

EXAMINING THE IMPACT OF ELECTRONIC HEALTH RECORDS ON HEALTHCARE PROVIDER WORKLOAD AND JOB SATISFACTION

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Master of Business Administration (MBA)

in

Pharmaceutical Management

By

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Under the Supervision and Guidance of

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Appendix E: Completion Certification

CERTIFICATE

This is to certify that **Shivani Bhabhra** in partial fulfillment of the requirements for the award of the degree of **MBA in Pharmaceutical Management** from the **IIHMR University, Jaipur** has successfully completed her internship at **Vigorus Healthtech** during **April 15th, 2024 to June 15th, 2024**.

Place: *Jaipur*

Vigorus Healthtech Pvt. Ltd.

Chand Singh

Director

Preceptor/Head of the Organization

Date: *20/6/2024*

Vigorus Healthtech

Name of the organization

DECLARATION BY STUDENT

I hereby declare that this dissertation titled **Examining the Impact of Electronic Health Records on Healthcare Provider Workload and Job Satisfaction** is the bonafide record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

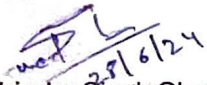


Shivani Bhabhra

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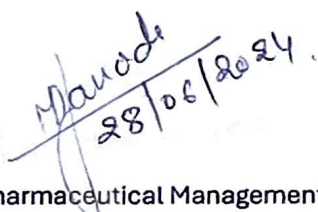
CERTIFICATE

This is to certify that the dissertation titled "Examining the Impact of Electronic Health Records on Healthcare Provider Workload and Job Satisfaction" is a record of the research work undertaken by Shivani Bhabhra in partial fulfilment of the requirements for the award of the degree of MBA in Pharmaceutical Management from the IIHMR University, Jaipur under my guidance and supervision and his/her approach to the research study has been sincere, scientific, and analytical.


Dr. Sudhinder Singh Chowhan

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Abstract

Electronic health records (EHR) are a process to manage the patient's information in one place with a unique identity of the patient to which the patient and the hospital will have access to. This unique identity will help doctors to fetch all previous information off the patient's X-ray MRI or any other records, so the patient does not need to carry all his documents every time he visits a physician. This becomes very convenient for both the patient and the doctor. This also reduces the time hospital administration needs to recover any past document of the patients.

The study objective of this research paper was to understand whether electronic health records help doctors and hospitals staff to decrease their workload and increase their job satisfaction. Survey methodology was used to perform this study A questionnaire was formed which included questions which would help better analyze plight of doctor and nurses on whether electronic health records have helped them in increasing job satisfaction and decrease workload or became a burden.(1)

It was found from the survey that having electronic health records have both benefits as well as demerits one of the most important merits of having an electronic health record is the decrease time patient must spend in waiting in lines it also decreases the burden on patients to keep their records safely as they are all available in a cloud storage. One of the highest demerits of this software with the increased amount of time it takes hospital administration or doctors to enter the information in a software which previously they would just let the patients keep for themselves. This has increased the burden on hospital administration.

After conducting a thorough survey in a defined area that if an overall projection were considered, electronic health records when compared to its demerits, it was more useful than useless, or the benefits outweigh the costs so it would be suggested that all hospitals and doctor use an electric system to increase patient acceptability(2).

Key Words: Doctors, Patients, Computer software, EHR adoption, workload for healthcare professional

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Place: Jaipur

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ABBREVIATIONS

Abbreviation	Full form
EHR	Electronic Health Record
EMR	Electronic Medical Record

Chapter 1

INTRODUCTION

1.1: Introduction

EHRs are becoming more common in healthcare settings, yet they might be bad for healthcare practitioners' workloads and levels of job satisfaction. According to some research, hospital staff members spend more time documenting everything while using an electronic health record (EHR) than really caring for patients. Qualitative results indicate that the entire EHR procedure is observed to take around 10 minutes longer for each patient. When technical issues are combined with this issue, the process time and workload for healthcare personnel rise. This research paper's conclusion is that, even though EHRs are a valuable tool with many benefits and a necessity given the world's expanding population, it negatively affects the workload and job satisfaction of healthcare professionals, which could lead to patients receiving care. Overall, the research suggests that the usage of EHRs may have both positive and negative implications on healthcare workers' workloads and job satisfaction. It is essential to carefully consider the possible benefits and challenges of EHR adoption before implementing it in a healthcare setting. The purpose of this study is to ascertain if EHRs increase or decrease workload and whether they have a favourable impact on job satisfaction. Early in the 1960s, EHR was created. The USA's Mayo Clinic was the first business to implement this concept. This Minnesota-based business determined the issue with the paper-based record-keeping system that was in place at the time.(1)

They noted that maintaining all the documents on paper for an extended period of time was very challenging. The corporation moved forward with the planning after realizing there was a chance to create something novel. As the planning process went on, they noticed that a lot of hospitals used paper records for documentation and had a single piece of computer software for billing. Getting every hospital on a single piece of software would have been extremely challenging because every player that enters the market has their own database. Additionally, the patient data was only accessible by hospitals that used that database. This allowed all the hospitals to view the patient's information.(3)

