King Khalid University

System Analysis And Design

(Medicine Scanner)

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INTRODUCTION

Each year, in the Saudi Arabia kingdom alone, 2500 people die due to a medication error[1]. Additionally, hundreds of thousands of other patients experience but often do not report an adverse reaction or other complications related to a medication. major consequence of medication errors is that it leads to decreased patients satisfaction and a growing lack of trust in the healthcare system.

The most common reasons for errors include failure to communicate drug orders, illegible handwriting, wrong drug selection chosen from a drop-down menu, confusion over similarly named drugs, confusion over similar packaging between products, or errors involving dosing units or weight. Medication errors may be due to human errors, but it often results from a flawed system with inadequate backup to detect mistakes.[2][3].

Our project goal is for analysis and develop mobile application and desktop for preventing a medication error .

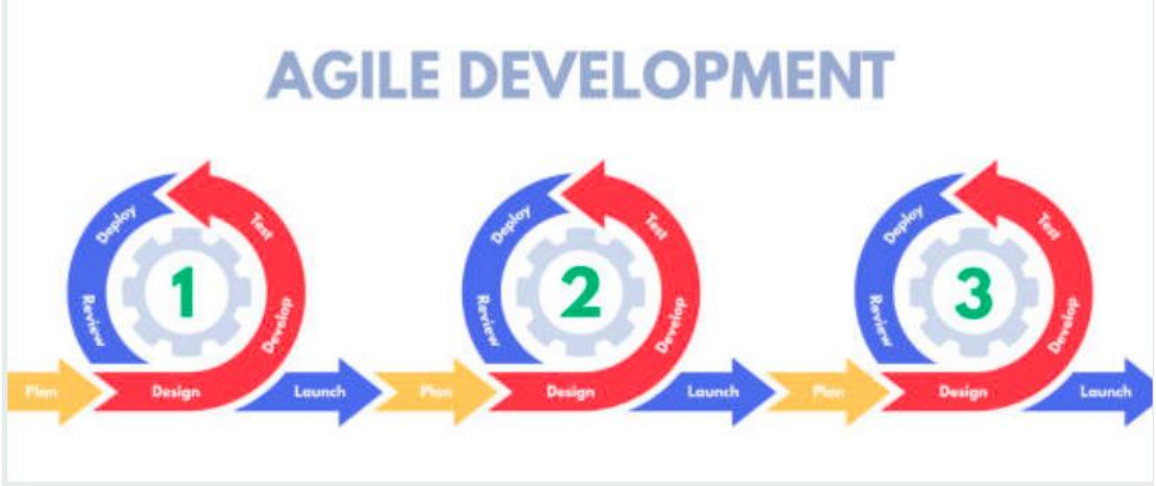
Problem definition

Medication errors are most common at the ordering or prescribing stage. Typical errors include the healthcare provider writing the wrong medication, wrong route or dose, or the wrong frequency.

Based in so, this research project aims to fill out the previously mentioned gap. It can be achieved by developing an application for preventing the medication errors.

Methodology

Because we don't know all of the information beforehand, the agile method is the best fit for our project. The app data aren't static. Using this paradigm, the project can be iterated and increased until it is free of errors and flaws.



Agile methodology

OBJECTIVE

This project aims to make changes in the medical sector by:

1.1 Reading the information of the medicine is going to decrease the percentage of people taking a wrong medicine.
1.2 Helps to solve the mistakes made in medical treatment.
1.3 Avoid mix-ups between similar medications.
1.4 Helps to take medication at it's tight time
1.5 Promote/encourage the safe use and understanding of technology in the prevention of medication errors

Obstacles

The limitations set by the lack of data .as well as and studies continues to prove to be an obstacle for any person or organization wanting to prove if our application have or have not effected patient safety errors with medication dosages.

Mission

The mission of our application for on Medication Error is to maximize the safe use of medications and to increase awareness of medication errors through open communication, increased reporting and promotion of medication error prevention strategies.

