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THE EFFECT OF E-PRESCRIPTIONS ON HEALTHCARE PROFESSIONALS' PERFORMANCE IN THE MIDDLE EAST: A SYSTEMATIC REVIEW

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Abstract
Objective: To systematically review the effect of E-prescriptions on healthcare professionals' performance in the Middle East.

Methods: To retrieve relevant articles, the study employed an exploratory research design to facilitate the acquisition of data from secondary databases, including Medline, Web of Science, Google Scholar, and PubMed. The term "keyword" was utilized to search pertinent literature for this study, encompassing works that delve into the domains of E-prescriptions and healthcare professionals' performance.

Results: An exhaustive exploration identified 3053 pertinent research papers retrieved from the designated data sources. Subsequently, 12 articles met the predetermined inclusion criteria and then underwent systematic review. The analysis revealed a noteworthy finding that underscores the imperative for healthcare professionals to cultivate transparent communication with patients concerning E-prescriptions.

Conclusion: Educating patients about the system can enhance their understanding and acceptance of this technology, ultimately leading to better adherence to medication and improved health outcomes.

Keywords: Electronic prescriptions, E-prescriptions, Healthcare professionals, Performance, Systematic review

Introduction

Electronic prescriptions, also known as E-prescriptions, have astonishingly changed how healthcare providers and patients communicate. During the last decade, it has gained huge acceptance in the field of healthcare for a number of obvious reasons, including adherence to new technology, laws that the government supports, and enhancing demand for efficacious healthcare services.[1] For this reason,

the composition of prescriptions has evolved into a more systematic procedure, yielding enhancements in both patients' safety and satisfaction.[2] The implementation of E-prescriptions serves to diminish the probability of errors in drug names and dosages, issues that have traditionally raised concerns in handwritten prescriptions due to illegible writing or misinterpretation of medical abbreviations.[3] They can readily be monitored by healthcare providers, pharmacies, and health insurance companies, providing better insights into disease trends and improving patient care. The medical histories of patients are recorded in the electronic health records, thus providing healthcare practitioners access to prior information on medical conditions, drugs, allergies, and any drug reactions.[2]

Myriad studies have been conducted to compare the benefits of E-prescriptions versus manual prescriptions. These studies have reported that medication errors have been significantly reduced after implementing E-prescribing systems.[3] However, these advantages are not impervious to several challenges. Transitioning from manual to E-prescription systems may require significant time and financial costs, which makes it cumbersome for smaller healthcare facilities. Additionally, healthcare practitioners require proper training to learn and adapt to these new systems, which may temporarily disturb the workflows and pose additional responsibilities. This, in turn, can result in resistance and frustration among healthcare providers, causing a poor impact on their performances.[4, 5]

The Middle East is a fast-developing region that is experiencing substantial expansion and investment across several industries, including the domain of healthcare.[6] However, despite their growing popularity in the Middle East, there is scarce evidence about the impact of E-prescriptions on the efficacy of healthcare systems. As the global acceptance of E-prescriptions continues to grow, examining their effects on the healthcare system in the Middle East becomes crucial for the healthcare industry. This exploration allows stakeholders and policymakers to make informed decisions, guide implementation processes, and leverage the benefits offered by E-prescription technology. The rationale behind conducting a systematic review of existing literature was to collect and synthesize available evidence regarding the impacts of E-prescription systems on the performance of healthcare workers. The goal was to evaluate the strengths and limitations of these studies, identify areas requiring further investigation, and gain a comprehensive understanding of the factors influencing the successful integration of E-prescription systems in Middle Eastern healthcare facilities.

Additionally, the review aimed to offer transparency in comprehending the parameters influencing the successful adoption of E-prescription systems. By assessing the outcomes of E-prescription adoption, such as reduced medication errors, improved efficacy, and minimized challenges during implementation, it provides valuable insights for future policy development, resource allocation, and research priorities in the Middle East's healthcare landscape.

Methods

Search Strategy:

This study adopts a systematic review methodology, utilizing secondary data sources to ascertain outcomes. Employing an exploratory research design, the study facilitates data acquisition from secondary databases, refines the research topic, and formulates a well-defined research hypothesis. Various search engines, such as Medline, Web of Science, Google Scholar, and PubMed, were employed to retrieve pertinent articles. The term "keyword" was employed to explore relevant literature, encompassing works within the realms of E-prescriptions and healthcare professionals' performance.