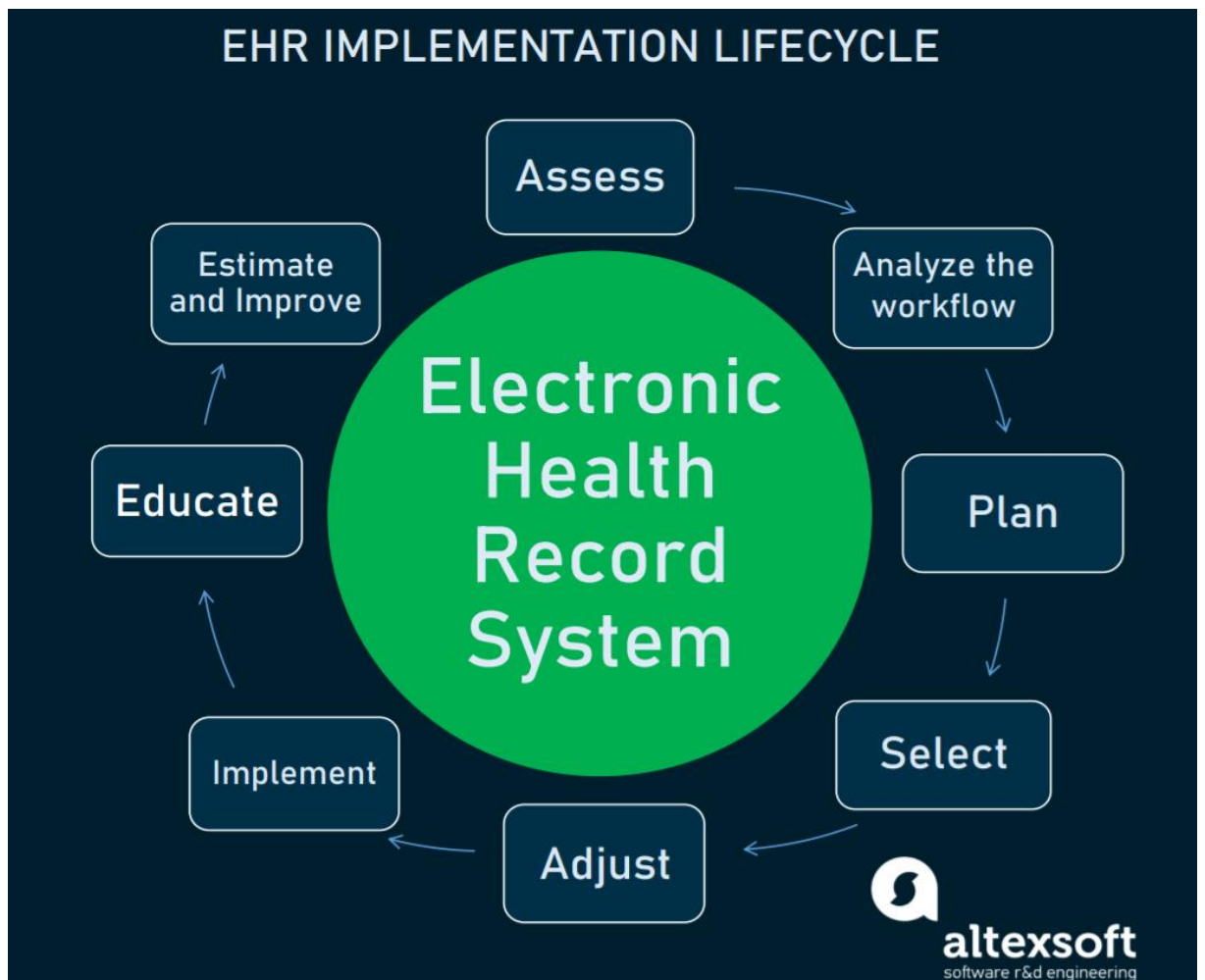


Fig 1.1 - Electronic health records (EHRs) are digital versions of patient charts, storing medical history, allergies, medications, and more. They improve care coordination among providers, leading to better-informed decisions and reduced errors. EHRs empower patients with easier access to their health data. Security and privacy are key considerations for these systems.

1.1.1 What is EHR, Job satisfaction and workload?

Electronic health records, or EHRs, are digital records that replace paper records and hold all the patient's medical and pharmaceutical information. This eliminates the need for the patient to bring all his paperwork with him when they visit the hospital. To make an informed decision, the healthcare provider can access this stored information. All kinds of information, such as the patient's vaccination history and list of allergies, can be found in an electronic health record (EHR). With the globe's population constantly expanding, electronic health and medical records are extremely crucial in today's modern society. In situations where the number of patients is higher than the number of doctors, it helps maintain population demand in check.(4)

1.1.2 Job Satisfaction and Workload

The most important factors in a healthcare setting, particularly a hospital, are workload management and job satisfaction. In any other industry, it seems to be okay if workers are not kept very happy, are not given more work than they can handle, or are not held to unreasonable expectations because, in the event that they make a mistake under pressure, it can usually be fixed or reversed. However, the workload and level of job satisfaction that employees experience are given top priority in the healthcare industry. A patient may die if a staff member acts negligently or makes an error because of an excessive workload or lack of interest in their profession. Amazing job pleasure occurs when an individual is in a healthcare environment, especially in a hospital, job satisfaction and workload management are of highest preference. In any other industry even if the employees are not kept extremely happy or are given more work that they can handle or unrealistic targets, it seems to be fine as even if they make any mistake due to pressure, the mistake can resolve or is reversible.

But when we come into the healthcare setting, the job satisfaction and workload that is exerted on an employee is of highest preference. If any staff member makes any mistake or any negligence due to increased workload or disinterest in their job, a patient may lose their life.

