



Gujarat Medical Services Corporation Limited
A Government of Gujarat Undertaking

An Analytical Study on Extent of Drug Shortages in Deendayal Pradhan Mantri Jan Aushadhi Stores in Saurashtra Region, Gujarat



PRESENTED BY –

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UNDER THE GUIDANCE OF –

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THE IIHMR UNIVERSITY

- Price Control of Scheduled Drugs through the NPPA
- Price Regulation of Non Scheduled Drugs
- Uniform VAT of 4% on medicines
- Reduction in Excise duty from 16% to 6%

INTRODUCTION

Deendayal Prime Minister Jan Aushadhi Store (DPMJAS) is an ambitious program conceived and implemented by Govt. of Gujarat **with the partnership and administration of HLL Lifecare Limited**, a Government of India owned corporation based in Kerala that manufactures healthcare products to provide generic medicines at affordable prices. Deendayal Prime Minister Jan Aushadhi Stores (DPMJAS) reflect **Govt. of Gujarat's powerful commitment** to decrease the cost of treatment or out of pocket expenditure for the patients. Deendayal Prime Minister Jan Aushadhi Stores will be providing quality generic drugs, branded drugs and over the counter drugs at very affordable and low prices. Patients can purchase drugs at **up to 80 %** cheaper than the market price from Deendayal Prime Minister Jan Aushadhi Stores.

DEENDAYAL PRIME MINISTER JAN AUSHADHI STORES, GOVT. OF GUJARAT

- Throughout the past several months, the Deendayal Pradhan Mantri Jan Aushadhi Stores have raised an increasing number **of reports and complaints in regards to drug shortages**, directly affecting patients care in the whole Gujarat. However, any reliable reporting is not there with the system that shows there was **no clear understanding of the extent of drug shortages**, nor specific impact or scope of drug shortages on store in-charges, pharmacists & patients as well.
- As a part of my MBA curriculum, I decided to conduct a survey in order to make a very clear understanding of the scope and extent of medicines shortages in all Deendayal Stores located in Saurashtra region of Gujarat.
- The Govt. of Gujarat has already opened 52 generic stores named 'Deendayal Pradhan Mantri Jan Aushadhi Stores' and planning to inaugurate more 150 stores in different regions in Gujarat. So, the research findings of the study can effectively help in opening of these stores & the implementation of this project with chances of less shortages.

SCOPE OF THE PROJECT

- Shortages of medicines are causing a serious concern in all over the world including India to a greater extent because of low management and less production, supply and ineffective distribution.
- In simple terms, there is a need to make all the essential drugs available to the patients anyhow and keeping in mind the following intentions to choose this topic for the research study:
 1. Are we focused on the patients' healthcare?
 2. Do we have an idea about the extent of satisfying the patients through providing the prescribed medicines?
 3. Are we doing things right in the supply chain management?
 4. Do we have the right talent aligned with our pharmacists, the right support resources and processes in place?
 5. What has changed externally in our markets or with our stakeholders?

RATIONALE

- To identify the real causes behind drug shortages in Deendayal Pradhan Mantri Jan Aushadhi Stores.
- To analyse the extent of drug shortages in Deendayal Pradhan Mantri Jan Aushadhi Stores.
- To look for the possible solutions to prevent the drug shortages in Deendayal Pradhan Mantri Jan Aushadhi Stores.

