

Patient's Satisfaction towards "WASFATY" e-Prescriptions Service Implementation Provided by Community Pharmacies in Qassim Region

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Abstract

This study was conducted to assess the level of Patient's Satisfaction towards "WASFATY" E-Prescriptions Service provided by community Pharmacies in Qassim Region. **Method:** The study used a cross-sectional approach; it was conducted between September and November 2022. Data was collected using a random sampling technique, and an online questionnaire was distributed among the study population. A Ten-point scale, ranging from 1 (Extremely Poor) to 10 (Excellent), was used to assess patient satisfaction. **Results and Conclusion:** A total of 294 beneficiaries participated in the study. The level of satisfaction towards "WASFATY" E-Prescriptions Service provided by community Pharmacies in Qassim Region is (2.92) out of 5, (58.4% SD (3.235)). Aspects related to the pharmacy was divided to two points, the barriers consist of six domains, not all medicines are available (24.4%), E- prescription program-WASFATY- at the pharmacy has broken (9.6%), Receiving alternative medicines (Brand change/company name different) (11.8%), The pharmacist asked to come at another time(5.4%), Unavailability of a participating pharmacy in the WASFATY close to home (24.4%), Not applicable (24.4%), and the advantages consist of six domains, Freedom of timing in receiving medication (20.7%), No waiting time needed (16.3%), Fast access to obtain the medication (11.7%), Ease of obtaining medication (9.9%), The number of pharmacies participating in the WASFATY program(20.7%), Availability of a pharmacy participating in the e-prescription near the house(20.7%).

Keywords: Wasfaty e-prescription, community pharmacy, Patient satisfaction, e-service.

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1.0 INTRODUCTION

1.1 Background

'WASFATY' e-service, which aims to facilitate for patients obtaining medications and medical supplies through accredited community pharmacies. This service is one of the initiatives aimed at improving the quality of health services. Patients and beneficiaries are guided to the closest pharmacy to get the medications they need free-of-charge and facilitate their re-dispensing and home delivery, in addition to receiving notifications of the prescription status via mobile text message. The service also helps achieve patient safety by avoiding medical errors that result from handwriting, and automatic verification of conflicting medications for beneficiaries. The service seeks to provide the highest standards and electronic systems to facilitate medication-dispensing services to ensure medications are available for patients and

improve and develop the guidelines of medications use (MOH, 2021).

Wasfaty e-prescription is defined as "the direct computer-to-computer transmission of electronic prescriptions (e-prescriptions) from the prescriber office to community pharmacies". The e-prescriptions are initiated by physicians and sent electronically to community pharmacies where patients can obtain their medications and other healthcare products free of charge. Community pharmacy is the largest private sector in the pharmacy field and employs the largest proportion of the pharmacy workforce in Saudi Arabia (Almaghaslah *et al.*, 2022).

1.2 Research Question

Research questions serve several purposes. They provide a framework for a study, helping the researcher organize his or her research and ensuring a study's relevance, direction, and coherence. In this way,

research questions help keep a researcher focused during an investigation (Onwuegbuzie & Leech 2006). The following question was developed to guide this study:

- i. What is the level of patient's satisfaction towards "WASFATY" E-Prescriptions Service provided by community Pharmacies?

1.3 Research Objectives

The objectives of a study should be specific and reflect the question that researcher is asking (Khoo 2005). The main objective of this study is;

- i. To assess the level of Patient's Satisfaction towards "WASFATY" E-Prescriptions Service provided by community Pharmacies.

1.4 Research Justification

The research justification refers to the rationale behind research endeavour or the reason why a study is being conducted. The National Unified Procurement Company (NUPCO) has recently introduced an electronic prescribing program called "WASFATY", which allows patients to dispense their medicine from different geographical locations around the kingdom free of charge, and to have a trusted source of medical information (Al Safwan *et al.*, 2020). Patient's satisfaction has been considered as one of the most important measures for evaluating the 'WASFATY' e-service, so perception toward the transition of pharmaceutical care services, and concerns about and limitations and barriers of the WASFATY e-service.