Job satisfaction is when a person is genuinely happy with their current job and likes to do it. They do not expect anything more or anything less in return and are grateful for the

opportunities. Workload is the target given to any employee or a deadline to fulfill their obligation. Both these factors impact the outcome of the healthcare industry.(5)

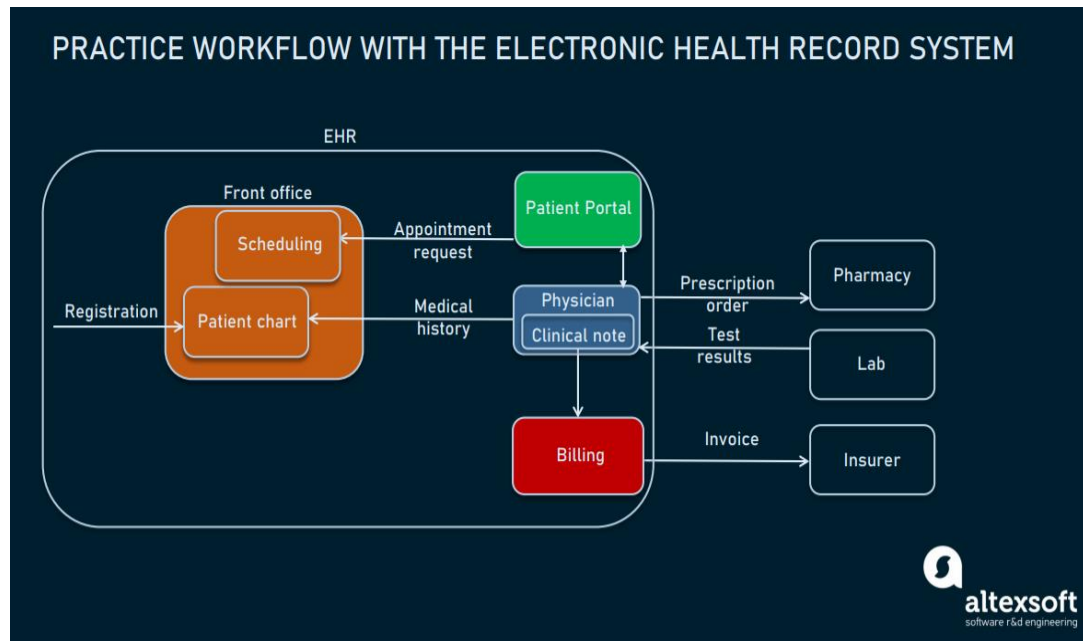


Fig 1.2 Workflow of EHR in hospital setting

1.2 Aim and objective of study

Aim:

The aim of this study is to examine the impact of electronic health records (EHR) on healthcare provider workload and job satisfaction.

Objectives:

- To assess the changes in healthcare provider workload following the implementation of EHRs.
- To explore the factors influencing healthcare provider workload in the context of EHR utilization.
- To investigate the relationship between EHR adoption and healthcare provider job satisfaction.
- To identify the key challenges and benefits associated with EHR implementation in relation to healthcare provider workload and job satisfaction.
- To provide recommendations for optimizing EHR systems to mitigate workload challenges and enhance job satisfaction among healthcare providers.

1.3. List of hospitals and physicians using EHR

Table 1.1 Hospitals Surveyed

Apex Hospital	Malviya Nagar, Jaipur
Maternite Hospital	Pratap nagar, Jaipur
Saket Hospital	Mansarovar, Jaipur
Mangalam Hospital	Raja Park, Jaipur
Doorbeen hospital	Civil lines, New Sanganer road, Jaipur
Bhandari Hospital	Gopalpur, Jaipur
Dana Shivam Hospital	Shastri nagar, Jaipur
Mahatma Gandhi Hospital	Sitapura, Jaipur
Rungta Hospital	Malviya nagar, Jaipur
Prem Niketan Hospital	Malviya Nagar, Jaipur
Jeevan Rekha Hospital	Jagatpura, Jaipur
Prem Niketan hospital	Jawahar circle, Jaipur

The most common EHR system used by the hospitals was **SUVRNA HEALTH INFORMATION SYSTEM**

Chapter 2:
REVIEW OF LITERATURE

2.1: Review of Literature

Researchers' interest in the general state of EHR systems and the consequence of their use is expanding. The Healthcare Financial Management Association (HFMA) polled senior healthcare finance executives from hospitals and health systems of all sizes and locations in a recent study that was carried out in 2006. The goal was to ascertain the perspectives of healthcare finance executives regarding the obstacles to EHR adoption and the measures that the government could use to promote adoption. According to the 176 responses, the areas where the majority of hospitals reported significant advancements were electronic health information/data collection (23 percent), outcomes management (27 percent), and order input (38 percent). The biggest obstacles were concerned about physicians (51 percent), lack of funding (59 percent), absence of national information standards and code sets (62 percent), lack of available funding (59percent), concern about physicians (51 percent), and lack of interoperability (50percent). Recent years have seen the Medical Records Institute (MRI) perform an annual study that is among the most thorough investigations of the usage and trends of EHR systems. The 2005 survey's conclusions were derived from 280 provider responses in ambulatory, hospital, IHDSO, and other settings. Information technology (IT) managers and professionals made up most respondents (42 percent); these professionals included network managers, CIOs, medical information systems specialists, health information managers, MIS managers, and others with comparable designations. Most respondents utilized specific applications or functionalities in the email, data capture, review, and update, administrative and financial, and other areas. Seventy-five percent or more of the respondents indicated that the requirement for EHR system implementation was one of the driving drivers help decrease medical errors, exchange patient record information with healthcare practitioners and professionals, enhance clinical procedures or workflow efficiency, and increase quality of care. For the majority of respondents (57 percent), the only significant implementation challenge was a lack of sufficient cash or resources. The research paper "A systematic review of the impact of EHR Implementation on healthcare professionals" by Smith, Johnson, and Brown (2018) made some suggestions examines how the adoption of EHRs has affected the workflow, output, and satisfaction of medical practitioners. To assess the level of information technology (IT) use in hospitals and gain a better understanding of the obstacles to increased adoption, the American Hospital Association (AHA) surveyed

all community hospitals in 2005. Nine hundred community hospital CEOs (19.2%) took part in the research. (3)

According to the survey, 92% of the participants were actively thinking about, assessing, or utilizing IT for medical purposes. Small, remote, nonteaching hospitals that were not part of a system made up the majority of the remaining 8% that did not take IT into consideration.