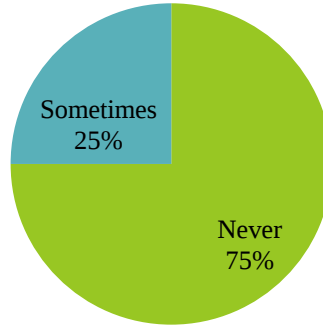
RESEARCH OBJECTIVES

Sample Design	Descriptive Research
Sampling Method	Purposive Sampling (Total Population)
Sample Population	Junior Pharmacists, Senior Pharmacists and Store In-charges
Sample Size	16 (out of 52)
Sample Selection	Deendayal Pradhan Mantri Jan Aushadhi Stores in Saurashtra region in Gujarat
Data Collection	Primary Data (structured questionnaire)
Research Instrument (Tools and Techniques)	Research questionnaire contains closed and open-ended questions. - direct interviews - Emails - informal talk
Data Analysis	Microsoft Excel
Study Duration	1st February to 30th April 2017

RESEARCH METHODOLOGY

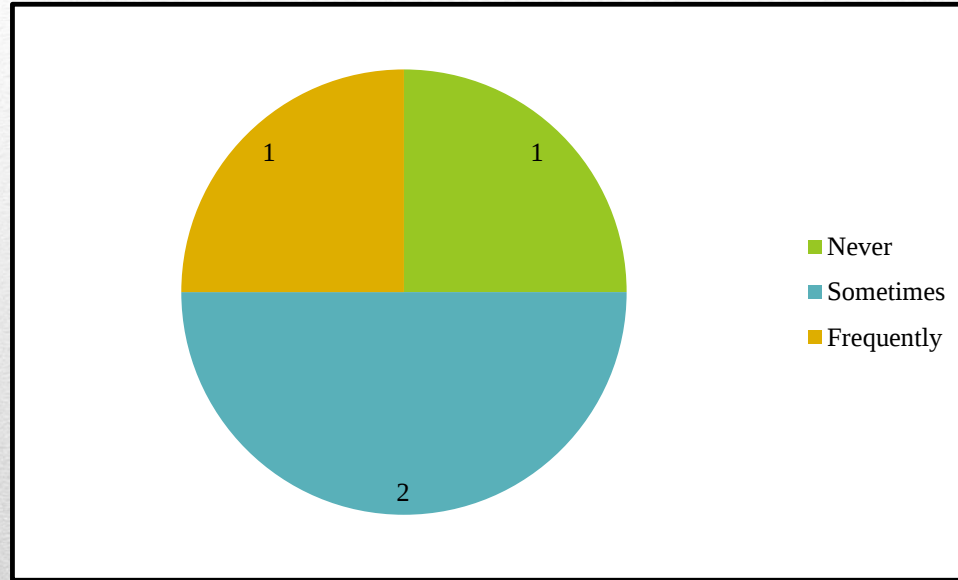
1. Do you receive advance notices of shortages?

