



A Study On Consumer Usage And Adaptation Of E-Pharmacy In Gujarat

Parmar Nikunj, Modi Isha, Paresh Patel

1Student of MBA, Department of Faculty of Management Studies, Parul University, Vadodara,
Gujarat- 391760

2Student of MBA, Department of Faculty of Management Studies, Parul University, Vadodara,
Gujarat- 391760

3Assistant Professor, Department of Faculty of Management Studies, Parul University, Vadodara,
Gujarat- 391760

Abstract

E-pharmacy has emerged as a significant aspect of the healthcare industry, offering convenience and accessibility to consumers. This study explores consumer behaviour, usage patterns, and the factors influencing the adaptation of e-pharmacy services in Gujarat. The research highlights the benefits and challenges associated with e-pharmacies while providing insights into strategies for improving their adoption. The study employs a mixed-method research approach, analysing survey responses and industry trends. Findings indicate that digital literacy, pricing advantages, and regulatory frameworks significantly impact consumer adoption. This research contributes to the growing discussion on digital healthcare adoption in India.

Keywords: E-pharmacy, Consumer Behaviour, Digital Healthcare, Online Pharmacy, Gujarat, Adaptation, E-commerce Healthcare

1. Introduction

1.1 Background

The pharmaceutical industry is undergoing a digital transformation, with online pharmacies revolutionizing how consumers access medications. E-pharmacies enable patients to order medicines remotely, ensuring doorstep delivery and eliminating the need for physical store visits. The COVID-19 pandemic further accelerated the shift towards digital healthcare services, increasing consumer reliance on e-pharmacies.

1.2 Problem Statement

Despite the growing presence of e-pharmacies, adoption rates in Gujarat vary due to factors such as regulatory concerns, trust issues, and technological barriers. The study aims to investigate the key drivers and barriers influencing consumer adoption.

1.3 Objectives

- To analyse the factors influencing consumer adaptation to e-pharmacy services in Gujarat.
- To evaluate the benefits and challenges associated with e-pharmacies.
- To provide recommendations for improving consumer adoption of digital pharmacy services.

1.4 Research Hypothesis

H1: Consumers who are digitally literate are more likely to adopt e-pharmacy services.

H2: Competitive pricing and discounts influence consumer decisions to switch to e-pharmacies.

H3: Concerns about product authenticity and data security limit the adoption of e-pharmacy services.

2. Literature Review

E-pharmacy is a rapidly evolving sector driven by technological advancements and changing consumer behaviors. Studies suggest that digital literacy and trust in online platforms significantly impact e-pharmacy adoption. Regulatory policies, data privacy, and counterfeit concerns are commonly discussed barriers. This section synthesizes existing literature on e-pharmacy adoption, consumer trust, and regulatory challenges in India.

Additionally, global comparisons highlight how countries like the U.S. and China have implemented robust regulatory frameworks to streamline e-pharmacy services. By analysing international best practices, Indian policymakers and businesses can adopt similar approaches to enhance consumer trust and ensure compliance.

3. Research Methodology

3.1 Study Design

This research follows a mixed-method approach, combining quantitative surveys and qualitative interviews.

3.2 Data Collection

- **Primary Data:** Survey responses from 200 consumers in Gujarat.
- **Secondary Data:** Industry reports, academic papers, and government policies.

3.3 Sampling Techniques

- **Population:** Residents of Gujarat who have used or are aware of e-pharmacy services.
- **Sampling Unit:** Individual consumers.
- **Sample Size:** 200 respondents.
- **Sampling Methods:** Stratified random sampling to ensure demographic diversity.

