lines of electronic medical record when used. This result is parallel to the study conducted by **Morton, (2008)**. They reported that (96%) of nurses were satisfied with easy of using electronic medical record.

The present study revealed that (98.2%) of nurses had perception about benefits of electronic medical record. This result agrees with **Lee, Yong-Fang Kuo, & Goodwin, (2013)** in which most of studied sample was satisfied with benefits of electronic medical record. On the other hand, this result is disagreed with the study conducted by **Van nistelrooij & Sminia, (2010)** Who reported that about more than 50% of nurses reported interruptions while documenting patient care in which they duplicate the charting .Also **Lee, Mills, Bausell, & Lu, (2008)** found that nurses felt patient relationships were effected as patients believed nurses were just sitting around on the computer so they prefer using handwriting documentation than electronic medical record.



**Van nistelrooij & Sminia, (2010)** disclosed that health care providers' supposed ease of use positively affects EMR determination to use. In adding, perceived helpfulness is definite as individual acceptance about using certain system can aid him or her to advance the performance. An apparent usefulness or perceived benefit is initiated as significant psychological aspect prompting EMR acceptance **Morton, (2008)**.

According to the present study, most of studied sample rated preference of using electronic medical record than paper record (98.8%). This result disagreed with result conducted in Norwegian by **Lee, Yong-Fang Kuo, & Goodwin, (2013)**. The study reported flexibility of the paper based medical record. The paper based medical record existed in equivalent with the EMR. Paper records also have certain benefits matched toward EMR's. There is for example faster to read copy on paper than on a monitor, the paper is easier to transport from place to place etc.

## 2-Result related to organizational development:-

The present study revealed that (54.1%) of nurses were agreed with the purposes, reward, attitude toward change and structure of the organization, while (68.2%) of nurses were agreed with leadership, helpful mechanism, and relationships inside the organization. This result is contrasted with the study conducted in South-west Nigeria by **Anderson, (2007)** which revealed that the majority of the respondents were disagree with the goals of the organization.

The present study revealed that there is Correlation between satisfaction when using electronic medical record and total assessment score of organizational development. This may be due to increase nurses perception about electronic medical record in which the organization makes a lot of courses about using computer system and its benefits to quality of work that lead to develop the organization. In addition, the organization frequently make meeting with head nurses to know and assess their needs for their units and to update their knowledge about the needs of organization.

**Studier, (2005)** who accomplished study about organizational factors and EMR outlines; found that organizations with philosophies of change and that value of innovations may have better probability of efficiently applying an EMR system. This is like to **Ingersoll, (2000)** who suggests that as soon as change is realized as a constructive characteristic of the setting, nurses are more possible to obligate to the effort of the organization. He suggested further that organizational readiness might be a more vital pointer of the potential for reform achievement than the environmental variables more usually measured.

The present study revealed that, there are statistical correlation between benefits of electronic medical record and content and ease of use of EMR which having the ability to decrease time used in documentation , provide accurate and complete information about the patient ,maintain patient privacy ,and this will lead to improve patient care and promote organizational development .

This result is accorded with **Sullivan, (2010)** who reported that using electronic medical record is integral part of determinations to encourage health care quality, patient safety, and efficiency. Hospitals used their EMRs to facilitate performance capacity, monitoring, and then development.

The present study also revealed that, there is significance correlation between comparison (between using electronic medical record and paper record) and accuracy, format, easy to use and content of electronic medical record .This result is accorded with **Morton, (2008)** who presented that nurses favored using the EMR than paper based records and that overall, establish it more effective and efficient.

**Desroches, Campbell & Rao, (2008)** Revealed that The EMR seems to have both positive and negative influences on primary-care outpatient practices. There are clear benefits over old-style paper-based records in terms of legibility and availability. Fears of computers interfering with the patient physician relationship do not seem to have been recognized in our review of the literature. Although not specifically recognized as an issue in this analysis, preceding studies have emphasized worries around the privacy and confidentiality of the EMR.