In response to the Saudi government challenge of WASFATY e-service. The outcomes of this study are expected to help decision-maker, supervisory agencies in the ministry of health (M.O.H) and NUPCO to resolve the problems and barriers of WASFATY e-service implementation.

2.0 LITERATURE REVIEW

2.1 Introduction

A community pharmacy is defined as a healthcare facility that is responsible for the provision of pharmaceutical services to a specific community. A community pharmacy allows the public access to medications and healthcare advice. In Saudi Arabia, there are ~9000 community pharmacies under the regulation of the Ministry of Health (MOH), the Saudi Food and Drug Authority (SFDA), and the Saudi Commission for Health Specialties (SCHS). The MOH Department of Pharmaceutical Care organizes and supervises pharmacy practice-related activities in Saudi Arabia, the SCHS is responsible for accreditation of pharmacists, and the SFDA ensures the safety of food, medications, biological and chemical substances, and electronic products. Seven themes related to the new WASFATY service were identified and divided into three categories: perception toward the transition of pharmaceutical care services, experience of the new WASFATY service, and concerns about and limitations

of the WASFATY service. The majority of participants expressed a need for the new WASFATY service and said that it is more convenient than PHCs for the several reasons: easy access, easy availability, and locations near homes. The majority of participants said that communication with community pharmacists is better compared to PHC pharmacists. A few participants said that community pharmacists spend more time with them and provide them with more information about their medication. A few participants said the reason was the less workload they believe community pharmacists have, others felt it was the commercial nature of the community pharmacists' work, while most of the community pharmacists believed the reason to be a lack of physical barriers in community pharmacies that improves pharmacist-patient communication (Aloola *et al.*, 2020).

2.2 Initiation of "WASFATY" E-Service

This service is one of the initiatives aimed at improving the quality of health services. Beneficiaries are guided to the closest pharmacy to get the medications they need free-of-charge and facilitate their re-dispensing and home delivery, in addition to receiving notifications of the prescription status via text message. The service also helps achieve patient safety by avoiding medical errors that result from handwriting, and automatic verification of conflicting medications for beneficiaries. The service seeks to provide the highest standards and electronic systems to facilitate medication dispensing services to ensure medications are available for patients and improve and develop the guidelines of medications use (M.O.H 2019).

The initiative connects primary healthcare centers and hospitals to selected community pharmacies in various locations to allow easy access to the nearest pharmacy in the neighborhood. The services also aim to improve health spending efficiency and reduce medication waste, enhance medication availability, improve patient medication counselling and help prevent medication errors. In 2021, community pharmacies numbered 9026 around the country, employing 17,815 pharmacists. Pharmacy ownership is limited to Saudi pharmacists registered with the Saudi Commission for Healthcare Specialties, the licensing body for healthcare professions. The maximum number of pharmacies that can be owned by a single pharmacist is 30. Community pharmacies are usually managed by one to two pharmacists or one pharmacist and an assistant. They usually operate between 8 and 12 h a day, 6 days a week. Some pharmacies operate 24 h a day. The Ministry of Health is the government body that regulates the community pharmacy sector (Almaghaslah *et al.*, 2022).

In light of the 2030 vision of Saudi Arabia, the National Unified Procurement Company (NUPCO) has recently introduced an electronic prescribing program called WASFATY, which allows patients to dispense

their medicine from different geographical locations around the kingdom free of charge, and to have a trusted source of medical information (Al Safwan *et al.*, 2020).

2.3 Cost- Effective in Pharmaceutical Health

Global healthcare expenditure is escalating at an unsustainable rate. Money spent on medicines and managing medication-related problems continues to grow. The reduction of inappropriately prescribed medicines not only produces savings in the cost of each individual medicine but also reduces the risk of adverse drug events (ADEs) that often contribute to prolonged and expensive hospital admissions. Under constrained financial conditions, healthcare services need to demonstrate that they remain cost-effective, given the investment in their provision. Therefore, the continuing high cost of medicines emphasizes the increasing importance of pharmacoeconomic evaluation studies (Dalton and Byrne, 2017).