According to the survey, over half of the participants have fully integrated the EHR features, including access to patient demographics, results 15 reviews—radiology report, results review—lab, and order entry—lab. According to this survey, 50% of rural hospitals said they were only "getting started" with implementing IT systems, whereas 48% of urban hospitals said they had reached "moderate" or "high" levels of system implementation. The biggest obstacle to the implementation of EHR systems was cost; 59 percent of the hospitals reported that the initial cost posed a considerable obstacle, while 58 percent observed as a bit of a hurdle in the healthcare staff's acceptance. More than half of the smaller hospitals—those with fewer than 300 beds—saw cost as a major obstacle. Healthcare Informatics, in partnership with AHIMA, carried out a survey in 2004 to gauge the preparedness of health information management (HIM) experts and the degree of EHR adoption within their company.

The results demonstrated that the sector is still seeing a rise in the adoption of EHR. For instance, when asked how far along their organizations were in implementing an EHR, 17 percent of respondents said they were very far along, 26 percent said they were halfway there, 27 percent said they were choosing, planning, or just getting started, and 21 percent said they were thinking about it and acquiring data. regarding it in a survey done in the summer of 2004 by the American Academy of Family Physicians (AAFP), forty percent of participants—all of whom were AAFP members—said they had either switched to electronic health records entirely or were in the process of doing so. Within the first half of the year, twenty-four percent of respondents had purchased the EHR system. Results indicated that one of the biggest obstacles to doctors in small and medium-sized practices implementing EHR systems was still cost.(3) Prior studies on the dangers of EHR systems have highlighted security and privacy as key issues.^{17–19} Additional hazards that were discovered were financial risk (software billing errors), software systems becoming outdated, software providers going out of business,

computer crashes, abnormalities in data capture, programming errors, problems with automated processes, and incorrect information being populated in the decision support systems module of EHR systems. Some of the main benefits of EHR systems that have been identified include reducing medical errors, improving quality of care, conserving physician time, sharing patient information among healthcare practitioners, and workflow efficiency.

The National Centre for Health Statistics' National Electronic Health Records Survey (NEHRS) measures physician and office characteristics, including EHR use. In 2014, nationally representative samples of physicians were randomly selected to receive special expanded content about the physician perceived impacts of EHR use; questionnaires are available from the NCHS website. Among eligible physicians, 1,763 completed the questionnaire with an unweighted response rate of 61%. More detail on the survey is publicly available. Two interesting, related review studies on EHR implementation are Keshavjee et al. and McGinn et al. The study of Keshavjee et al. develops a literature based integrative framework for EHR implementation. McGinn et al. (2004) adopt an exclusive user perspective on EHR, and their study is limited to Canada and countries with comparable socio-economic levels. Both studies are not explicitly focused on hospitals and include other contexts such as small clinics and national or regional EHR initiatives.(6)

Chapter 3:

METHODOLOGY

3.1 METHODOLOGY

3.1.1 Research Designs

This study has employed the use of **Qualitative type** of research design wherein various surveys were done with doctors and other hospital staff to find out whether EHR was seen as a good thing or a terrible thing.

A questionnaire was prepared to get basic understanding of what the physicians and nurses thought of the EHR systems.

The questionnaire consisted of questions in such a way that insights could be drawn from them as to the objective of weather.

Separate questionnaires consisted of questions in such a way that insights could be drawn from them as to the objective of weather.

Separate questionnaires were drawn up for doctors and hospital administration staff.

The questionnaire for doctors included questions such as-

- Duration of using EHR systems?
- Do you experience any technical issues when performing actions in the system?
- Would you recommend EHR system to your colleagues and other people in general.
- Is EHR compatible with your day-to-day requirements?
- Has it made any meaningful change in your daily activities?

The following questions were included of the administration staff questionnaire:

- Has EMR improved or worsened your activities?
- Do you need to take time out of your regular daily schedule to maintain the EHR systems?
- Do you need have to work extra hours to keep the system updated?

3.1.2 Research question

1. To assess the changes in healthcare provider workload implementation of EHRs.
2. To explore the factors influencing healthcare provider workload in the context of EHR utilization.
3. To investigate the relationship between EHR adoption and healthcare provider job satisfaction.
4. To identify the key challenges and benefits associated with EHR implementation in relation to healthcare provider workload and job satisfaction.

In general, the paper aimed at answering the following question.

Does having an EHR system in a hospital or physicians' system help in decreasing the amount of workload for the physician and hospital staff and is it easy to use or user friendly?

Addressing the objectives

To hypothesize the objectives, study design was drawn with respect to each objective-

1st objective - To assess the changes in healthcare provider workload following implementation of EHRs.