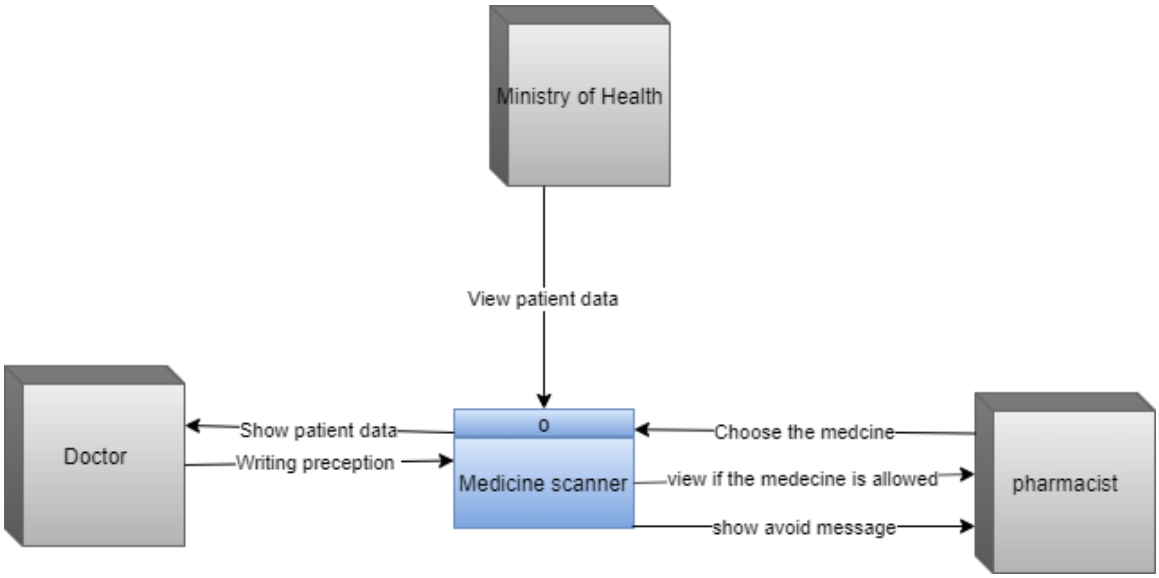
Vision

No patient will be harmed by a medication error.