2.4. Community Pharmacies

The long-established image of community pharmacists has been based on a transactional model, primarily focused on the preparation, dispensing, and supply of medicines. However, this profession has transformed considerably in recent times, and faces further radical changes as it moves toward providing services and playing a greater role in health promotion and disease prevention. Community pharmacists are one of the most accessible healthcare providers and hence are in a unique position to provide a patient-focused primary healthcare service to their community. Community pharmacists are ideally placed to undertake health screenings for disease prevention and progression, and to aid in the diagnosis of new diseases (eg, type 2 diabetes). Pharmacy-based health checks have been shown to be cost-effective when actively screening at-risk patients (Dalton and Byrne, 2017).

2.5 Patient Satisfaction

A study was conducted in 2022 to assess patient satisfaction with the e-prescription service implemented by the Ministry of Health hospitals and primary healthcare centers in Saudi Arabia. The study used a cross-sectional approach. Data were collected using a random sampling technique, and an online questionnaire was distributed among the study population. A five-point Likert scale, ranging from 1 (not at all satisfied) to 5 (very satisfied), was used to assess patient satisfaction. A total of 400 patients participated in the study. More than half (57.5%) of them were males, and around one-third were between the ages of 30 to 39. Slightly less than three-quarters (72%) were educated to university level and above. The vast majority were Saudi nationals (94.3%) who utilized WASFATY services for an acute condition. The distribution of scale scores for all questions related to pharmacy personnel and services is presented in Table 2. All responses ranged from 1 (not at all satisfied) to 5

(very satisfied). Both items, i.e., accessibility to pharmacies in terms of numbers, location, and opening hours, as well as pharmacy facilities, including waiting area, counselling area, dispensing area and parking lots, were skewed towards 5 (very satisfied). Both items related to pharmacists, i.e., knowledge, skills, and competencies, as well as friendliness and approachability, were also skewed towards 5 (very satisfied). Eight items were related to patients' experience with WASFATY, comparing the new service with the old primary healthcare centers' pharmaceutical services. All items, such as availability of pharmacists, procedures for refills, waiting time, privacy, and confidentiality were skewed towards 5 (very satisfied). Factors related to patient experience with WASFATY, the new service, as compared with old primary healthcare centers' pharmaceutical services, such as the availability of pharmacists, procedures for refills, waiting time, privacy, and confidentiality, were also skewed towards 5 (very satisfied) (Almaghaslah *et al.*, 2022).

Patient satisfaction is of value to primary health care providers (El Shabrawy & Mahmoud 1993). Patient satisfaction is an important factor to measure the provided health services outcomes. Patient satisfaction is an important and commonly used indicator for measuring the quality in health care. Patient satisfaction affects clinical outcomes, patient retention, and medical malpractice claims. It affects the timely, efficient, and patient-centred delivery of quality health care. Patient satisfaction is thus a proxy but a very effective indicator to measure the success of doctors and hospitals (Prakash 2010).

3.0 METHODOLOGY

3.1 Introduction

The understanding of the basic aspects of methodology is essential for any researcher (Garg, 2016). Research is a systematic process, which uses scientific methods to generate new knowledge that can be used to solve a query or improve on the existing system (Bhaskar and Manjuladevi, 2016). This part aims to provide an understanding of the research methodology and design used to achieve the research objectives discussed in chapter one. This study was conducted by quantitative method, to arrive at a better understanding of Patient's Satisfaction towards "WASFATY" e-Prescriptions Service provided by community pharmacies.

3.2 Study Design

A cross-sectional study design will be conducted from July to November, 2022, to assess the level of Patient's Satisfaction towards "WASFATY" e-Prescriptions Service provided by community pharmacies in Saudi Arabia, using electronic questionnaire. Sample size (Calculated by a Raosoft sample size calculator (<http://www.raosoft.com>) with a predetermined margin of error of 5% and a confidence

level of 95%) is n=294 randomly sampling. The collected quantitative data will be descriptive statistics; *t*-test was done to examine if there is a significant difference in means (SD) for the participants. Chi-square to determine if there is significant association between social demography and patient's satisfaction toward "WASFATY" e-service. The collected data was analyzed using SPSS, version 20.