To comprehend the impact of E-prescriptions on healthcare professionals' performance, a comprehensive research strategy was executed. Initially, the researchers explored scholarly databases like PubMed and Medline, which contain medical literature and life sciences journal articles. A literature review was conducted, focusing on articles published within the last 10 years. The search strategy incorporated keywords and MeSH phrases related to computerized prescriptions, medical staff efficiency, and the Middle East. Boolean operators (AND, OR) were utilized to combine terms and broaden the search, such as E-prescription AND professionals' performance. In total, 3053 studies identified through the literature search underwent screening based on title and abstract to assess their

relevance. Subsequently, a thorough examination was conducted using the complete text of articles that met the established criteria. The research findings from these investigations were disseminated through scholarly publications that underwent rigorous evaluation by field experts, constituting original empirical inquiries.

Study selection criteria:

Inclusion criteria

- Studies assessing the impact of E-prescriptions on healthcare professionals' performance include aspects, such as medication errors, efficiency, patient safety, and communication.
- The quantitative study designs include randomized controlled trials, cohort studies, case-control studies, and qualitative interviews or focus groups.
- Studies published in peer-reviewed journals, conference proceedings, or as part of dissertations or theses.
- Studies published in English.
- Studies published within the last 10 years.

Exclusion criteria

- Studies exclusively examining the impact of E-prescriptions on patients, pharmacies, or other stakeholders without a focus on healthcare professionals' performance.
- Studies assessing electronic health records or other health information technologies without specific emphasis on E-prescription systems.
- Opinion pieces, editorials, commentaries, or narrative reviews that do not provide original research findings or data.
- Studies published in non-peer-reviewed sources like websites, blogs, or newspaper articles.
- Studies published in languages other than English.
- Studies with significant methodological flaws or biases, as determined during the quality assessment process.

Quality assessment

The four databases employed in this study provided a significant collection of 3053 scholarly papers and articles in the literature field. A systematic review was then undertaken using the Joanna Briggs Institute (JBI) assessment and the PRISMA methodology to thoroughly assess the influence of E-prescription on the performance of healthcare professionals in the Middle East. The JBI assessment was instrumental in scrutinizing the research methodology and quality to ensure objectivity, emphasizing aspects like conduct, design, and analysis. Concurrently, the PRISMA methodology was employed to extract relevant data and identify pertinent studies (Figure 1).

Data extraction

The search prioritized articles published within the last decade in English or with an accessible English translation. Manual searches of reference lists of obtained articles were conducted to identify additional publications. The researcher found 722 relevant investigations from Medline and 760 from PubMed focusing on the impact of E-prescriptions on healthcare professionals' performance.

A search for scholarly articles was then conducted in the digital repository of the Web of Science, retrieving 671 papers. The researcher used identical keywords and restricted the search to the most recent three years. Additionally, 897 scholarly articles were obtained from Google Scholar, examining the impact of E-prescription on healthcare professionals' performance using the exact keywords and limiting the search to the most recent articles. In total, 3053 relevant research papers were retrieved from the selected data sources, forming the basis for a systematic review.

Data synthesis

The initial step of the systematic review involved formulating a clear and precise research question. After establishing the research question, the next step was identifying pertinent literature, evaluating

its relevance and quality, and making suitable selections. The subsequent stage included synthesizing the available evidence, which involved analyzing and highlighting similarities and differences between outcomes, and formulating deductions based on the collected information. The results of the systematic review were then presented in the results section, offering a comprehensive examination of the available evidence.