The present study revealed significant relationship between relationships inside the organization and leadership style, helpful mechanism, and attitude toward change in which, working as a team help in improving the patient care and raise the effectiveness of the organization which lead to organizational development. This result is accorded with **Anderson, (2007)** who discovered that there is major association among collaboration and performance. These was attributed to the fact that teamwork is a significant driver of organizational effectiveness in terms of performance, productivity, gainful, quality service, tuneful working relationship among others.

Moreover, the result revealed that there is significant relationship between structure of the organization and attitude of nurses toward change in which the structure of the organization make the flow of work easier. This result is accorded with **DeKler, (2007)** who found that the structure of the hospital was straight related to the procedures of care directing and next the patients' health outcomes.

The existing study found that there is no significant relationship between personal characteristics of nurses (qualification, years of experience, position, and setting). This result contrasted with **Anderson, (2007)**. Thus, academics discovered the relationships between some nurse features and the related attitudes toward electronic documentation. The features involved age, sex, race, education level, years of nursing experience, and prior use of computers.

The present study found no significant relationship between ease of use of EMR and attitude toward change. This contrast with **Aldosari, (2008) & Morton, (2008)** who found that there was significant relationship with the nurses' attitude towards the system usage and acceptance.

The present study found that there are significant correlations between attitude toward change and timelines, format and content of EMR. This reflects readiness of nurses toward using EMR. Also there are significant correlations between structure of the organization and timelines and format of EMR. This reflects presence of abilities that promote implementation of EMR. In addition, there is significant correlation between accuracy of EMR and relationship inside the organization. This reflects that using EMR will enhance positive relationships that promote loyalty to the organization.

The findings of the present study showed that (57.1%) of study sample are diploma degree and (48.2%) of them are more than ten years of experiences. (38.8%) rated poor of computer skills, with (32.9%) rated fair and (61.2%) of them use two fingers in dealing with computer. The possible explanation for this fact is that nurses with low qualification had poor computer skills and poor understand with benefits of electronic documentation or using electronic medical record.

This result was in contrast with study conducted by **Zali, (2008)**. The study reported that more than eighty percent of nurses rated good to excellent in computer skills and said their openness to electronic medical record in which the nurses were ten or less years of experiences.

## 5. RECOMMENDATION

*In the light of the findings, the following recommendations were suggested:*

### **Recommendation related to nurses manager:-**

A lot of training programs should be done to increase nurse's computers skills.

1. Assessment of nurse's computers skills and knowledge about electronic medical record should be done before implementation of the system.
2. Benefits of electronic medical record should be discussed before implementation and assess any obstacles for using.
3. Discuss that using electronic medical record will improve nursing documentation.
4. Discuss that using electronic medical record is more helpful than hindrance in patient care.

### **Recommendation related to organization:-**

1. Organizational goals should be stated and discussed clearly according to the priorities of the organization.
2. The direct supervisor should discuss her efforts and her goals to their staff to sustain her and to promote organizational progress.
3. The organization should explain policy, objectives, and attitude of any change to avoid any resistance to change.
4. Rewards should be distributed fairly.
5. The organization should encourage any helpful changes to improve quality of care.

### **Future for Nursing Research:**

-Additional studies should be conducted to assess nurses' perception toward using electronic medical record and its role in improving patient care and organizational development.

## International Journal of Novel Research in Healthcare and Nursing

Vol. 5, Issue 2, pp: (193-204), Month: May - August 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