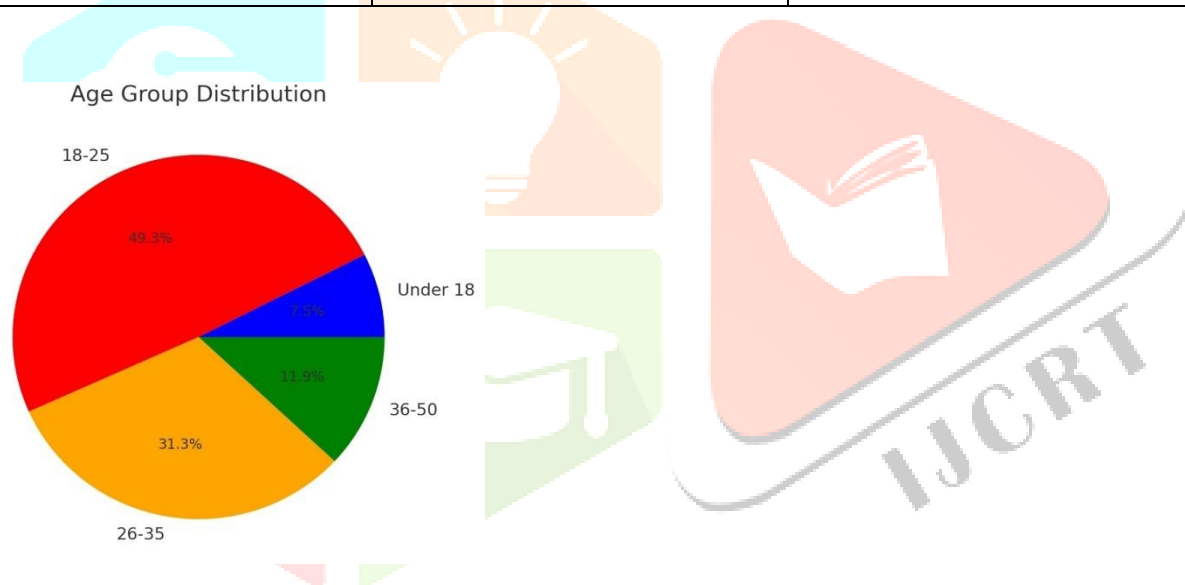
3.4 Data Analysis

Data is analysed using **SPSS** for statistical testing and trend identification. Qualitative responses are thematically categorized.

TABLE 1: AGE

Awareness about the consumer adoption in e-pharmacy among the population with age difference as old consumer are less aware than the younger age group.

Description	Frequency	Percentage
Under 18 years	15	7.5%
18-25 years	99	49.3%
26-35 years	63	31.3%
36-50 years	24	11.9%



INTERPRETATION:

- 7.5% of the respondents are under the age group 18 years
- 49.3% of the respondents are the age group 18 to 25 years
- 31.3% of the respondents are the age group 26 to 35 years
- 11.9% of the respondents are the age group 36 to 50 years

TABLE 2: GENDER

Gender the respondents to male responses greater than the female responses.