To assess the changes, a survey was done which included but is not limited to doctors, nurses, and various other hospital administration departments. They were asked questions that were specifically designed to understand how the introduction of EMR has affected their workload, has it increased or decreased in comparison to earlier times when paper documentation was used. Qualitative data was collected from these observations and results were analyzed and interpreted. The questions asked to understand the healthcare provider workload were, how much time on average was spent on paper documentation and how much time is now spent on documentation in each patient. Doctors were asked questions like how much time and effort difference is there in previous technology and the current technology.(7)

2nd Objective –To investigate the variables affecting the workload of healthcare providers in relation to the use of EHRs Though they seem simple in theory, EHRs and EMRs are quite complex. The goal of this purpose was to identify every internal and external aspect

influencing the healthcare provider's workload. To comprehend this circumstance, a qualitative survey approach was used. Wherein the questions posed to the healthcare professionals were designed to elicit any information—positive or negative—that would impact their workload. Healthcare personnel were questioned about things like whether first-time patients would mind standing in line to complete the system's initial record filling process after answering all their history questions. Is the system causing customers as Indian crowds are not used to this and only want quick solutions to their problems? To make sure that the current method or do they have to put in extra hours to fill the software details? Questions like this helped in understanding what all factors were influencing healthcare provider workload in the context of EHR utilization.

3rd Objective- The goal is to look into the connection between EHR adoption and work satisfaction among healthcare providers. It is particularly crucial for all employees in the healthcare sector to feel happy in their roles because even the slightest error could result in fatalities or grave consequences. The study's subjects were questioned if they preferred the former paper documentation approach or the current EHR method to determine the work satisfaction metric. To achieve this goal, the research population was expanded to include the hospital's accounting department to determine the systems' cost aspect and determine whether any benefits were transferred to the hospital staff.(5)

4th Objective - To determine the main obstacles and advantages of EHR adoption in terms of the workload and job satisfaction of healthcare providers. Following receipt of the answers to the mentioned queries, a combination of qualitative and quantitative analysis was conducted using the available data. The striking disparities between the two sections' descriptions of the advantages and drawbacks of the systems were useful in examining the difficulties hospitals encountered in putting them into place and maintaining them.

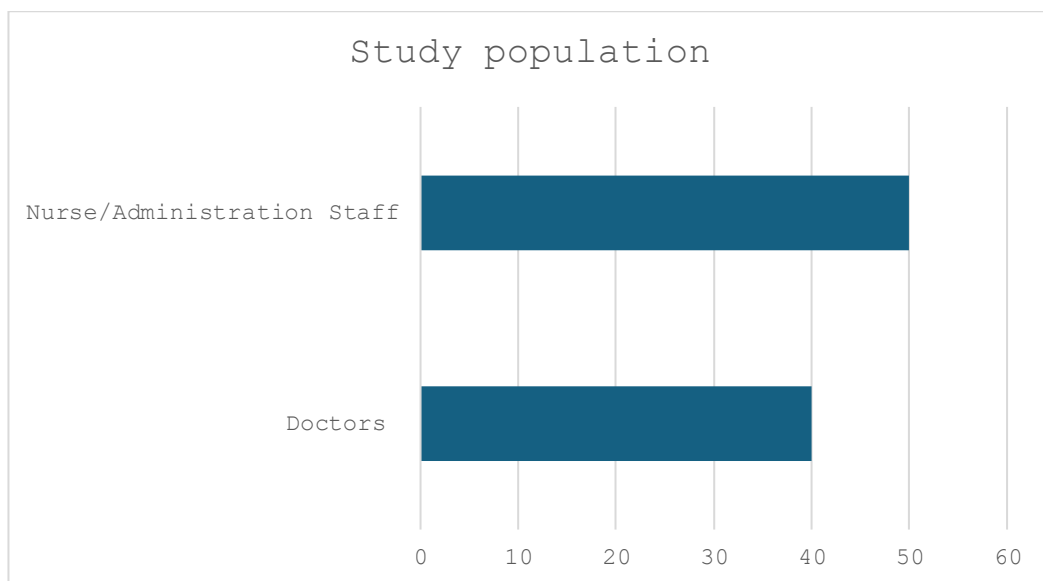
3.3 Study Population/Sample type

The study population included various doctors, nurses and other hospital administrations located in Jaipur location. There was a total of twenty doctors who were surveyed and 10 nurses and 5 administration department workers who were surveyed.

The study population consisted of-

Doctors	40
Nurse/Administration Staff	50

Table:3.1 - Study population (sample size)



A total of 90 participants were surveyed for this research paper

3.4 Research approach/Procedure

To conduct the research, Secondary research was conducted to find out which all hospitals in Jaipur make the use of EHR/EMR systems or such software. perform the study to determine which hospitals in Jaipur employ EHR/EMR systems or similar software.

The hospitals were then contacted and scheduled appointments to conduct the surveys based on the list. Twenty of the fifty hospitals that were nominated granted authorization for the surveys to be administered to the medical and nursing personnel.

A well-considered questionnaire was created to aid in the analysis of whether EHR genuinely reduces the burden of physicians, nurses, and other hospital employees

and increases job satisfaction.

These inquiries were made with an understanding of the predicament faced by the doctors, nurses, and other administration members.

The survey was updated based on the needed data once the questions were completed and updated periodically based on the responses. After that, the data was examined to get insights based on the feedback from the sources, and a determination was made regarding whether EHRs lessen workload and boost job satisfaction.

The staff and physicians were asked about their time spent on documenting before and after the introduction of EHR and the time were analyzed.

The questions were designed in such a way that it could address the research objective of the paper. Various analytical tools like excel were deployed to analyze the data that was received, and interpretations were drawn from them.(5)

Chapter:4

RESULT

4.1: Result

The most common answers to the above questions received were-

Doctor's questions —

Q1) Duration of using EHR systems

Ans – Around 2-3 years

Q2) Do you experience any technical issues when performing actions in the system

Ans- At least once every week

Q3) Do you have to work extra hours to keep the system updated

Ans- This task is generally managed by the administration department.