Scope/ environment

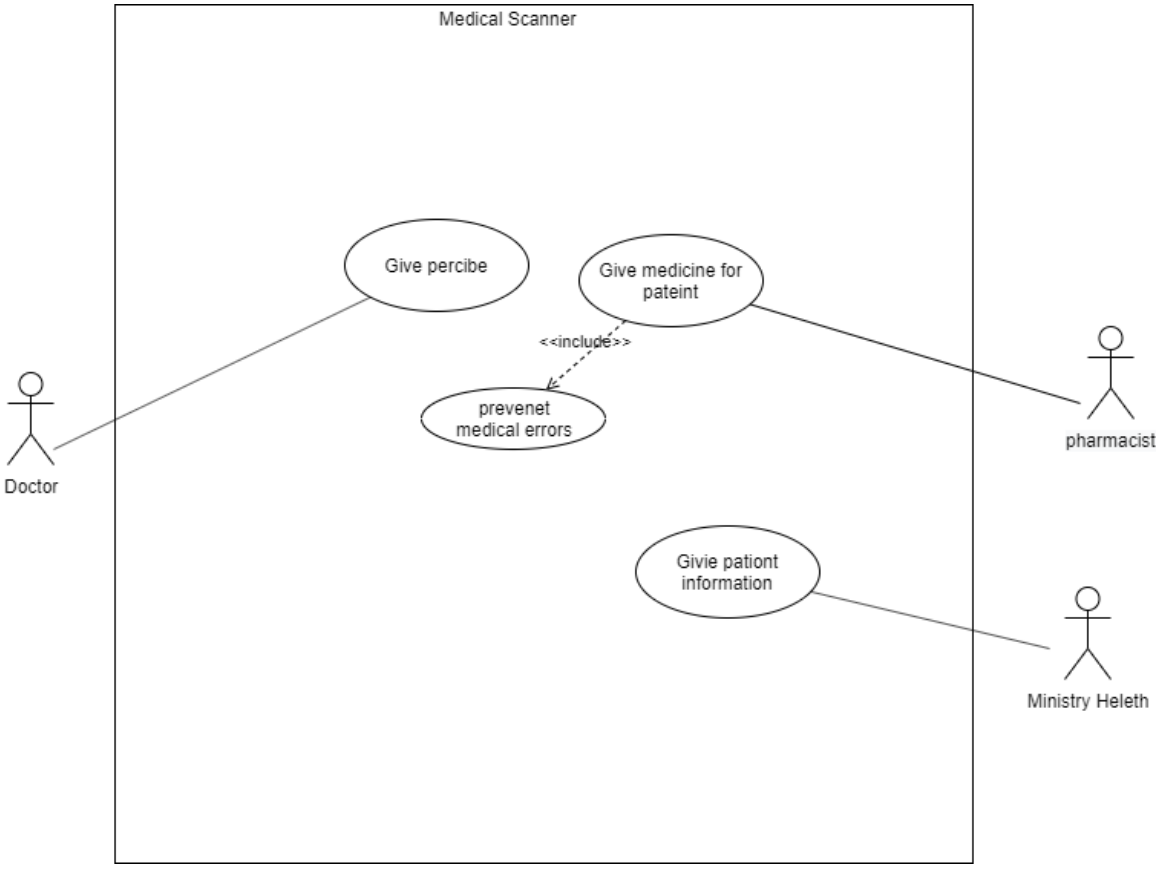
The research project will finally come up with an application that prevent medicine errors . The application will target the cities in Kingdom of Saudi. The vital role of the application is for patients when go to the pharmacy and preventing the medical error .

Context diagram

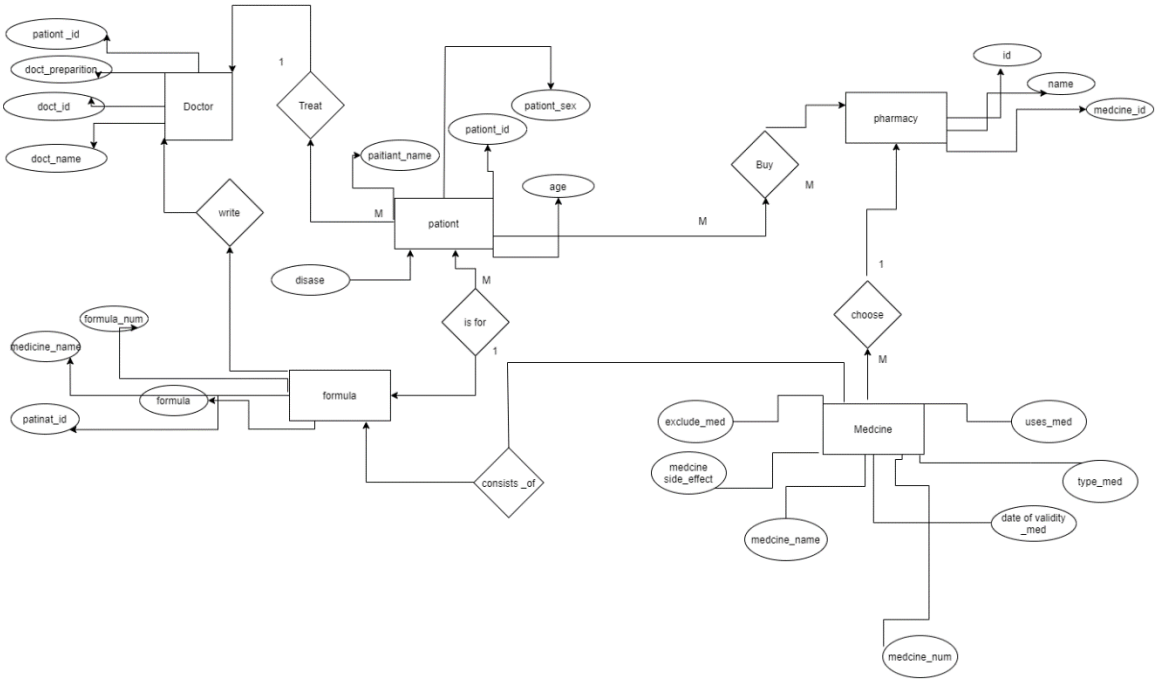


Context diagram

Usecase diagram :