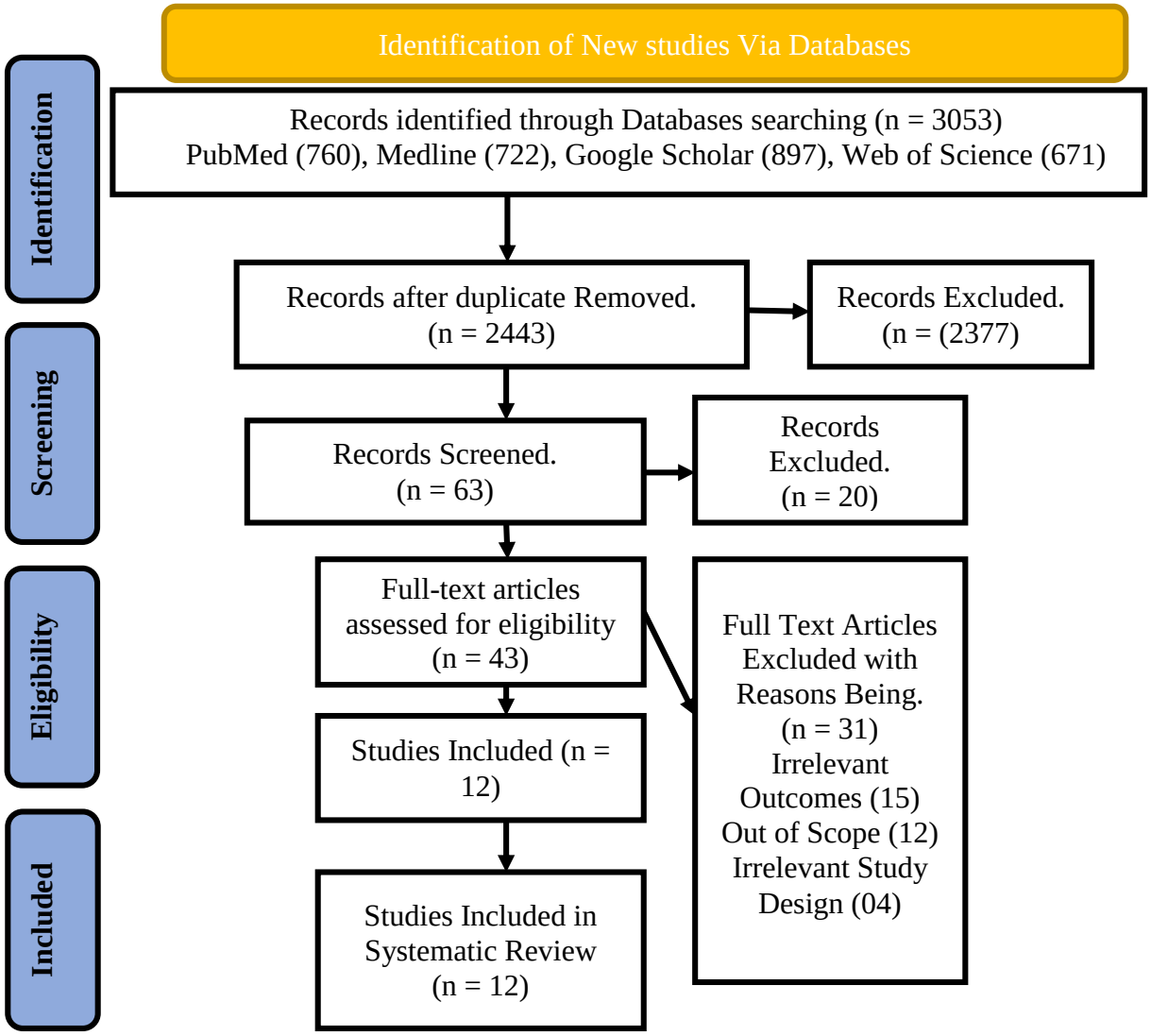

Figure 1: PRISMA Flow Diagram Based on PRISMA Guidelines of Studies Evaluation for Systematic Review

The aforementioned PRISMA flow diagram displays the studies from the databases, including Google Scholar, PubMed, Medline, and Web of Science. The extracted studies were from 3053, while after the PRISMA screening based on the quality of the selected studies, only 12 studies were found to be most relevant and included in this systematic review.

Results:

In this chapter, the substantial research findings and their contribution to the existing knowledge in the field were concluded. Tables 1 and 2 discuss the outcomes of this research work. Data for this research were extracted from prominent databases such as Google Scholar, PubMed, Medline, and Web of Science. The PRISMA flow diagram was employed to screen the most relevant studies, revealing that only 12 studies were deemed most pertinent to this research. Following this, the

methodology of the selected studies was evaluated using the JBI assessment 8-item checklist to interpret the outcomes of this systematic review.

Table 1 JBI Model for Assessing Articles for Eligibility.

