



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University
College of Management
Master of Project Management

(Research proposal)

**Patient's satisfaction on the E-prescription provided in
Ministry of National Guard - Health Affairs**

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Introduction:

For physicians to communicate their decisions regarding drug therapy and for pharmacists to dispense medications, handwritten prescriptions have long been the favored means of communication (Hellström et al., 2009). It is regarded as a helpful tool for patients on how to utilize the medication to get the most benefit utilizing the technology which is called commonly electronic prescription (Byrne et al., 2010). Electronic prescription is “a broad term that means using the computer devices to enter, modify, review, and generate or transmit medicine prescriptions that prepare two-way transmissions between the point of care and the dispenser” (Bell et al., 2004). E-prescribing is also defined as “the direct computer-to-computer transmission of electronic prescriptions (e-prescriptions) from the prescriber office to community pharmacies” (Odukoya & Chui, 2012). E-prescribing is where technology is utilized to cross the time, geographic, and crowd barriers between providers and patients to get the medications to the patients.

The government–private partnerships that were given more attention in the Saudi 2030 Vision plan played a significant role in this change. Only Saudi pharmacists who have registered with the Saudi Commission for Healthcare Specialties, which issues licenses to healthcare professionals, are permitted to own pharmacies, and the pharmacies must run by them (Almaghaslah et al., 2021). Typically, one to two pharmacists, or a pharmacist and an assistant, run community pharmacies. The government agency in charge of overseeing pharmacies is the Ministry of Health (الصحة, n.d.). Other governmental agencies provide pharmaceutical services in the Kingdom of Saudi Arabia, and The Ministry of National Guard - Health Affairs one of the well-known in the healthcare sector. Five current hospitals and medical city, and multiple primary healthcare centers in different sizes spread over the geographical cascade of the kingdom (About MNGHA, n.d.). The Health Affairs organizations serve the employees of the ministry and their dependents in all levels of healthcare services. Other beneficiaries are served nationally and internationally (About MNGHA, n.d.). The Health Affairs implement unified electronic medical record and adopted technology solutions in many of the provided services to enhance the accessibility of these services. As one of those electronic prescriptions where the patients can request their medications through the Patient Care Application (About MNGHA, n.d.). That application creates access for the patient with various services such as evaluating the provided services and others are planned to achieve in the future to be added.

Important and aim of the study:

The healthcare system in Saudi Arabia has changed drastically in the last few years (Almaghaslah et al., 2021). Among various electronic health solutions to process health-related data in the last ten years, electronic prescription has always been a focus of interest. The assessment of the

patient satisfaction in The Health Affairs has not been addressed in the previous study. This study is aimed to evaluate the patients' satisfaction in the pharmacy provided services by the application of The Health Affairs patients. Hence, following the recent implementation of the Patient Care Application in The Health Affairs, a patient satisfaction assessment will assess the service of various socio-demographic variables and geographical variables and further enhancement the provided service. To the best of our knowledge, this is the first study to evaluate the Patient Care Application in The Health Affairs in Saudi Arabia.

Literature review:

Electronic prescription systems have been designed and implemented according to the domestic needs of each country, and different standards are also established to make it better every year. Electronic prescription has been discussed in many experts' reports and public national plans, and it is tested, implemented, or are implemented in several European and the United States countries(Ahmadi et al., 2014; Ekedahl, 2010; Smith, 2005)11/4/22 2:37:00 AM. Several benefits were identified with the use of the electronic prescription solution (EPS), including the fact that electronic prescriptions are accurate, complete, and readable, which reduces the chance of dispensing errors and omissions. It provides higher levels of security, regulates the repeat dispensing workload enabling patients to collect their medication on time, is a convenience to the patients since they do not have to wait for the paper prescription to be dispensed, and opens two-way communication between the prescriber and the pharmacist, allowing pharmacists to be more involved in patient-centered care(Odukoya & Chui, 2012). On the other hand, EPS is also associated with delays in receiving prescriptions and inaccurate prescriptions from physicians. An overwhelming number of prescriptions with unclear information may lead to delays in dispensing. A lack of formal training also affects the speed of dispensing(Odukoya & Chui, 2012). A nationwide patient satisfaction survey assessing the newly implemented e-prescriptions system in Finland reported high satisfaction levels(Lämsä et al., 2018). Similarly, a country-level evaluation of e-prescriptions in Sweden indicated that patients had a positive attitude towards e-prescribing, found e-prescribing to be safe and beneficial, and enabled a faster dispensing process(Hammar et al., 2011). Another domestic Brazilian study have concluded that replacing handwritten prescriptions with e-prescribing would have several benefits(Mendonça et al., 2010). In 2018, an e-prescribing system called Wastfaty was launched in the government healthcare centers at both primary and secondary levels. The study concluded that no difficulties were encountered in purchasing medications, renewing prescriptions, or acting on behalf of someone in the pharmacy(Alqahtani, 2021).

Research methodology:

The study will use a cross-sectional online questionnaire. Another retrospective data will go through initial evaluating to find out if it is capable to fit in our study and replace the cross-sectional survey or adding it in case it will add value to the study. The retrospective data is required permission to retrieve and utilize. In case approval is not gained in the proper time, the cross-sectional method will fulfill the purpose of this study.

Study scope:

The scope of the study is the patients who served and got their medication utilizing The Patient Care Application in the Ministry of National Guard - Health Affairs in the Kingdom of Saudi Arabia during the period between April to October - 2022.

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