GENDER	Frequency	RESPONCES
Male	128	63.4%
Female	74	36.6%

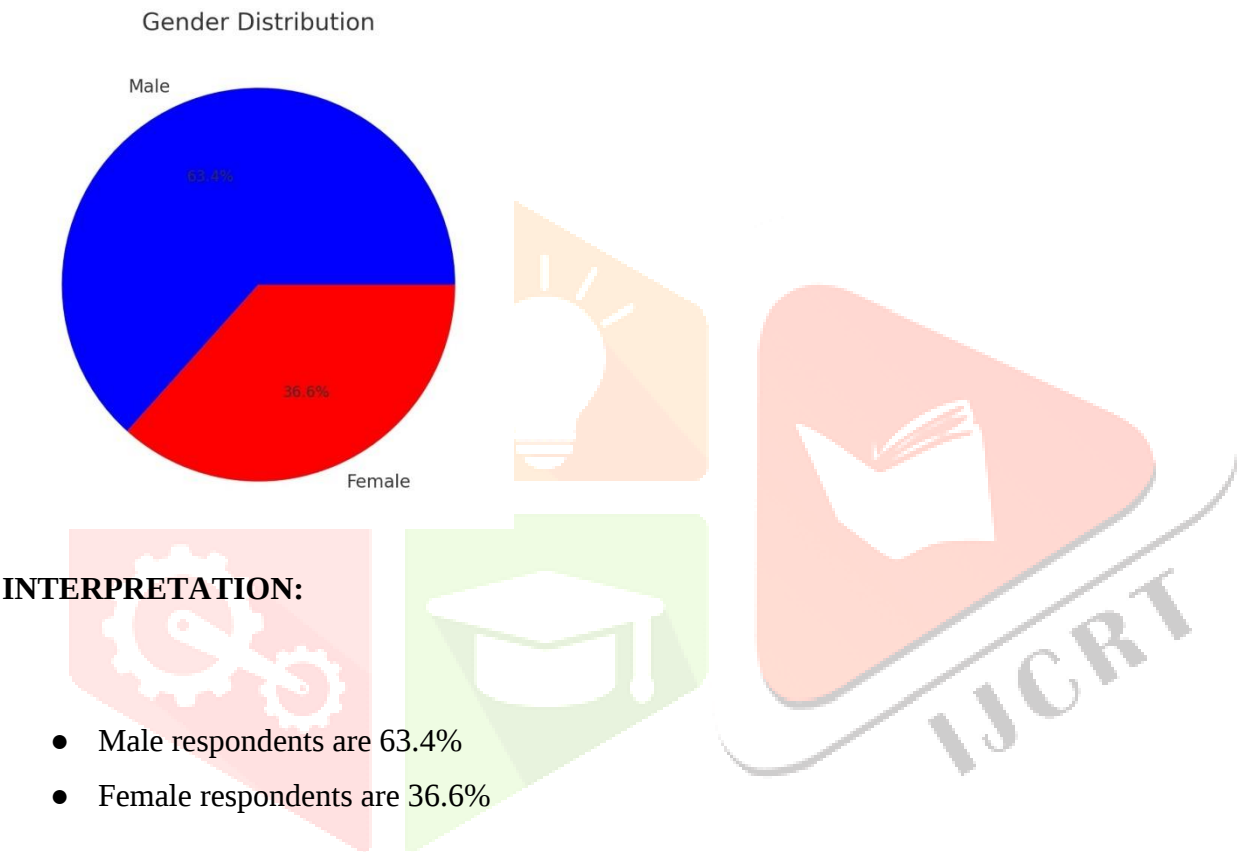
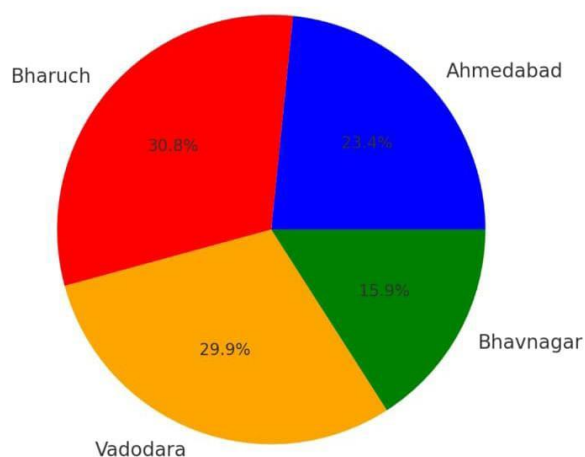


TABLE 3: LOCATION

Awareness about the location in more aware the people in Vadodara.

LOCATION	Frequency	PERCENTAGE
Ahmedabad	47	23.4%
Vadodara	62	30.8%
Bharuch	60	29.9%
Jamnagar	32	15.9%

Location Distribution

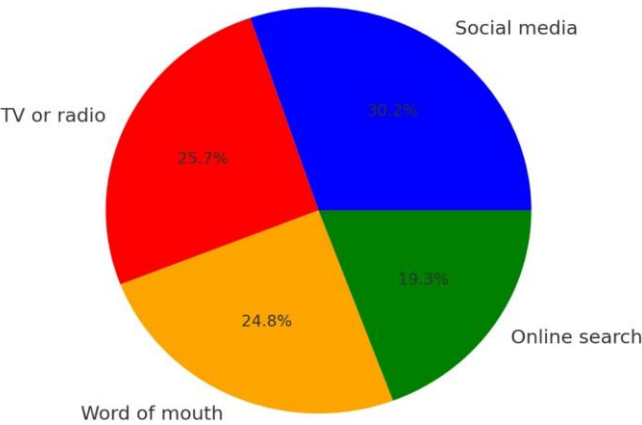
**INTERPRETATION:**

- Ahmedabad city respondents 23.4%
- Vadodara city respondents 30.8%
- Bharuch city respondents 29.9%
- Jamnagar city respondents 15.9%

TABLE 4: HOW DID YOU LEARN E-PHARMACY SERVICE:

APP	Frequency	PERCENTAGE
Social media	61	30.2%
Tv or radio	52	25.7%
Word of mouth	50	24.8%
Online search	39	19.3%