ERD



CONCLUSION

This section provides an overview of the system and an introduction to it. It contains information about the system's history, difficulties, objectives, system definition, scope, goals, culture, and obstacles. This is the step of analysis. It is a critical phase in the system's analysis. The project's data will be gathered in order to graphically depict the system's processes, which will need the creation of various schemes such as use cases ,context diagram and ERDs.

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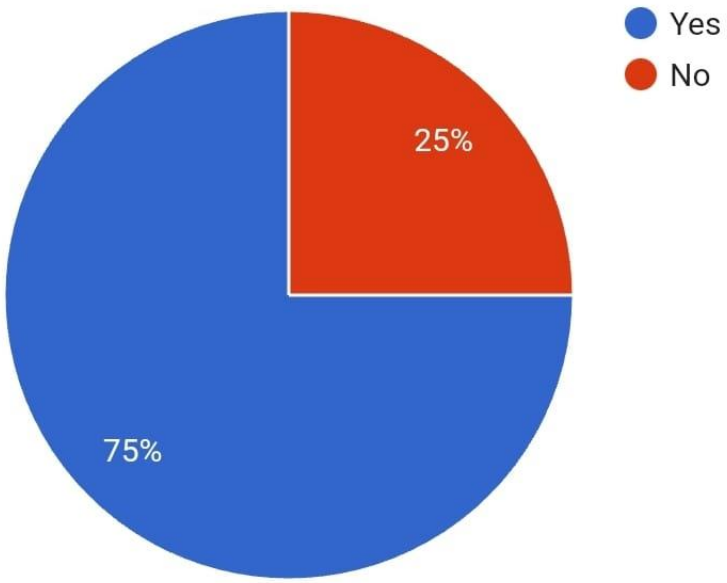
نسخ

have you or someone you know ever experienced mix - ups ? with two similar medications

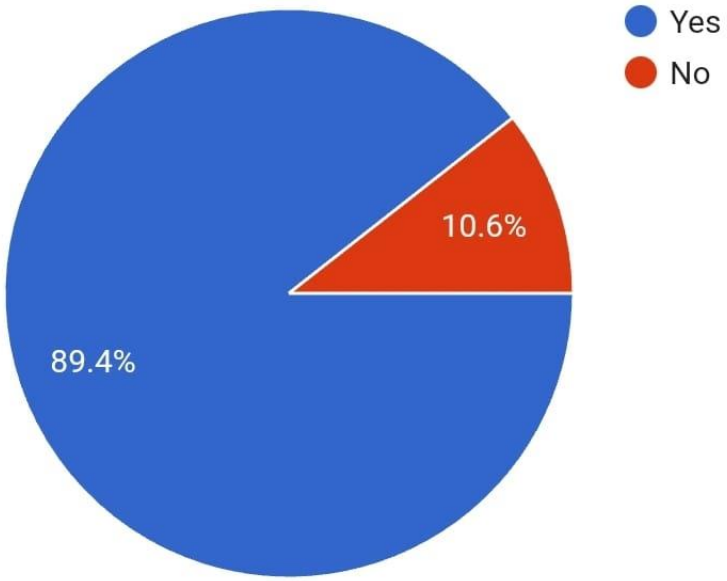
104 ردود



نسخ

Do you want to inquire from the pharmacist about your medication and how to use it ?using your phone