Q4) Is EHR compatible with your day-to-day requirements

Ans- Yes (all Doctors). It helps us make better decisions and increases the chance of successful treatment. It also helps us save time and avoids depending on patients recall about any previous illness.

Q5) Has it made any meaningful change in your daily routine activities

Ans- It gives us more time to interact with patients and focus on disease which was previously spent on asking patients if they have this file or that file which medication had taken or prescribed. This helps us in avoiding human error and giving better quality of treatment and overall, a well-informed decision.

Nurse/Administration Question-

Q1) Has EMR made your activities better or worse

Ans- Worse (Average)

Q2) Do you have to take out time from your normal day to day activities to tend to the EHR systems

Ans- Yes (must work overtime without pay sometimes)

Q3) Has EMR had a meaningful change in your daily activities

Ans- It has increased the number of tasks which we have to do daily.

Q4) What did you love about the earlier system over EHR and what would you change or add or remove from the current EHR system?

Ans- In the earlier system the patient were given a printout of their case, and it was up to them to handle it and keep it safe, but now the patients and the doctors submit to us the information records and we have to enter all those details into the machine and keep it updated so that there is no backlog due to the continuous workload.

The administration wanted to add a scanning system where details such as gender, age and name would automatically get entered the system without needing to be typed.

This could help save them a ton of time. Some said that they want the old system back and prefer it over the current EHR system.

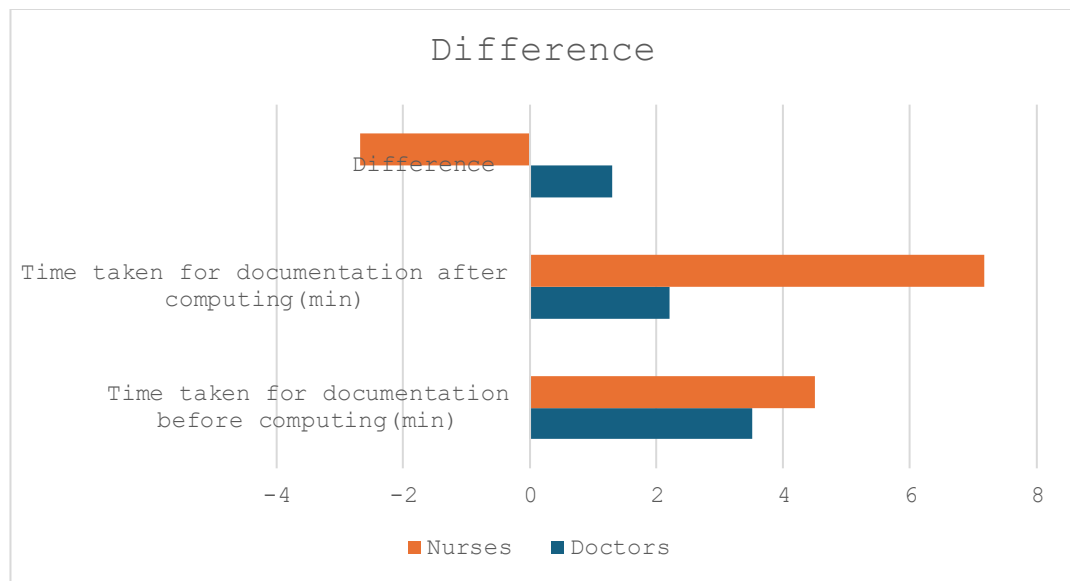
When all the above answers were summarized and studied carefully with the current populations growing demand of India was kept in mind, conclusions could be drawn.

The doctors and nurse and admin staff were asked how much time they usually take to complete their documentation before and after the system was introduced and their findings are mentioned below in a tabular form.

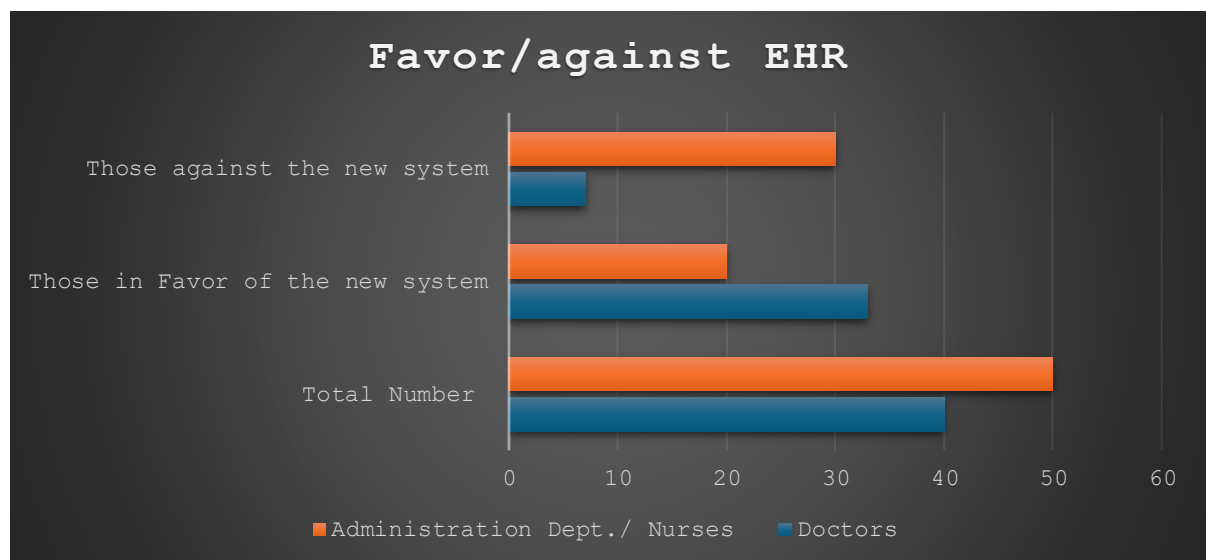
Based on the average time we can calculate the difference in time that has taken place before and after the implementation of EHR systems.