How People First Learned About E-Pharmacy Services

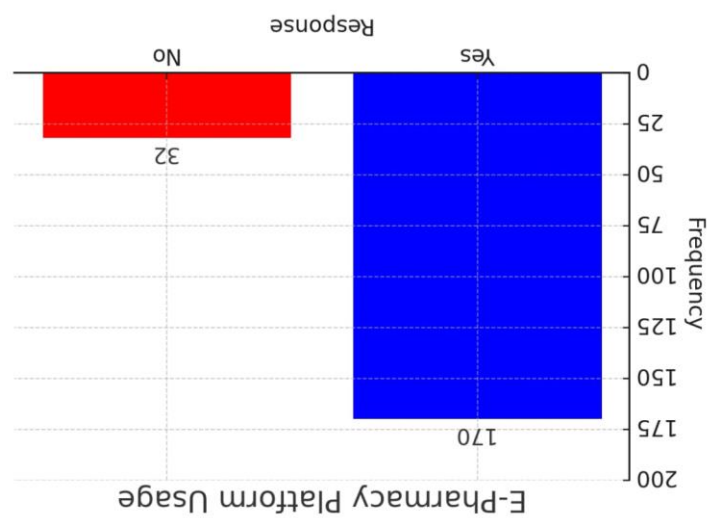


Interpretation:

- Social media respondents 30.2%
- Tv or radio respondents 25.7%
- Word of mouth respondents 24.8%
- Online search respondents 19.3%

TABLE 5: HAVE YOU EVER USED AN E-PHARMACY PLATFORM TO PURCHASE MEDICATION?

USE E-PHARMACY PLATFORM	Frequency	PERCENTAGE
YES	170	84.2%
NO	32	15.8%



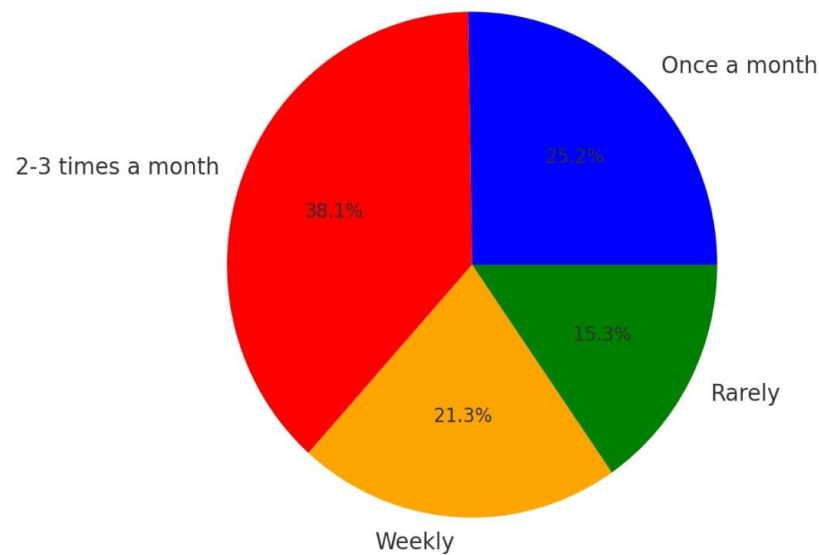
INTERPRETATION:

- E-pharmacy online uses respondents 66.5%
- E-pharmacy not uses respondents 19.5%

TABLE 6: HOW OFTEN DO YOU USE E-PHARMACY SERVICE?

use	Frequency	Percentage
Once a month	51	25.2%
2-3 times a month	77	38.1%
Weekly	43	21.3%
rarely	31	15.3%

How Often Do You Use E-Pharmacy Services?