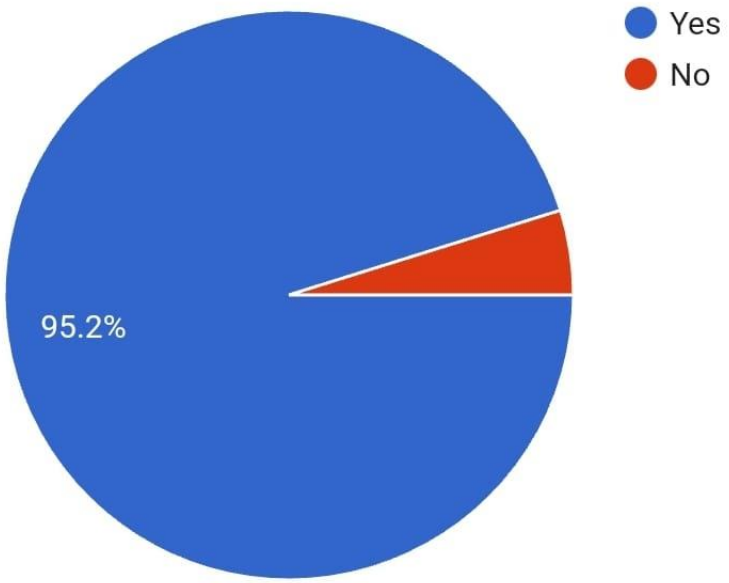
104 ردود



نسخ

do you think the medication scan system can help people who cannot see clearly?

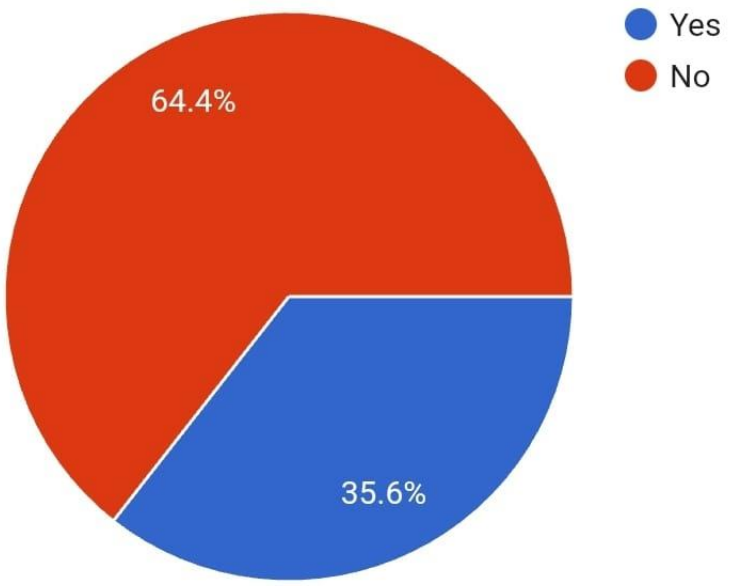
104 ردود



نسخ

have you ever forgot or didn't know when to take your medication?

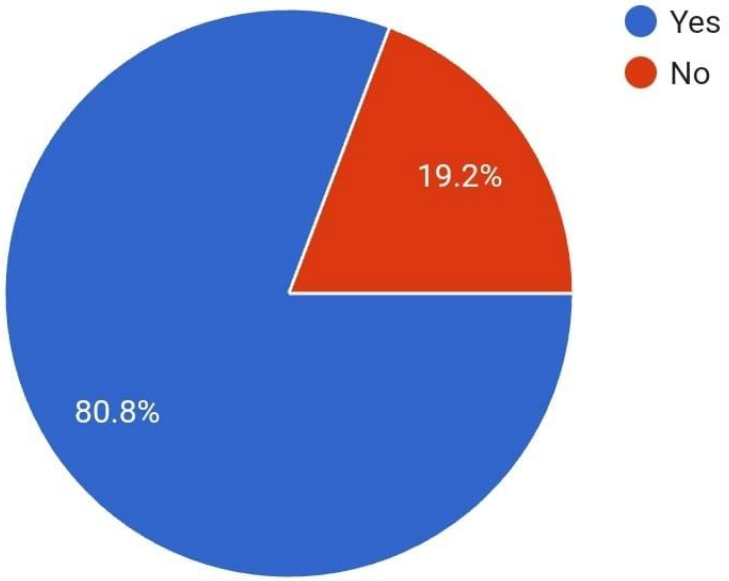
104 ردود



نسخ

Have you ever used an expired medicine?