Data Collection

Using electronic questionnaire, with sample size is n=294 randomly sampling. The collected quantitative data will be descriptive statistics; *t*-test was done to examine if there is a significant difference in means (SD) for the participants. Chi-square to determine if there is significant association between social demography and patient's satisfaction toward "WASFATY" e-service. The collected data was analyzed using SPSS, version 20. The questionnaire electronically was distributed through email and social media applications, including WhatsApp groups. The data collection tool was developed in English and subsequently translated into Arabic.

3.3 Sample Size

Calculating the sample size is a most important determinant of statistical power of a study. A study with inadequate power, unless being conducted as a safety and feasibility study, is unethical (Wang, *et al.*, 2013). The participant sample size will be determined using Electronic Sample Size Calculator- ESSC. The sample size was determined based on the total population of Saudi Arabia (35,013,414) and determined by using a Raosoft sample size calculator (<http://www.raosoft.com>) with a predetermined margin of error of 5% and a confidence level of 95%. In order to minimize erroneous findings and increase study reliability, the target sample size was set at 385 patients.

Based on the online calculator and the appropriate sample size for this study is (n) = 294 patients who were eligible for free government healthcare services and having previously used WASFATY e-service.

3.4 Study Location

The study will be conducted in Qassim region. Qassim region is located at the center of the country, Qassim is an agricultural region. Buraidah, the capital of the Qassim province, plays a major role in the production of dates in the KSA. It is known as the "alimentary basket" of the country, because of its agricultural assets. Qassim has an area of 73,000 km² and a population of 1,387,996. Of this population, 991,032 are Saudi (71.40%), and 396,964 are non-Saudi (28.60%). The population of Qassim represents 4.37 % of the total population of the KSA.

3.5 Target Population

All Saudi patients living in Qassim region using "WASFATY" e-service (Patients of PHCC's and Out-patient clinics). The target population for this research is (294) Saudi patients who are living in Qassim region.

3.6

a. Inclusion Criteria:

- i- Patients who were eligible for free government healthcare services in Saudi Arabia, having previously used WASFATY e-service.
- ii- Saudi Nationality.
- iii- Age 18 years or older

b. Exclusion Criteria:

- i- Saudi patients who have never utilized the WASFATY e-system.
- ii- Non- Saudi Nationality.
- iii- Age below 18 years.

3.7 RESEARCH INSTRUMENT

The English instrument that will be used in this study will be validated to be ensured by retranslating the Arabic version into English. To check the clarity of language and the questionnaire format, the data collecting tool will be piloted with ten participants who are representative of the research population. The pilot research findings are not included in the final results. Based on the pilot feedback, the questionnaire will be evaluated and adjusted. The final survey will be distributed in Arabic by E-electronic questionnaire. See (APPENDIX A).

The understanding of the basic aspects of methodology is essential for any researcher (Garg, 2016). Research is a systematic process, which uses scientific methods to generate new knowledge that can be used to solve a query or improve on the existing system (Bhaskar and Manjuladevi, 2016). This chapter aims to provide an understanding of the research methodology and design used to achieve the research objectives discussed in chapter one. This study will be conducted by quantitative method, to arrive at a better understanding of level of Patient's Satisfaction towards "WASFATY" E-Prescriptions Service provided by community Pharmacies in Qassim Region.

4.0 RESULT

4.1 Introduction

For any researcher, understanding the basic aspects of methods is important (Garg 2016). Study is a systematic process that uses scientific techniques to produce new information that can be used to address a query or develop the current framework" (Bhaskar & Manjuladevi 2016).

For conducting the research survey- e-questionnaire with Qassim region citizens. A

convenience sample of 294 participants agreed to participate in the questionnaire, which we used to assess the level of Patient's Satisfaction towards "WASFATY" E-Prescriptions Service provided by community Pharmacies in Qassim Region.

4.2 Characteristics of the Sample

Of the 294 participants from Qassim region invited to participate in the study, 294 (100.00%) participated in the study were filled up the

questionnaires. Around three-quarters (78.6%) were males compared to an approximate quarter (21.4%) females, and the highest age group were between the ages of 36 to 45. The vast majority were married (82.0%), and slightly more than half (55.4%) were educated to bachelor level and above. Almost (43.5%) of the respondents were having 4 to 6 members in their family. Meanwhile, nearly 60% of the respondents were not having any chronic diseases (Table 1).