Citations	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
(Almutairi et al., 2018) [7]	Y	Y	N	Y	N	N	Y	Y
(Al-Otaibi et al., 2022) [8]	Y	Y	Y	Y	Y	Y	Y	Y
(Alfadli & Al, 2022)[9]	Y	Y	Y	Y	Y	N	Y	Y
(Al Dosari et al., 2017) [10]	N	Y	Y	Y	N	N	Y	Y
(Alsahali et al., 2023) [11]	Y	Y	Y	Y	N	N	Y	Y
(Hammad et al. 2023) [12]	Y	Y	Y	Y	Y	Y	Y	Y
(Elden et al., 2023)[13]	Y	Y	N	Y	Y	Y	Y	Y
(Al Tarawneh, 2022) [14]	Y	Y	Y	Y	Y	Y	Y	Y
(Hitti et al., 2017)[15]	Y	Y	Y	U	Y	Y	Y	Y
(Raeesi et al., 2021)[16]	Y	Y	Y	Y	Y	Y	Y	N
(Al Jarbooa and Sekhar, 2023) [17]	Y	Y	Y	Y	Y	Y	Y	Y
(Tobaiqy et al., 2023) [18]	U	NA	Y	Y	N	N	Y	Y

Y* (Yes); N* (No); NA* (Not Applicable); U* (Unclear)

The above-presented JBI assessment table indicates that only cross-sectional descriptive, observational study, mixed methods, interviews, and survey studies were included in this systematic review. The identified and retrieved studies from the screening of the PRISMA diagram were found to be suitable and relevant to this research work and got a significant 90.2% scoring of relevancy and suitability based on the JBI assessment. The checklist for the JBI assessment is as follows.

Q1. Were the criteria for inclusion in the sample clearly defined?
Q2. Were the study subjects and the setting described in detail?
Q3. Was the exposure measured in a valid and reliable way?
Q4. Were objective, standard criteria used for measurement of the condition?
Q5. Were confounding factors identified?
Q6. Were strategies to deal with confounding factors stated?
Q7. Were the outcomes measured in a valid and reliable way?
Q8. Was appropriate statistical analysis used?

Table 2 General Characteristics of Included Studies

#	Title	Author	Date	Study Type	Source	Study Approach	Results
1	Physicians' Perceptions of Electronic Prescribing with Electronic Medical Records in Kuwaiti Primary Healthcare Centers	Almutairi et al. [7]	2018	Quantitative	PubMed	Cross-sectional	The majority of the physicians had positive perceptions related to the utilization of e-prescriptions, specifically in saving time, improving the quality of healthcare, and increasing the efficiency and productivity of healthcare providers.
2	The Factors Contributing to Physicians' Current Use of and Satisfaction With Electronic Health Records in Kuwait's Public Health Care: Cross-sectional Questionnaire Study	Al-Otaibi et al. [8]	2022	Quantitative	Google Scholar	Cross-sectional	It was reported that the degree of satisfaction among physicians with electronic health records strongly correlates with the preference for the new electronic health record system as well as its impact on physicians.
3	A Study to Assess Prescription Transfer and Medicines Collection Through a New Electronic Prescription	Tobaiqy et al. [18]	2023	Quantitative	Google Scholar	Cross-sectional	According to the findings of the study, a notable number of participants reported satisfaction with the registration procedure of