### REFERENCES

- [1] Aldosari, B.(2008): Factors affecting physician's attitude about the medical information system usage and acceptance through the mandated implementation of integrated medical information system at the Saudi Arabia National Guard Health System: A modified technology acceptance model. Dissertation abstract international, 64 (7) (UMI No.3097602.
- [2] Anderson, H. (2007): HER pioneers try to stay out front, *Health Data Management*, 15 (5): Pp:26-34.
- [3] Burke, W., W. (2008): A contemporary view of organization development. In T. G. Cummings (Ed.), *Handbook of organization development*, Pp.: 13–38.
- [4] Butin, M., Burke, M., Hoaglin, M., & Blumenthal, D. (2011): The Benefits of Health Information Technology: A review of the recent literature shows predominately positive results, *Health Affairs*, 30(3), pp: 464-471.
- [5] Cummings, T., G. (2005): *Organizational development and change*. 8<sup>th</sup> ed., Ohio: South Western Thompson.
- [6] DeKler, M. (2007): Healing emotional trauma in organizations: An O.D. Framework and case study. *Organizational Development Journal*, 25(2), Pp: 49-56.
- [7] Desroches, CM, Campbell EG, & Rao SR, (2008): electronic health records in ambulatory cared national survey of physicians *N Engle J*, 359: pp 50-60.
- [8] Greenhaleg, T., Potts, H., Wong, G., Brk,p. etal(2009): Tension and paradoxes in Electronic Patient record research,: A systematic Literature Review using the Meta narrative method, *Milbank Quarterly* 87(4): 729-88
- [9] Ingersoll, G.,L. (2000): Relationship of Organizational Culture and Readiness for Change to Employee Commitment to the Organization. *J Nurs. Adm*, 30(1): Pp: 11-20.
- [10] Janićijević, N. (2011): Methodological Approaches in the Research of Organizational Culture, *Economic Annals*, 46 (189), Pp. 69–100.
- [11] Janusz S., & Grzegorz, K.(2008): Electronic patient record and archive of records in Cardio.net System for Tele-cardiology, 54 (3), Pp: 223-226.
- [12] Kierkegaard, p. (2011): Electronic Health Record: Wiring Europe's health care, *Computer Law & Security Review* 27(5): Pp 503-512
- [13] Lee, J., Yong-Fang Kuo, Y., & Goodwin, J.,S.(2013): The effect of electronic medical record adoption on outcomes in US Hospitals. *BMC Health Services Research*, 13(1): 39.
- [14] Lee, T., (2006): Nursing information: Users' experiences of a system in Taiwan one year after its implementation, *Journal of Clinical Nursing*, 17(6), 763.
- [15] Lee, T., Mills, M., Bausell, B., & Lu, MH. (2008): Two Stage Evaluation of The Impact of nursing Information System In Taiwan. *International Journal of Medical Informatics*, 77(10), Pp: 698-707.
- [16] Leonie, F., M.,& Kohl, (2013): Prevention Aimed at Lifestyle Behaviors: A Systematic Review of Reviews, *J Med Internet Res*.
- [17] Lundberg K., Balfors, B., & folkeson, L. (2009): Framework for Environmental Performance Measurement in a Swedish Public Sector Organization. *Journal of Cleaner Production* Pp: 1017-1024.
- [18] Mayo, (2011): *An Introduction to Electronic Health Records*, The McGraw-Hill Companies, Inc. P. 11.
- [19] Monika A., J. (2012): Electronic Symptom Reporting Between Patient and Provider for Improved Health Care Service Quality. *J Med Internet Res*.
- [20] Morton, ME. (2008): *Use and Acceptance of an Electronic Health Record: Factors Affecting Physician Attitudes*, PhD Thesis, Drexel University.

**International Journal of Novel Research in Healthcare and Nursing**

Vol. 5, Issue 2, pp: (193-204), Month: May - August 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

- [21] Parente, S., & McCullough, J. (2009): Health information technology and patient safety: Evidence from panel data, Health affairs, Pp: 357-361.
- [22] Robert, C., P. (2011): Organizational development: A Guide for learning change.
- [23] Studier, M. (2005): The effect of organizational Factors on the Effectiveness of EMR System Implementation,: What Have We Learned Electronic Health Care, 4(2): Pp: 92-98
- [24] Sullivan, R. (2010): Practicing Organization Development: A Guide for Leading Change, Jossey Bass, ISBN 0-470-40544-9.
- [25] Van nistelrooij, A., &Sminia, H. (2010): Organization development: What's actually happening? Journal of Change Management, 10(4), Pp: 407-420.
- [26] Zali, M.R. (2008): The organizational diagnosis in a public company, the Journal of executive management, 21(2),Pp: 28-45.