Table 1: Demographics

	Frequency	Percentage (%)
Gender		
Male	231	78.6
Female	63	21.4
Age		
18 – 25	19	6.5
26 – 35	45	15.3
36 – 45	95	32.3
46 – 55	83	28.2
56 – 60	29	9.9
>60	23	7.8
Marital Status		
Single	40	13.6
Married	241	82.0
Other (Divorced / Widowed)	13	4.4
Education		
Under High School	22	7.5
High School	82	27.9
Bachelor	163	55.4
Postgraduate	27	9.2
Household size/ Family members		
1 – 3	57	19.4
4 - 6	128	43.5
7 - 10	92	31.3
>10	17	5.8
Chronic disease		
Yes	107	36.4
No	176	59.9
I do not know	11	3.7

The distribution of E-prescription utilizers to Wasfaty services is presented in (Table 2). Almost all respondents (93%) utilized Wasfaty services during their medication prescriptions, while approximately (47.3%) of them have been prescribed more than five times via WASFATY within one year. According to

(72.8%) of the respondents the place of getting their E-prescriptions were mainly primary health care centers (PHCC). While, around half of the respondents (52.7%) have not been able to prescribe their medications from the first visit to the pharmacy as less than half (44.2%) of the medications were available.

Table 2: Utilization of medication via E-prescription (WASFATY)

	Frequency	Percentage (%)
Prescribing medication via WASFATY		
Yes	273	92.9
No	21	7.1
Frequency of prescribing medication via WASFATY within one year		
Once	25	8.5
More than one	114	38.8
More than five times	139	47.3

Not applicable	16	5.4
Place of getting E-prescription		
Hospital	57	19.4
Primary Health Care Center (PHCC)	214	72.8
Specialized medical center	8	2.7
Other	5	1.7
Not Applicable	10	3.4
Prescribing medication from the first visit to the pharmacy		
Yes	139	47.3
No	155	52.7
Availability of the medication		
Yes	70	23.8
No	94	32.0
Some of them	130	44.2

Table 3 displays comparison between pharmacies that have been mostly visited with available and unavailable medications which were prescribed via the E-prescription program – WASFATY. The highest percentage of pharmacy that most of its E-medication prescriptions via (WASFATY) was available, were for Aldawa (28.5%) and Adel (23.9%) pharmacies. On contrary, pharmacies have been mostly visited with

unavailable (WASFATY) prescribed medications, the highest scores were for Aldawa (27.6%) and Adel (14.4%) pharmacies. Other pharmacies were ranging from; Lemonah, Senat, Tadawina, Almujtama, Zahra Rawdah, Tadawina Corner, Alsagaf, Alamal and Whites pharmacies (7.8%, 6.3%, 6.3%, 3.7%, 3.1%, 2.2%, 2.0%, 1.7% and 1.7%) respectively.

Table 3: Comparison between pharmacies that have available and unavailable medications via the E-prescription program – WASFATY

Pharmacy's Name	Respondents (N)		Percentage (%)		Percent of Cases % (n = 294)	
	Medication is available	Medication is not available	Medication is available	Medication is not available	Medication is available	Medication is not available
Aldawa Pharmacy	168	150	28.5	27.6	57.1	51.0
Aljazea Pharmacy	7	7	1.2	1.3	2.4	2.4
Adel Pharmacy	141	78	23.9	14.4	48.0	26.5
Senat Pharmacy	37	19	6.3	3.5	12.6	6.5
Anova Pharmacy	17	19	2.9	3.5	5.8	6.5
Zahra Rawdah Pharmacy	18	17	3.1	3.1	6.1	5.8
Alsagaf Pharmacy	12	16	2.0	2.9	4.1	5.4
Almujtama' a Pharmacy	22	20	3.7	3.7	7.5	6.8
Tadawina Pharmacy	37	53	6.3	9.8	12.6	18.0
Tadawina Corner Pharmacy	13	27	2.2	5.0	4.4	9.2
Almuhanna Pharmacy	2	3	0.3	0.6	0.7	1.0
Exier Pharmacy	2	4	0.3	0.7	0.7	1.4
Alamal Pharmacy	10	5	1.7	0.9	3.4	1.7
Dawa Alsalamah Pharmacy	6	7	1.0	1.3	2.0	2.4
Tibbi Pharmacy	5	4	0.8	0.7	1.7	1.4
Whites Pharmacy	10	5	1.7	0.9	3.4	1.7
Lemonah Pharmacy	46	44	7.8	8.1	15.6	15.0
Other Pharmacies	36	65	6.1	12.0	12.2	22.1
Total	N= 589	N= 543	100.0 %	100.0%	200.3 %	184.7%