	Service: A Cross-Sectional Survey						the e-prescription Wasfaty service.
4	Perceptions of Community Pharmacists toward the National E-Prescribing Service (Wasfaty) and Exploring the Benefits and Challenges of the Service: A Descriptive Study from Qassim Region, Saudi Arabia	Alsahali et al. [11]	2023	Quantitative	PubMed	Descriptive survey	The findings showed that the E-prescription system has several positive impacts on healthcare providers' work, including patient safety, less medication errors, and improved patient care.
5	Primary Health Care Physicians' Perceptions of Centralized Electronic Prescription Service in Qassim Province, Saudi Arabia	Hammad et al. [12]	2023	Quantitative	Google Scholar	Cross-sectional	As per the findings, most physicians were satisfied with Wasfaty's service. However, half of the physicians reported that Wasfaty's service did not lessen the waiting time for the patients.
6	The Effect of Electronic Health Systems on Job Satisfaction and Teamwork of Healthcare Workers: A Case Study on King Hussein Cancer Center	Al Tarawneh [14]	2022	Quantitative	Google Scholar	Descriptive	The findings showed that e-health system utilization and Job satisfaction were significantly high. It was also found that a high percentage of healthcare providers used the Electronic Health System, and they were satisfied with it.
7	Impact of Internally Developed Electronic Prescription on Prescribing Errors at Discharge from the Emergency Department	Hitti et al.[15]	2017	Quantitative	PubMed	Descriptive analysis	The introduction of the electronic prescription system resulted in a noteworthy decrease in prescription errors during the discharge process.
8	Evaluating physicians' perspectives on the efficiency and effectiveness of the electronic prescribing system	Raeesi et al.[16]	2021	Quantitative	PubMed	Survey	Medical practitioners generally expressed their appreciation for the efficacy of electronic prescribing, citing advantages, including lower prescription errors, optimized workflow, and enhanced legibility of prescriptions.
9	Assessment of factors influencing nurses acceptance of electronic medical records in a Saudi Arabia hospital	Aldosari et al. [10]	2017	Quantitative	Google Scholar	Descriptive	The results showed a strong positive correlation between perceived usefulness and ease of utilization, causing a positive impact on nurses' acceptance of the electronic prescribing system.
10	Assessment of Perceptions of Patients' Satisfaction with E-Prescribing (Wasfaty) in Makkah Al-Mukarramah in Saudi Arabia 2022	Alfadli & Al [9]	2022	Quantitative	Google Scholar	Cross-Sectional	Findings suggest that Wasfaty has positively impacted patient satisfaction with prescription services in the region, likely due to its convenience and efficiency in medication management. Patients appreciate the ease of electronic prescription access, which, in turn, contributes to improved healthcare experiences in the area.
11	Health Innovations in Response to the COVID-19 Pandemic: Perspectives from the Eastern Mediterranean Region	Elden et al.[13]	2023	Quantitative	PubMed	Cross-Sectional	The findings highlight a range of innovative responses, including the rapid adoption of telehealth, contact tracing apps, and vaccination campaigns. Playing a critical role in managing and mitigating the impact of the pandemic in the region, these innovations have offered valuable insights for future

							public health preparedness and response efforts.
12	Doctors Perceptions Regarding Electronic Systems at Primary Healthcare Centers in Qassim Region, Saudi Arabia	Al Jarbooa and Sekhar [17]	2023	Quantitative	Google Scholar	Cross-sectional	Most doctors documented that systems are necessary in their everyday work. In addition, the majority noticed an improved quality of care. More than half of the physicians reported increased productivity.

Discussion

The objective of this project was to analyze the impact of E-prescriptions on the performance of healthcare professionals in the Middle East through a systematic review. The research outcomes indicate a significant influence of E-prescriptions on healthcare professionals' performance. A considerable number of medical practitioners perceived the E-prescription system as advantageous, leading to improvements in patient safety, increased productivity, reduction in prescription inaccuracies, enhanced prescription readability, decreased medication errors, and more efficient record-keeping.

However, healthcare professionals faced challenges, including technical barriers such as system downtimes and slow internet connections. Additionally, adapting to the new system posed difficulties due to insufficient training and support. A study by Alshahrani et al. (2020) suggested that using E-prescriptions was less likely to cause medical errors compared to traditional prescription methods. However, adverse effects were noted, including deficient or imprecise patient data, challenges in managing the E-prescribing platform, time constraints, and insufficient clinical expertise. The research emphasized that errors often resulted from the complex interplay of individual, organizational, and technical factors, with potential consequences such as increased healthcare expenses, jeopardizing patient well-being, and possible legal consequences for healthcare practitioners. The findings recommend addressing these errors by improving the quality of training, optimizing system design, and fostering effective communication among healthcare practitioners.[19]

Bulut et al.'s study unveiled that the transition to electronic prescriptions posed both advantages and challenges for family physicians. Among the benefits were improved legibility of prescriptions, a reduction in medication errors, and more efficient record-keeping. However, family physicians faced obstacles, including technical issues such as system downtimes and slow internet connections, as well as difficulties adapting to the new system due to insufficient training and support. Additionally, the research indicated that senior medical practitioners experienced greater challenges in adjusting to the electronic prescription system compared to their junior colleagues.[20]