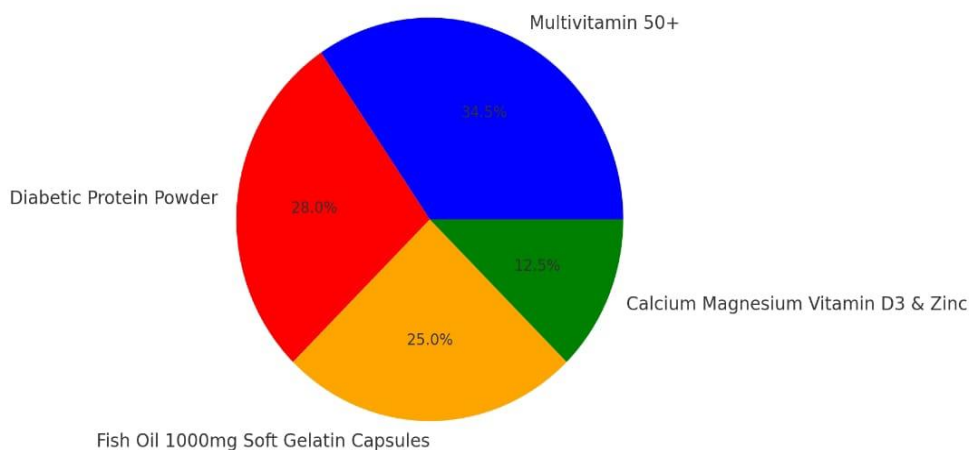
INTERPRETATION:

- Once a month respondents 22%
- 2-3 time a month respondents 25.4%
- Weekly respondents 17.8%
- Rarely respondents 34.7%

TABLE 7: WHICH TYPE OF PRODUCT PURCHASE FROM AN E-PHARMACY?

PRODUCT NAME	Frequency	PERCENTAGE
Multivitamin	69	34.5%
Diabetes	56	28%
Fish oil	50	25%
Calcium magnesium vit d3 and zinc	25	12.5%

Types of Products Purchased from an E-Pharmacy

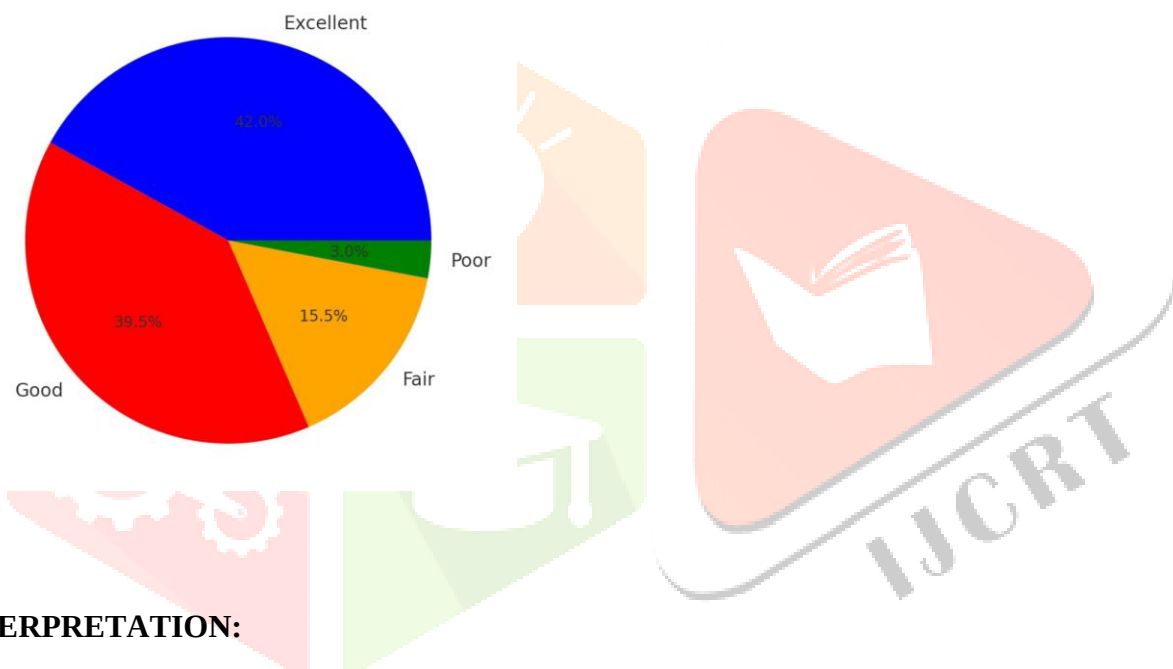
**INTERPRETATION:**

- Multivitamin tab respondents 34.5%
- Diabetes tab respondents 28%
- Fish oil tab respondents 25%
- Calcium magnesium vitamin D3 and zinc tab respondents 12.5%

TABLE 8: HOW WOULD YOU RATE YOUR OVERALL EXPERIENCE WITH E-PHARMACY SERVICES?