Table 4 presents comparison between barriers and advantages to get the medications from the WASFATY program. Most of respondents have faced; availability, feasibility issues as well as other issues not listed within the choices scoring each (24.4%). While very few respondents (5.4%) have chosen that the

pharmacist asked to come at another time was a barrier for them to get their electronic medications.

Similarly, were the advantages of prescribing medication via WASFATY, the highest score was (20.7%) for each; freedom of timing in receiving

medication, the number of pharmacies participating in the WASFATY program and availability of a pharmacy participating in the e-prescription near the house

compared to fewer who have chosen the ease of obtaining medication has helped them in getting their medications.

Table 4: Comparison between barriers and advantages to get the medications from the WASFATY program

	Frequency	Percentage (%)
Barriers of prescribing medication via WASFATY		
Not all medicines are available	199	24.4
E- prescription program-WASFATY- at the pharmacy has broken	78	9.6
Receiving alternative medicines (Brand change/company name different)	96	11.8
The pharmacist asked to come at another time	44	5.4
Unavailability of a participating pharmacy in the WASFATY close to home	199	24.4
Not applicable	199	24.4
Advantages of prescribing medication via WASFATY		
Freedom of timing in receiving medication	162	20.7
No waiting time needed	127	16.3
Fast access to obtain the medication	91	11.7
Ease of obtaining medication	77	9.9
The number of pharmacies participating in the WASFATY program	162	20.7
Availability of a pharmacy participating in the e-prescription near the house	162	20.7

4.3 Chi-square test

Satisfaction with the Experience of Implementing the Electronic Prescription ‘WASFATY’

Table 6.1: The relationship between user’s satisfaction and sex category

Gender	Item	Response	What’s your gender?		Total
			Male	Female	
Item 16: ‘Satisfaction’ How do you rate your level of satisfaction with the experience of implementing the electronic prescription ‘WASFATY’	Excellent	Count	33	17	50
		%	66.0%	34.0%	100.0%
	Very good	Count	21	10	31
		%	67.7%	32.3%	100.0%
	Good	Count	29	0	29
		%	100.0%	0.0%	100.0%
	Above Moderate	Count	32	8	40
		%	80.0%	20.0%	100.0%
	Moderate	Count	9	9	18
		%	50.0%	50.0%	100.0%
	Below Moderate	Count	19	5	24
		%	79.2%	20.8%	100.0%
	Acceptable	Count	15	3	18
		%	83.3%	16.7%	100.0%
	Poor	Count	10	5	15
		%	66.7%	33.3%	100.0%
Very Poor	Count	12	1	13	
	%	92.3%	7.7%	100.0%	
Extremely Poor	Count	51	5	56	
	%	91.1%	8.9%	100.0%	
Total	Count	231	63	294	
	%	78.6%	21.4%	100.0%	
Pearson Chi-Square	Value	Sig	Cramer’s V	Decision	
	31.701	0.000	0.328	Supported	

Table 6.1 investigates the relationship between Demographic Characteristics and users’ satisfaction of the electronic prescription ‘WASFATY’. The first question explored was: “Is there a difference in the satisfaction level with the electronic prescription ‘WASFATY’ between males and females?”. The first hypothesis (H1) states: “There are significant differences in users’ satisfaction level of the electronic prescription ‘WASFATY’ due to their gender.” In order to test the first hypothesis, a Chi-square test (χ^2) was

carried out to analyze the results of the electronic prescription user’ responses and to verify the validity of the hypothesis. The results of the chi-square presented in (Table 6.1) and the value obtained is χ^2 (9, N= 294) = 31.70, with p-value = 0.000 < 0.05, indicating that there was a significant relationship between users’ satisfaction level and their gender. Furthermore, the effect size has been calculated because the chi-square is significant. The result of the Cramer’s test was obtained

$V = 0.328 < 0.30$, and it corresponds to a large effect

size (Cohen, 1988).