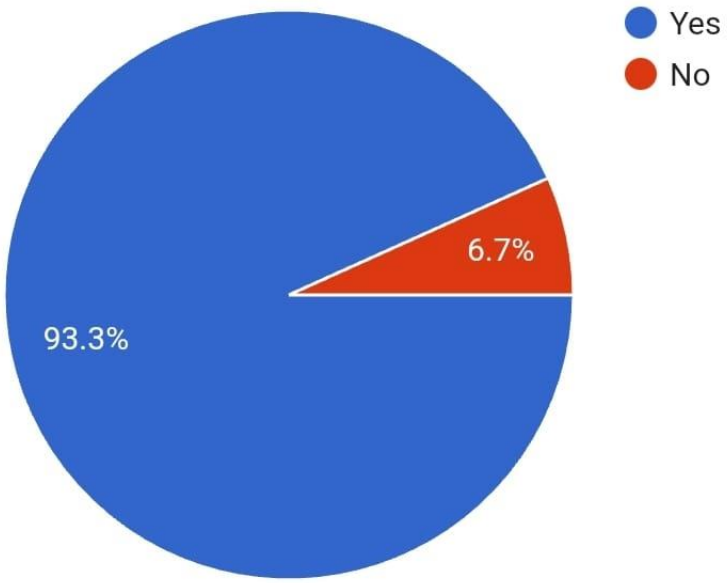
104 ردود



نسخ

Do you support the idea of a medicine scanner?

