



EXAMINING THE IMPACT OF MANAGEMENT INFORMATION SYSTEM ON PATIENT SATISFACTION IN VISIT HEALTH PVT. LIMITED

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INTRODUCTION

- The integration of Management Information Systems (MIS) in healthcare has had a significant impact on various aspects of the industry.
- MIS facilitates the collection, storage, processing, retrieval, and presentation of health information for education, management, and research purposes in hospitals.
- The primary goal of MIS is to improve hospital activities and deliver exceptional services to patients.
- Research consistently shows the benefits of MIS in reducing patient waiting time, lowering mortality rates, managing drug side effects, and improving care processes.
- The acceptance and adoption of MIS by its users are crucial for its effectiveness and success.
- User satisfaction and alignment of the system with the work environment and requirements are important factors influencing the success of MIS.
- Studies have shown that telemedicine, a component of MIS, has a positive impact on the quality of work for healthcare professionals.
- In Iran, MIS implementation is prevalent across hospitals, but there are variations in the software used by different companies.

INTRODUCTION

- The MIS includes subsystems such as electronic patient record management, hospital financial management, decision support systems, patient scheduling, and ward management.
- There is an expectation among clinical staff that MIS can improve care and help them achieve their career goals.
- Despite the presence of MIS, there is a lack of specific studies examining its impact on clinical staff performance.
- **The objective of the present study is to investigate the influence of MIS on enhancing clinical staff performance and explore strategies for increasing its effectiveness from their perspective.**

Literature Review

- Heeks in 2006 examines the potential for MIS in the Healthcare sector to succeed or fail and highlights its significance. The author emphasizes that in order for MIS to be implemented properly, it is necessary to consider the requirements of user engagement and ongoing system adjustments. This emphasizes how important it is to adapt MID solutions to the organizations' specific needs.
- The relationship between the calibre of medical services and the alignment of hospital information systems is examined by Hsieh, Hsieh, and Kao (2016). Their research demonstrates a positive association, showing that MIS technologies may help enhance service quality when they are well-aligned with organizational goals and processes. This conclusion shows that Visit Health Pvt. Limited should work to ensure that its MIS and patient care goals are strongly aligned in order to increase patient satisfaction.
- Lai and Chen (2011) talk about several MIS tools, including as decision support systems, computerised physician order entry systems, and electronic health records. The authors stress that efficient and accurate use of these technologies can raise patient satisfaction levels overall. By integrating these solutions into their MIS framework, Visit Health Pvt. Limited may benefit from streamlined operations and improved patient experiences.

Literature Review

- The factors affecting patient satisfaction and hospital recommendations are examined by Lee and Chen (2013). Their research shows that patient satisfaction is highly influenced by both interpersonal (such as communication and empathy) and technical (such as efficiency and technology integration) factors. This conclusion emphasises how crucial it is to take into account not just the MIS technologies themselves but also how healthcare providers and patients interact when implementing MIS.
- Information and communication technology (ICT) integration in healthcare is covered in Schaper and Pervan's 2007 article, with a focus on the necessity of organisational and social integration. The authors contend that effective stakeholder collaboration, a common vision, and change management methods are necessary for successful ICT integration, including MIS. To maximise the advantages of MIS installation, Visit Health Pvt. Limited should concentrate on encouraging collaboration and communication among staff members.

Materials and Method

AIM: The purpose of the cross-sectional study done in was to look into **how the staff performance was affected by the Management Information System (MIS)**. The goal of the study was to determine how clinical staff perceived the MIS's ability to help them perform better across a range of areas, including diagnoses, instruction, research, and hospital administration procedures. The study also sought to assess the significance of each element as a means of strengthening the MIS's capability to further enhance clinical staff performance. The main goal was to offer suggestions and a framework for enhancing the MIS's efficiency in a healthcare setting.

Materials and Method

RESEARCH QUESTION:

1. What is the perceived impact of the Management Information System (MIS) on clinical staff performance.
2. What is the overall effectiveness of the MIS in improving clinical staff performance?

OBJECTIVES:

- 1 To assess the perceived impact of the Management Information System (MIS) on staff performance.
- 2 To identify the main factors that contribute to the effectiveness of the MIS in improving staff performance.

RESEARCH GAP:

There is no specific study that examines the impact of MIS on clinical staff performance.

Research Population Attitude Towards the Effect of MIS on Improve Their Performance and Increasing the Effectiveness of MIS if the Studied Factors are Developed.