Table 6.2: The relationship between user's satisfaction and age category

Age			How old are you?			
Item	Response		18 – 35	36 - 45	46 and above	Total
Item 16: 'Satisfaction' How do you rate your level of satisfaction with the experience of implementing the electronic prescription 'WASFATY'	Excellent	Count	20	12	18	50
		%	40.0%	24.0%	36.0%	100.0%
	Very good	Count	7	10	14	31
		%	22.6%	32.3%	45.2%	100.0%
	Good	Count	5	14	10	29
		%	17.2%	48.3%	34.5%	100.0%
	Above Moderate	Count	8	13	19	40
		%	20.0%	32.5%	47.5%	100.0%
	Moderate	Count	5	7	6	18
		%	27.8%	38.9%	33.3%	100.0%
	Below Moderate	Count	4	9	11	24
		%	16.7%	37.5%	45.8%	100.0%
	Acceptable	Count	6	7	5	18
		%	33.3%	38.9%	27.8%	100.0%
Poor	Count	3	2	10	15	
	%	20.0%	13.3%	66.7%	100.0%	
Very Poor	Count	1	4	8	13	
	%	7.7%	30.8%	61.5%	100.0%	
Extremely Poor	Count	5	17	34	56	
	%	8.9%	30.4%	60.7%	100.0%	
Total	Count	64	95	135	294	
	%	21.8%	32.3%	45.9%	100.0%	
Pearson Chi-Square	Value	Sig		Cramer's V	Decision	
	29.499	0.043		0.224	Supported	

Table 6.2 the results of the chi-square value obtained is $\chi^2 (18, N= 294) = 29.499$, with p-value = $0.043 < 0.05$, indicating that there was a significant relationship between users' satisfaction level with electronic prescription program 'WASFATY' and their

age. Furthermore, the effect size has been calculated because the chi-square is significant. The result of the Cramer's test was obtained $V = 0.224 < 0.30$, and it corresponds to a medium effect size (Cohen, 1988).

Table 6.3: The relationship between user's satisfaction and Marital Status

Marital Status			What's your marital status?		Total
Item	Response		Not Married	Married	
Item 16: 'Satisfaction' How do you rate your level of satisfaction with the experience of implementing the electronic prescription 'WASFATY'	Very good	Count	16	65	81
		%	19.8%	80.2%	100.0%
	Good	Count	6	23	29
		%	20.7%	79.3%	100.0%
	Above Moderate	Count	8	32	40
		%	20.0%	80.0%	100.0%
	Moderate	Count	3	15	18
		%	16.7%	83.3%	100.0%
	Below Moderate	Count	4	20	24
		%	16.7%	83.3%	100.0%
	Acceptable	Count	5	13	18
		%	27.8%	72.2%	100.0%
	Poor	Count	5	23	28
		%	17.9%	82.1%	100.0%
Very Poor	Count	6	50	56	
	%	10.7%	89.3%	100.0%	
Total	Count	53	241	294	
	%	18.0%	82.0%	100.0%	
Pearson Chi-Square	Value	Sig	Cramer's V	Decision	
	3.646	0.820	0.111	Not Supported	

Table 6.3 the results of the chi-square value were obtained is χ^2 (17, N= 294) = 3.646, with p-value = 0.820 greater than 0.05, indicating that there was no significant relationship between users' satisfaction level and their marital status. In other words, the users of the

electronic prescription program 'WASFATY' involved in this study have a similar satisfaction level with e-service, and it can be concluded that their marital status had no impact on their satisfaction level.