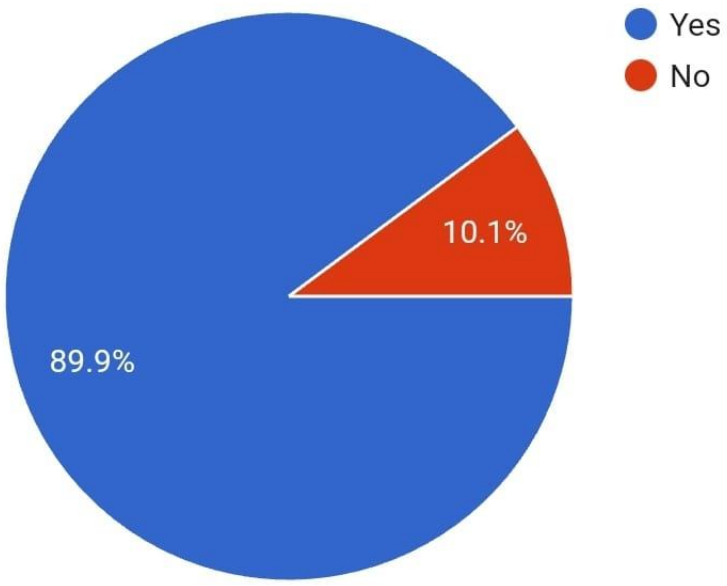
104 ردود

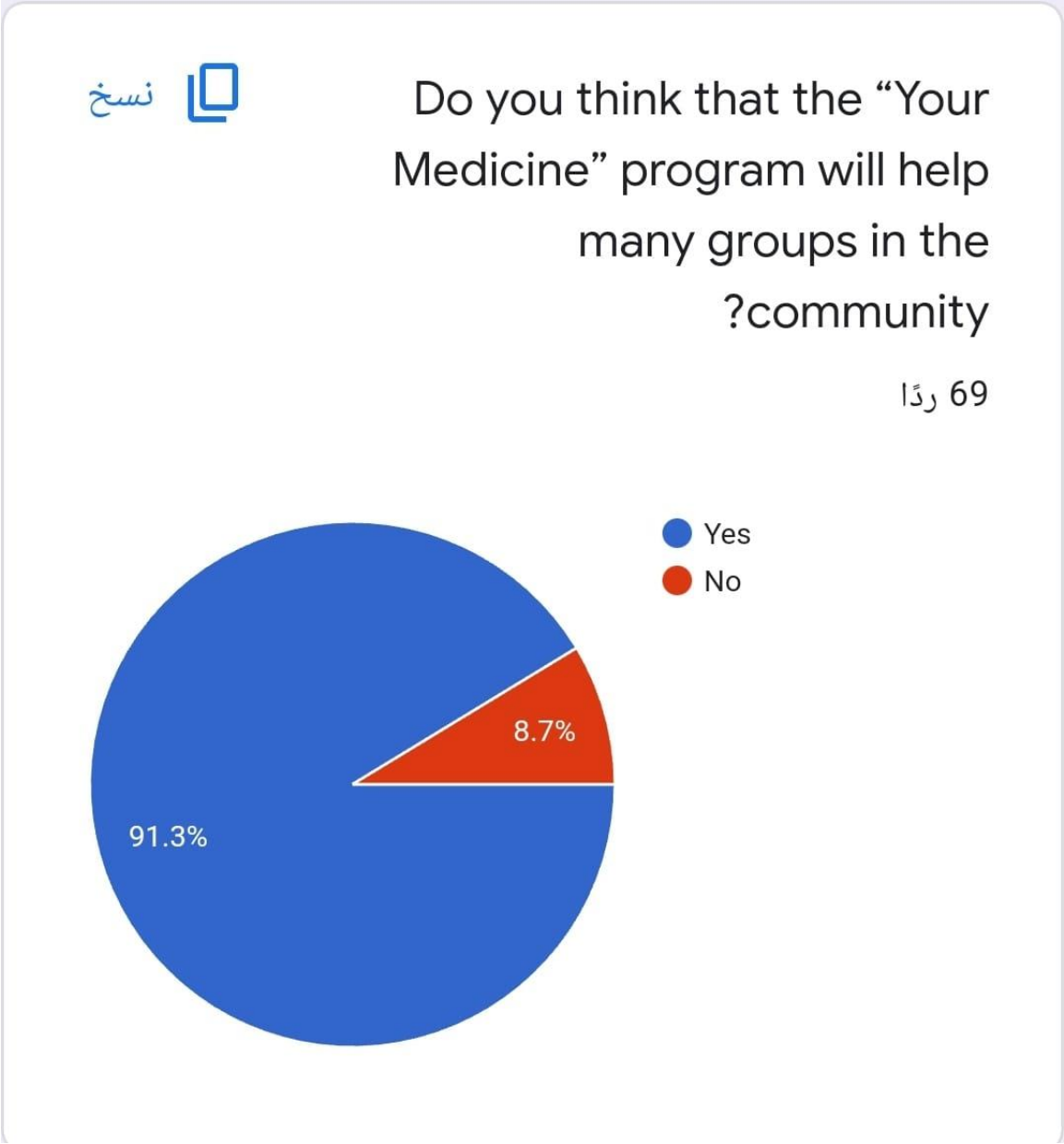


نسخ

Are there some over-the-counter medicines that you need to see their prescription for?

69 ردًا





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2- Ibrahim OM, Ibrahim RM, Meslamani AZA, Mazrouei NA. Dispensing errors in community pharmacies in the United Arab Emirates: investigating incidence, types, severity, and causes. Pharm Pract (Granada). 2020 Oct-Dec;18(4):2111. [PMC free article] [PubMed]
3- Zirpe KG, Seta B, Gholap S, Aurangabadi K, Gurav SK, Deshmukh AM, Wankhede P, Suryawanshi P, Vasanth S, Kurian M, Philip E, Jagtap N, Pandit E. Incidence of Medication Error in Critical Care Unit of a Tertiary Care Hospital: Where Do We Stand? Indian J Crit Care Med. 2020 Sep;24(9):799-803.