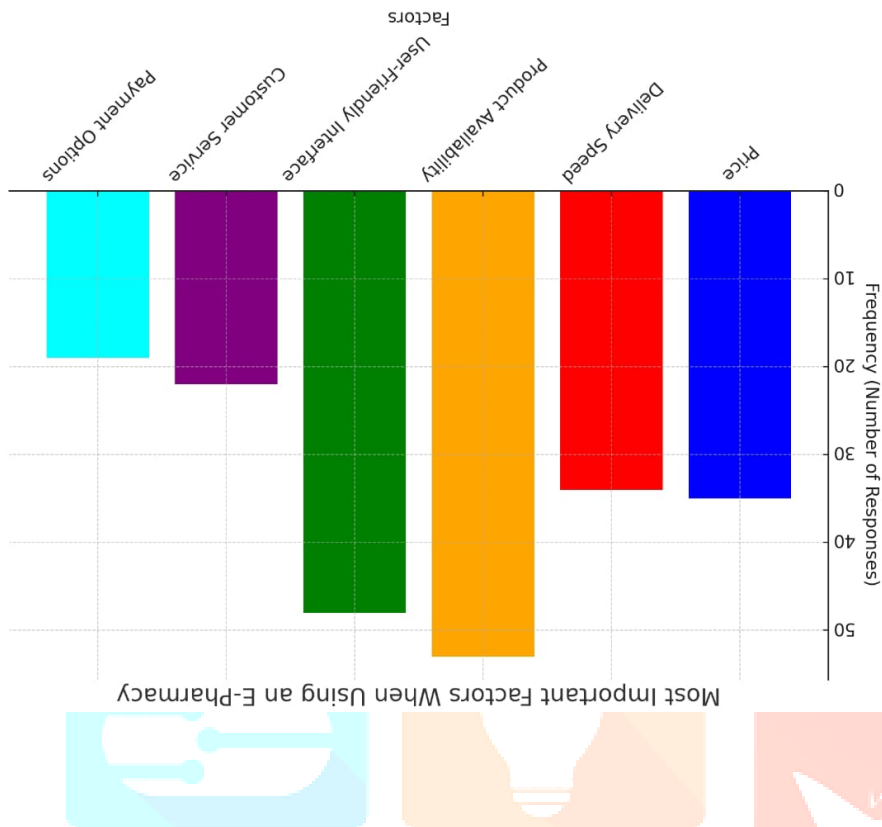
Experience	Frequency	Percentage
Excellent	84	42%
Good	79	39.5%
Fair	31	15.5%
poor	6	3%

Overall Experience with E-Pharmacy Services

**INTERPRETATION:**

- The survey results show that most users are satisfied with their experience using E-pharmacy services.
- 42% rated their experience as excellent, while 39.5% found it good. Only 15.5% of respondents gave a fair rating, and 3% the remaining portion had a poor experience.
- This suggests that overall, people are generally happy with the service provided by E-pharmacies.

TABLE 9: WHICH FACTORS DO YOU FIND MOST IMPORTANT WHEN USING AN E-PHARMACY?