Chang et al.[21] suggested that individuals who adhered to their E-prescriptions exhibited a significantly higher likelihood of sustaining their medication routine, causing better health outcomes and reduced healthcare expenses over an extended period. However, individuals who did not adhere to their prescribed medications faced adverse health outcomes over time, leading to higher healthcare costs in the long term due to complications arising from untreated medical conditions. Gabriel et al. (2017) demonstrated that opting for E-prescribing was linked to a noteworthy reduction in the occurrence of adverse drug reactions among diabetic patients. This decline in errors was credited to the system's capability to automatically verify potential drug reactions, allergies, and complications before transmitting a prescription to the pharmacy, thereby alerting the prescriber to any potential issues.[22]

Gider et al.'s (2015) study highlighted the diverse opinions among physicians regarding the usefulness of E-prescriptions. While acknowledging the benefits such as increased productivity, heightened patient safety by reducing prescription errors, and improved documentation, physicians also expressed reservations about various challenges. These concerns included technological complexities, system interruptions, and insufficient guidance and support. The study revealed that physicians voiced worries about patient confidentiality and data security within the e-prescribing system. Furthermore, concerns were raised about the depersonalized nature of e-prescribing, potentially impacting the relationship between physicians and patients.[23]

Gildon et al. (2019) posited that the adoption of electronic health records had substantially diminished the incidence of errors in medication prescriptions in pediatric healthcare vicinities. The enhancement in healthcare outcomes was attributed to different parameters of electronic health records, such as the automated measurement of dosages, alert mechanisms for possible drug interactions, and the same prescription patterns. However, the investigation revealed that specific categories of mistakes, such as those linked to incorrect choices made from drop-down lists, were exclusive to electronic health records.[24]

Hailiye Teferi et al. found that a notable percentage of healthcare professionals regarded the electronic prescription system as beneficial, contributing to improved patient safety, increased productivity, and the reduction of prescription inaccuracies. However, participants highlighted specific challenges, such as unreliable internet connectivity, frequent power disruptions, and insufficient technical support. Additionally, the study indicated that physicians' views on the E-prescription system were influenced by factors like their proficiency in computer skills, prior experience with E-prescription systems, and the quality of training they received in using the system.[25] The study by Hitti et al. (2017) showed that during the discharge process, introducing the electronic prescription system resulted in a noteworthy decrease in prescription errors. Nonetheless, the research revealed that although the system effectively decreased various types of errors, it did not wholly eradicate them.[15]

The study conducted by Kivekäs et al. in 2018 found that a considerable number of healthcare professionals held a positive view of electronic prescribing, believing it had a beneficial impact on patient safety by reducing medication errors, improving prescription readability, and enabling automated assessments for drug interactions and allergic reactions. Moreover, the utilization of this technology was reported to enhance the standard of healthcare delivery by simplifying the prescription process, promoting medication compliance, and facilitating superior care coordination. However, some medical practitioners expressed concerns related to technical aspects, including system malfunctions, periods of inactivity, and user-friendliness, which they believed could potentially impact the quality of patient care. Additionally, a significant proportion of respondents voiced apprehensions about reduced patient engagement resulting from increased reliance on electronic devices.[26] In terms of communication, electronic prescribing had both advantageous and disadvantageous impacts on communication. Viewed positively, electronic prescribing has improved the accuracy of prescriptions, reducing the necessity for physicians to receive clarification calls and facilitating more efficient recording of medication histories. However, some pharmacists have expressed concerns that e-prescribing could diminish opportunities for direct communication with physicians, potentially leading to communication breakdowns.[27]

Raeesi et al.'s study indicated that medical practitioners commonly conveyed their appreciation for the effectiveness of electronic prescribing, highlighting benefits such as reduced prescription errors, streamlined workflow, and improved legibility of prescriptions. The authors noted that the adoption of E-prescribing systems led to enhanced care coordination and increased patient safety. The study underscored the importance of continuous training and technical support to maximize the capabilities of E-prescribing systems and address any accompanying limitation.[16]

The study conducted by Yang et al. (2018) demonstrated significant variations in the clarity and understandability of electronic prescription (E-prescription) instructions. Some instructions were clear and easy to comprehend, while others were ambiguous and overly complex, potentially leading to patient confusion and non-adherence. Additionally, the research highlighted that the use of medical terminology and acronyms further compounded comprehension challenges for individuals seeking medical treatment. These findings underscore the need for standardizing patient instructions in electronic prescriptions to improve patient comprehension and adherence to medication.[2]

In a survey conducted by Alfadli and Al (2022), they evaluated patient satisfaction with the electronic prescribing system in Makkah Al-Mukarramah, Saudi Arabia. The findings suggest that Wasfaty has contributed to enhanced patient satisfaction with prescription services in the region, likely attributed to its practicality and effectiveness in managing medications. Patients appreciate the ease of access to electronic prescriptions, which contributes to the overall efficiency of the local healthcare system.