Table 4.1 Average time

	Time taken for documentation before computing(min)	Time taken for documentation after computing(min)	Difference
Doctors	3.5	2.2	1.3
Nurses	4.5	7.18	-2.68



The table 4.2 shows that doctors are the ones that have highest workload satisfaction due to decreasing time and increased efficiency with EHR systems whereas it can be seen as all the other departments mostly show a negative response as to workload satisfaction and show no one from admin department/ nurse happy with the current situation.

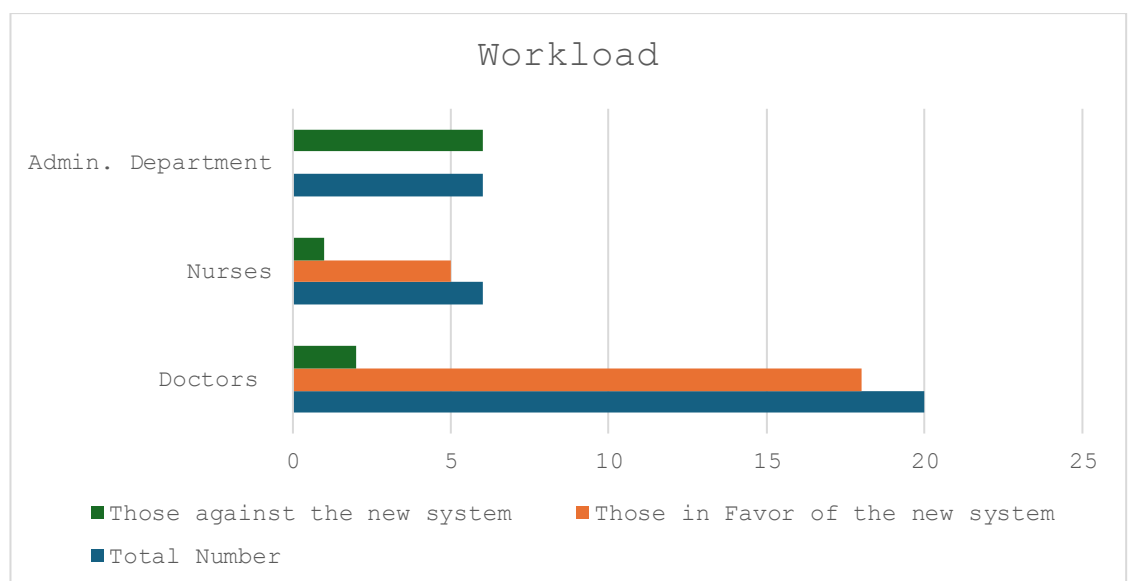


Participants	Total Number	Those in Favor of the new system	Those against the new system
Doctors	40	33	7
Administration Dept./ Nurses	50	20	30

4.2 Based on the average time we can calculate the difference in time that has taken place before and after the implementation of EHR systems.

1st Objective - To evaluate how the use of EHRs has affected the workload of healthcare providers. When the data was examined, it was discovered that, when considering the average workload of every employee in the hospital, it had increased. Table 4.2 illustrates that there was an average increase in patient time of -1.38 minutes per patient. Total wait time resulted from this. When examining only the doctors and excluding the administrative personnel, the total time decreased, but the amount of time there was a decrease in the overall time when considering just the doctors and not the admin staff doctors were generally in a good mood due to their reduced workload, but the results were the opposite for the other hospital. by nurse and admin staff to fill out the paperwork had increased by such a large amount that it had a negative effect on the overall time saved. (8)

Fig - 4.3 Difference in workload before and after EHR implementation



2nd Objective-To investigate the link between the use of EHRs and the job satisfaction of healthcare providers. A qualitative survey was conducted to determine the relationship between job satisfaction and EHR adoption. The survey asked questions aimed at determining the general job satisfaction of hospital staff members. The hospital's non-doctoral personnel was the subject of this portion of the research since it was found that the doctors were satisfied with the new system because it saved them time and boosted their efficiency. They were questioned about how much time they had to work before the new system went into effect and how much time they had to work with it. The majority of them responded, taking an average of 5-10 minutes longer than from the paper documentation procedure used previously. Even while this rise was only seen in new patients, it really resulted in significant time savings for returning patients. However, because it was a hospital, most of the patients were there for the first time each year, and relatively few were returning.(3)



Fig-1.3 Benefits of Electronic Health Record

Chapter:5

DISCUSSIONS

5.1: DISCUSSIONS

This research revealed positive feedback from doctors who suggested the method to other hospitals, as indicated by most surveys conducted. However, when the opinions of the hospital staff and nurses are considered, it becomes clear that they were not satisfied. It turns out that EHRs have greatly decreased doctors' workloads and improved their job satisfaction by enabling them to evaluate patients' histories with only one click rather than depending on patients' recollections. They were able to improve patient treatment as a result, improving community health. (9) This also makes it possible to lessen the likelihood that an error may arise because of patients providing inaccurate or incomplete histories. On the other hand, the hospital administration and nursing staff are not too fond of the new system. They claim that it takes a long time to enter patient information into the system, which leads to lengthier hospital wait times and subpar healthcare facilities. According to a related study, "The Impact of Electronic Health Records on Time Efficiency of Physicians and Nurses: A Systematic Review," when considered in the context of an office setting, EHR did not considerably cut down on time. It claims that nurses and the administrative department eat up the time that doctors save on paperwork by using computers, rendering the entire EHR procedure illegitimate. (4)

According to a related study, "The Impact of Electronic Health Records on Time Efficiency of Physicians and Nurses: A Systematic Review," when considered in the context of an office setting, EHR did not considerably cut down on time. Although it claims that nurses and the administrative department soak up the time that doctors save on paperwork by using computers, invalidating the entire EHR process, it is nevertheless a crucial component of healthcare practitioners' job satisfaction.