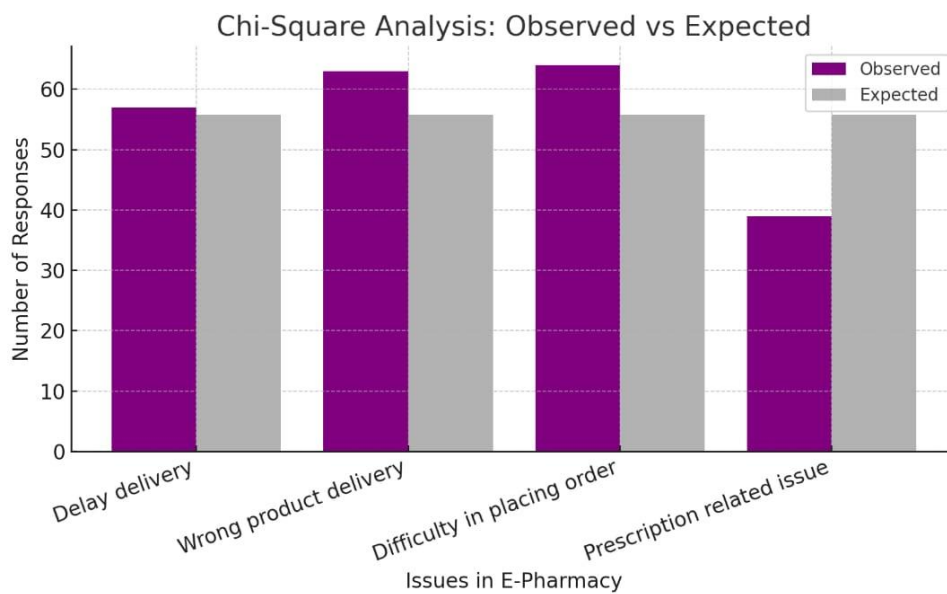


INTERPRETATION:

This data according to my survey represents the factors most important to users when using an E-pharmacy, with the provided numbers as follows:

- **Product availability** – 26.4%
- **Price** – 17.4%
- **Delivery speed** – 16.9%
- **User-friendly interface** – 23.9%
- **Customer service** – 10.9%
- **Payment options** – 9.5%

TABLE 10: HAVE YOU EXPERIENCED ANY OF THE FOLLOWING ISSUE WHILE USING AN E-PHARMACY?



INTERPRETATION:

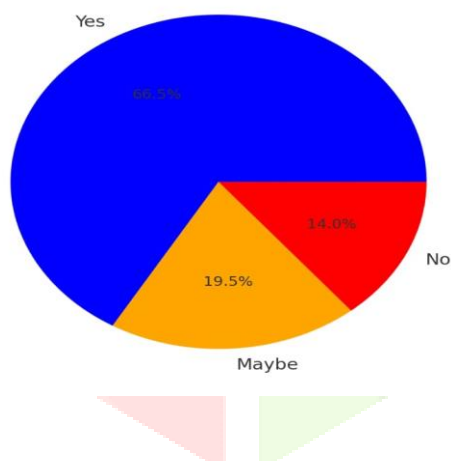
This data according to my survey represents the issues experienced by users while using an E-pharmacy, with the provided numbers as follows:

- **Delayed delivery** – 31%
- **Wrong product delivered** – 34.2%
- **Difficulties in placing an order** – 34.8%
- **Prescription-related issues** – 21.2%

TABLE 11: WOULD YOU RECOMMEND E-PHARMACY SERVICE TO OTHERS?

USE E-PHARMACY PLATFORM	Frequency	PERCENTAGE
YES	133	66.5%
NO	28	19.5%
May be	39	14%

Would You Recommend E-Pharmacy Services to Others?



INTERPRETATION:

- E-pharmacy online uses respondents 66.5%
- E-pharmacy not uses respondents 19.5%

4. Results and Discussion

4.1 Consumer Awareness and Usage

Survey results indicate that **68% of respondents** are aware of e-pharmacy services, but only **40% actively use them**. Key adoption drivers include convenience (80%) and discounts (65%), while barriers include trust issues (50%) and regulatory concerns (45%).

4.2 Pricing and Discounts

Competitive pricing is a significant driver, with **73% of consumers** preferring e-pharmacies for cost savings. However, concerns over hidden charges and delayed deliveries persist.

4.3 Trust and Security Concerns

More than **50% of respondents** expressed concerns over data security and counterfeit medicines. Strengthening consumer trust through transparent policies and digital security measures can enhance adoption rates.

4.4 Regulatory Challenges

Government regulations and prescription authentication requirements pose challenges to e-pharmacy businesses. Implementing a standardized framework for online pharmacy operations can address these concerns.

4.5 Future Trends in E-Pharmacy

With technological advancements, e-pharmacies are expected to integrate artificial intelligence (AI) and blockchain for prescription verification and secure transactions. AI-driven chatbots can enhance customer support, while blockchain ensures transparency in the supply chain, reducing the risk of counterfeit medications.

5. Conclusion and Future Scope

E-pharmacy services have the potential to transform healthcare accessibility in Gujarat. While pricing and convenience drive adoption, trust and regulatory barriers hinder growth. Future research should explore the impact of AI-driven customer support and blockchain-based prescription verification in enhancing e-pharmacy adoption. Additionally, longitudinal studies tracking the evolution of e-pharmacy regulations and consumer behavior over time would provide deeper insights into this rapidly evolving sector.

6. References (APA Style)

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