Additionally, Çorbacıoğlu Aksak's (2023) research investigated the impact of Turkey's Health Transformation Program on the autonomy of the medical community. The results revealed a significant transformation in the responsibilities of healthcare professionals and the healthcare system as a whole. The initiative, designed to centralize healthcare services, led to notable changes in the autonomy and duties of medical professionals in Turkey. This shift resulted in a divergence in the perceptions of the medical community regarding their professional roles and influence over decision-making processes.[28]
Elden et al. (2023) examined the Eastern Mediterranean Region's adaptation of healthcare technologies in response to the COVID-19 pandemic. The results demonstrated a variety of creative approaches, such as the quick uptake of telemedicine, contact tracing apps, and immunization programs. These developments have been crucial in managing and reducing the pandemic's effects in the area and have provided important lessons for upcoming public health preparedness and response initiatives.[13]

The outcomes of this research work are supported by previous studies, such as the study by Wrzosek et al. (2021), which revealed that E-prescriptions have demonstrated the ability to enhance healthcare efficiency through the optimization of workflows, mitigation of prescription-related miscommunications and facilitation of coordination among healthcare providers.[29] Similarly, the adoption of electronic prescribing systems was found to result in a significant decrease of 55% in medication errors in a major hospital in the United States, in a study by Özyurt Kaptanoğlu and Kılıçarslan.[29] This finding underscores the possible advantages of E-prescribing systems in improving patient safety and lowering the risk of medication-related adverse events. Similarly, the research by Frontoni et al. (2019) indicates a substantial decrease in medication errors associated with the implementation of E-prescribing. This reduction is particularly notable in the realms of dosing mistakes and errors originating from the interpretation and transcription of prescriptions.[30]

Congruently, Rahman Jabin and Hammar (2022) demonstrated that the utilization of e-prescribing systems, in conjunction with clinical decision support tools, proved to be efficacious in mitigating the incidence of potentially inappropriate medications and enhancing the general quality of prescribing for elderly individuals.[31] At the same time, Osmani et al. (2022) observed that the use of E-prescription systems significantly reduced errors, which, in turn, enhanced patient safety and healthcare quality.[32] By reducing the likelihood of handwriting-related errors, incorrect dosage calculations, and drug interactions, E-prescriptions have been shown to be essential in limiting patient harm. Roumeliotis et al. suggested that patients would experience less harm from prescription errors if computerized prescribing systems were widely used.[33]

On the other hand, Mohsin-Shaikh.[27] showed that healthcare professionals' daily routines were affected by the use of e-prescription tools. Medication errors saw a decline, and operational efficiency improved as a result. The implementation of clinical decision-making support further mitigated both medication errors and the adverse effects of drugs. Nevertheless, the research also identified a potential drawback, noting that healthcare providers might face a temporary decline in productivity and an increased workload due to the learning curve associated with electronic prescribing systems. Similarly, Hincapie et al. observed that E-prescribing systems presented challenges for specific healthcare providers, causing disruptions to their workflow and a reduction in efficiency.[34]

Conclusion

Based on the findings outlined in this comprehensive systematic review, it is concluded that e-prescriptions significantly impact the performance of healthcare professionals. It is crucial to acknowledge that this study is specifically focused on the healthcare sector within the boundaries of Saudi Arabia. Therefore, the generalizability of the results is limited and does not extend to other countries or regions. To address this, a proactive approach is recommended for healthcare professionals, emphasizing transparent communication with patients regarding e-prescriptions.

Initiatives aimed at educating patients about the intricacies of the system have the potential to enhance understanding and acceptance of this technology, thereby promoting increased adherence to prescribed medications and consequential improvements in health outcomes.

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