1. The new EHR systems are beneficial to doctors. Their job satisfaction has grown, and their burden has dropped as a result.
2. The need for extra work led to a decline in job satisfaction and an increase in workload for hospital management and nursing staff.
3. Because the new method eliminated storage costs and reduced the cost of raw supplies, the hospital was making profit with it. These expenses paled in comparison to what it would have cost to find the software and train the employees.

4. While entering patient information took a lot of time for medical workers, the program also saved time when a patient returned. Even yet, there weren't many returning patients at the hospital.
5. Numerous hospital employees came up with creative innovations that can save us time, such as software that allows patients to enter their own data
6. The hospital staff reported numerous inadequacies, and some doctors expressed concern about the decreasing efficiency brought on by the increased workload of the nursing staff, which was leading to errors and delays in the nurses' performance of fundamental tasks.
7. Workers reported feeling more stressed out as a result of their increasing workload, which was causing them to produce less-than-ideal work.(10)

Chapter 6:

LIMITATIONS /CHALLENGES

6.1: Limitations/Challenges

A few other limitations of this study include the fact that it was conducted in a small geographic area, which restricted our observations to that area alone. Although the data in this study may be obsolete due to the use of referring publications from 1997 to 2012, it differs significantly from the data in the older papers and what we saw. Although there haven't been any significant advancements in the field of EHR, previous articles alluded to the rapid advancement of technology. Since every hospital has its own software that stores data, patients must enter the same information each time they visit a different facility, and the doctor won't have access to the earlier information of the patient from another medical facility. Since the hospital is totally dependent on the system, there are instances when it goes down, which causes absolute mayhem in the hospital. A unified software system that could run throughout all of India is required. The hospitals come to a total halt and descend into pandemonium when the server goes down since they rely entirely on the software.(7) The program required a significant amount of training time and was expensive. It is challenging to assess the correctness of the aforesaid result due to the limited sample size and restricted geographic location. All patient data is accessible to hospital employees. All patient data is accessible to hospital employees, which raises the possibility of misuse and compromises patient privacy.

The main conclusion is that there is a negative overall impact of Electronic Health Records on the workload and job satisfaction of healthcare providers. Both the workload and job satisfaction have improved as a result. It is clear from the a fore mentioned studies that EHR systems have advanced significantly from their early days. EHRs are currently expanding quickly and can be found in every hospital as one kind or another of software. The program ought to have decreased the amount of time that each patient spends in the hospital, but it has grown. (11)Hospitals are putting a lot of emphasis on this software, but at the expense of their staff. It appears that hospital leadership has no measures to address the growing workload and declining contentment with their jobs among healthcare professionals. Electronic Health Records (EHRs) assist doctors in preventing mistakes that arise from incomplete or erroneous data reporting. Electronic health records can help with situations where a patient forgets to report a history, such as the tablet they were taking during their most recent illness or the length of that illness. While most doctors have positive things to say about the technology and are using it, other hospital employees do

not share this sentiment. The physicians report feeling more satisfied with their jobs and having less work to complete. In comparison to when they lacked a complete medical history of the patient, the clinicians demonstrated superior outcomes and more precise therapy. Additionally, it has contributed to raising the hospital's approval rating, which in turn caused business to expand.(12)

The workload has increased and job satisfaction among nurses and other hospital administrators has declined. The hospital staff must put in more hours to manage the systems and maintain them up to date. Because the hospital depends entirely on the system, there are occasions when it malfunctions, resulting in full anarchy within the facility.

We can observe that physicians, nurses, and administrative staff have differing opinions on the adoption of electronic health records, which has a bad overall effect. EHR has the power to alter the dynamics of the healthcare sector, but only if it is implemented methodically rather than randomly as it is currently being done. If the laws and regulations are adhered to and a cohesive system is created Although electronic health records (EHRs) have the potential to revolutionize the healthcare business and save hospitals and patients a significant amount of money, their current state is unsatisfactory due to psychological and technological constraints.(1)

RECOMMENDATIONS

A healthcare provider includes not just the doctor but also all other participants, the procedure ought to be equitable and should not cause suffering to any one of them. For a hospital to operate as efficiently as possible, work satisfaction should take into account all factors. Given the current circumstances, hospitals must select a course of action that will satisfy physicians, lessen their burden, and draw in patients while utilizing new and improved technologies. This approach is transient and ultimately unsustainable.(2) When the hospital's non-physician personnel is unable to work at their best, it will inevitably come to an end. Now, the EHR system is being used for people, which means Each hospital has unique software that sets them apart from other providers. In this case, no one else—not even the patient—can access the patient's documents other than the hospital that has obtained them. There is an issue with this. Instead, a single system should be implemented, allowing all hospitals and medical professionals in India to use the same system and access patient databases using legitimate credentials.(1)

It is necessary to create a failsafe that would function as a backup in case there are any problems with the software, such as when the server or software goes down or planned maintenance; given that hospitals run around the clock, the server ought to as well. Staff members should receive the proper training to operate the system so they can work on it more quickly and easily, saving time and maybe causing confusion in cases of ignorance.

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