Table 6.4: The relationship between user's satisfaction and Educational Level

Educational Level		What's your level of education?			Total
Item	Response		High School and Under	Bachelor and Postgraduate	
Item 16: 'Satisfaction' How do you rate your level of satisfaction with the experience of implementing the electronic prescription 'WASFATY'	Excellent	Count	19	31	50
		%	38.0%	62.0%	100.0%
	Very good	Count	5	26	31
		%	16.1%	83.9%	100.0%
	Good	Count	13	16	29
		%	44.8%	55.2%	100.0%
	Above Moderate	Count	11	29	40
		%	27.5%	72.5%	100.0%
	Moderate	Count	10	8	18
		%	55.6%	44.4%	100.0%
	Below Moderate	Count	11	13	24
		%	45.8%	54.2%	100.0%
	Acceptable	Count	2	16	18
		%	11.1%	88.9%	100.0%
Poor	Count	6	9	15	
	%	40.0%	60.0%	100.0%	
Very Poor	Count	5	8	13	
	%	38.5%	61.5%	100.0%	
Extremely Poor	Count	22	34	56	
	%	39.3%	60.7%	100.0%	
Total	Count	104	190	294	
	%	35.4%	64.6%	100.0%	
Pearson Chi-Square	Value	Sig	Cramer's V	Decision	
	16.952	0.049	0.240	Supported	

Table 6.4 the results of the chi-square value were obtained is χ^2 (9, N= 294) = 16.952, with p-value = 0.049 < 0.05, indicating that there was a significant relationship between users' satisfaction level and their educational level. Furthermore, the effect size has been calculated because the chi-square is significant. The result of the Cramer's test was obtained V = 0.240 < 0.30, and it corresponds to a medium effect size (Cohen, 1988).

4.4 Ethical Approval

The approval letter was issued by decision No. (H-04-Q-001/ 607-44-2085) on the 12 of Sep., 2022 from Central IRB-MOH (Department of research, Qassim health affairs, Saudi Arabia).

4.5 CONCLUSION

A total of 294 beneficiaries participated in the study. Around three-quarters (78.6%) of them were male compared to an approximate quarter (21.4%) female, and the highest age group were between the ages of 36 to 45. The vast majority were married (82.0%), and slightly more than half (55.4%) were

educated to bachelor level and above. Almost (43.5%) of the respondents were having 4 to 6 members in their family. Meanwhile, nearly 60% of the respondents were not having any chronic diseases. Result of the relationship between Demographic Characteristics and beneficiaries' satisfaction towards the electronic prescription 'WASFATY'. There are significant differences in beneficiaries' satisfaction level of the electronic prescription 'WASFATY', there was a significant relationship between beneficiaries' satisfaction level and their gender p-value = 0.000, age p-value = 0.043, and educational level p-value = 0.049, While there is no relationship between Marital Status and satisfaction towards the electronic prescription 'WASFATY' p-value = 0.820. The level of satisfaction towards "WASFATY" E-Prescriptions Service provided by community Pharmacies in Qassim Region is (2.92) out of 5. 58.4% (3.235). Aspects related to the pharmacy was divided to two points, the barriers consist of six domains, not all medicines are available (24.4%), E- prescription program- WASFATY- at the pharmacy has broken (9.6%), Receiving alternative medicines (Brand change/company name different) (11.8%), The pharmacist asked to come at another time(5.4%),

Unavailability of a participating pharmacy in the WASFATY close to home (24.4%), Not applicable (24.4%), and the advantages consist of six domains, Freedom of timing in receiving medication (20.7%), No waiting time needed (16.3%), Fast access to obtain the medication (11.7%), Ease of obtaining medication (9.9%), The number of pharmacies participating in the WASFATY program (20.7%), Availability of a pharmacy participating in the e-prescription near the house (20.7%).

4.6 RECOMMENDATIONS

The majority of the participated patients and beneficiaries reported a negative impact of E-Prescriptions Service on efficiency of the service and availability of the medication. So, this study recommends for urgent need to implement a comprehensive control and oversight for all the participated community pharmacies in WASFATY" E-Prescriptions Service to achieve a sustainable healthcare service with availability of the medication for patients. Problems face with Wasfaty has to be resolved urgently. Conducting the study in several regions around Saudi Arabia will help assess different community concerns about and barriers and limitations of the Wasfaty service.

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