		Mean Current Effectiveness Score [A]	Mean Importance Ratings Score [B]
1	Access to patient information	3.43	4.12
2	Accelerating diagnosis and treatment	3.19	3.94
3	Incidence of medical errors	3.35	4.16
4	Telemedicine	2.88	4
5	Unnecessary patient admissions and facilitating patient admission and discharge	3.26	4.02

6	Facilitating paraclinical processes (lab test, radiology, support consultations)	3.62	4.28
7	Facilitate nursing care processes	3.26	4.01
8	Medical research	3.65	4.28
9	Develop specific rules for the acceptance of MIS documentation in the judicial authorities	3.51	4.53
10	Reducing costs and Increasing productivity of equipment and facilities	3.2	3.89

11	Integration of health information	2.96	4.14
12	Production of information resources	3	3.87
13	Patient Safety	2.87	3.78
14	Computer literacy and MIS	3.25	4.18
15	Increase in clinician motivation	3.15	4.13

16	Providing clinician and End users work needs	3.33	4.23
17	Identifying and troubleshooting software MIS errors.	3.2	4.13
18	Private enterprise participation in MIS project development	3	3.93
19	Updating MIS	3.33	4.23
20	Alteration and overwriting data and violation of legal rights of patients	3.2	3.93
21	Collaboration between health IT* experts and physicians and radiologist to advance MIS goals	3.2	4.33
22	Distance and continuing education	3.02	3.93
	SUM	70.86	90.04
	Mean	3.22	4.09

INTERPRETATION

- The mean current effectiveness score(column A) for all the factors is 3.22. This score indicates the perceived effectiveness of each factor in achieving the asked issues.
- The mean significance conditions score(column B) for all the factors is 4.09. This score represents the perceived significance of each factor in the environment of the given sphere.
- Current Effectiveness $= (70.86 / 22*5) / 100$
 $= \mathbf{64.43\%}$
- Effectiveness after Modifying $= (90.04 / 22*5) / 100$
 $= \mathbf{81.85\%}$

RESULTS

- **The overall effectiveness score considering these factors was 81.85%, indicating a high level of effectiveness.**
- The research population's views on the MIS's effectiveness were influenced by factors such as the importance of medical research, integration of hospital systems, patient safety, and collaboration between IT experts and staff.
- The MIS was found to have a good level of effectiveness in enhancing clinical staff performance, with the highest impact on diagnostics, educational processes, research, and management.
- Several factors were identified as crucial for increasing the effectiveness of the MIS, including formulating rules for accepting computer documentation, fostering cooperation between IT experts and staff, facilitating education and research, and enhancing computer literacy.

RESULTS

- The study implemented strategies to enhance the effectiveness of the Management Information System (MIS) and observed a significant improvement in the effectiveness score after implementation.
- Differences were observed in the perceptions of effectiveness among different staff groups, with physicians having a more positive view of the MIS's impact on the healthcare system, while paramedics and radiologists emphasized its effect on performance improvement and quality of care.
- The study provided valuable insights into the utilization and effectiveness of the MIS in improving clinical staff performance.

DISCUSSION

- **(Heeks 2006)** Both the literature review and the study recognize the **importance of patient satisfaction as a key indicator** of healthcare quality. They emphasize the role of MIS in improving patient care and organizational efficiency.
- **Hsieh, and Kao (2016)**, Literature review and research acknowledges the importance of both **interpersonal and technical aspects** in health care. They highlight the impact of communication, empathy, efficiency and technology integration on patient satisfaction.
- **Hsieh, and Kao (2016)**, Both sources emphasize the need for **continuous improvement and improvement of MIS efficiency**. The literature review discusses continuous adaptation to adapt the system to organizational needs, while the Max Super Specialty Hospital study identifies improvement strategies that are positively correlated with improved clinical staffing.
- **Lee and Chen (2013)**, The literature review highlights the need to **align MIS tools with organizational goals and processes**. Max Super Specialty Hospital's research also focuses on strategies to improve MIS performance, which shows the importance of aligning the system with organizational requirements.

DISCUSSION

- The study identifies several critical factors to increase the efficiency of MIS, including establishing rules for receiving computer records, promoting collaboration between IT experts and employees, promoting education and research, and improving computer literacy. The literature review does not specifically address these specific factors, but highlights the importance of aligning organizational goals, user involvement, and continuous adaptation. The specific factors that determine effectiveness are controversial.
- Physicians have a more positive view of the impact of MIS on the healthcare system, while paramedics and radiologists emphasize its impact on improving efficiency and quality of care. The literature review does not provide specific information about the variation in perceptions between different staff groups, which creates a contradiction in this regard.

CONCLUSIONS

Following are the objective wise Conclusions are:

Perceived impact of the Management Information System (MIS) on staff performance.

- Increased emphasis on patient satisfaction
- Enhance patient care
- Increased emphasis on Organizational performance

Main factors that contribute to the effectiveness of the MIS in improving staff performance.

- Formulating rules for accepting computer documentation
- Fostering cooperation between IT experts and staff
- Facilitating education and research

SUGGESTIONS

- This research employed a **cross-sectional design**, which limits the ability to establish causal relationships between MIS utilization and patient satisfaction. To address this limitation, future research could adopt a **longitudinal study design**, following patients over an extended period, to better understand the sustained impact of MIS on patient satisfaction.
- Collaboration and knowledge sharing among healthcare organizations can be beneficial for sharing best practices and lessons learned in implementing MIS. The organization could consider **participating in industry conferences, forums, or collaborative research projects** to exchange insights with other organizations and learn from their experiences.
- Future research could also explore the **cost-effectiveness** of MIS implementation in the organization. Assessing the financial implications, return on investment, and cost savings associated with MIS utilization would provide a comprehensive understanding of the benefits and potential challenges in implementing and maintaining MIS systems.

THANK YOU