**Stores receive advance notices
of drug shortages**



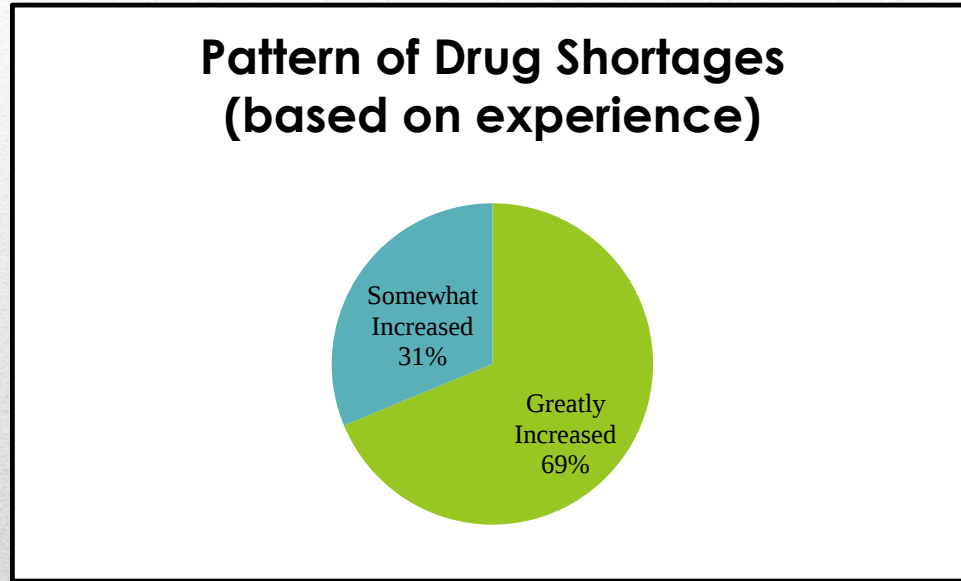
FINDINGS AND INTERPRETATIONS

2. If yes, do you get informed the expected delay in drug supply or shortages?



FINDINGS AND INTERPRETATIONS

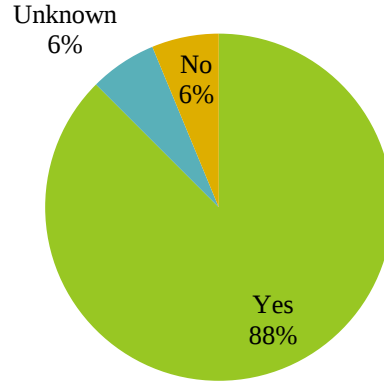
3. Based on your experience, over the past 6 months, have drug shortages -



FINDINGS AND INTERPRETATIONS

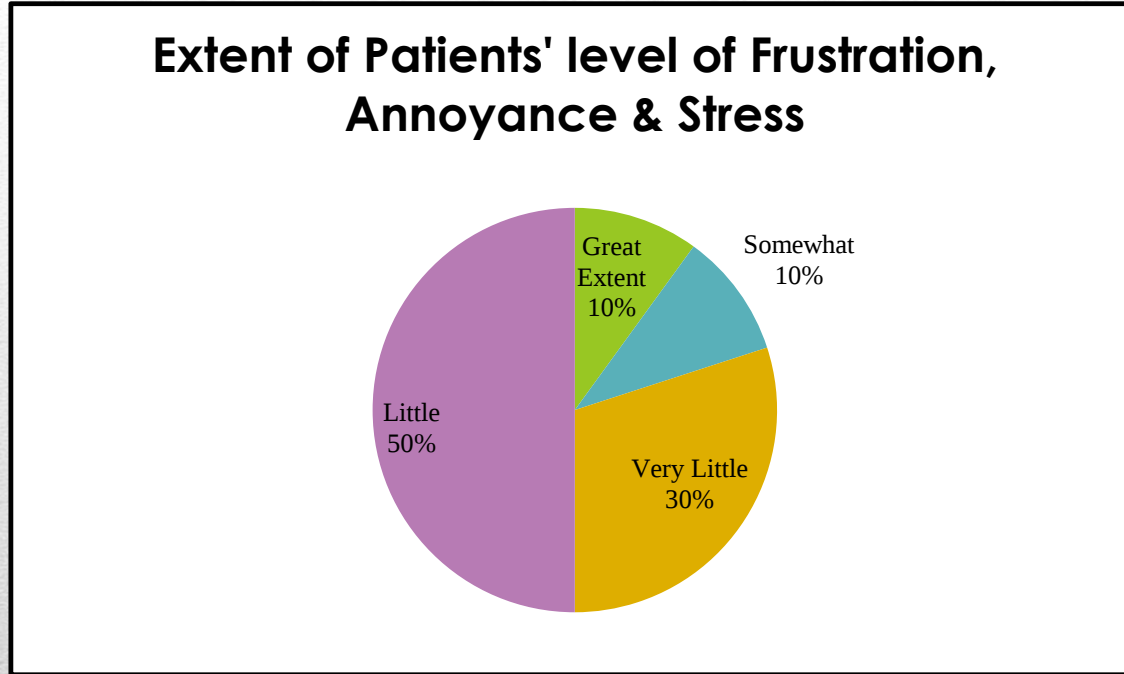
4. Do you think your patients' health outcomes have been adversely affected because of drug shortages?

Patients' Health Outcomes Adversely Affected because of Drug Shortages



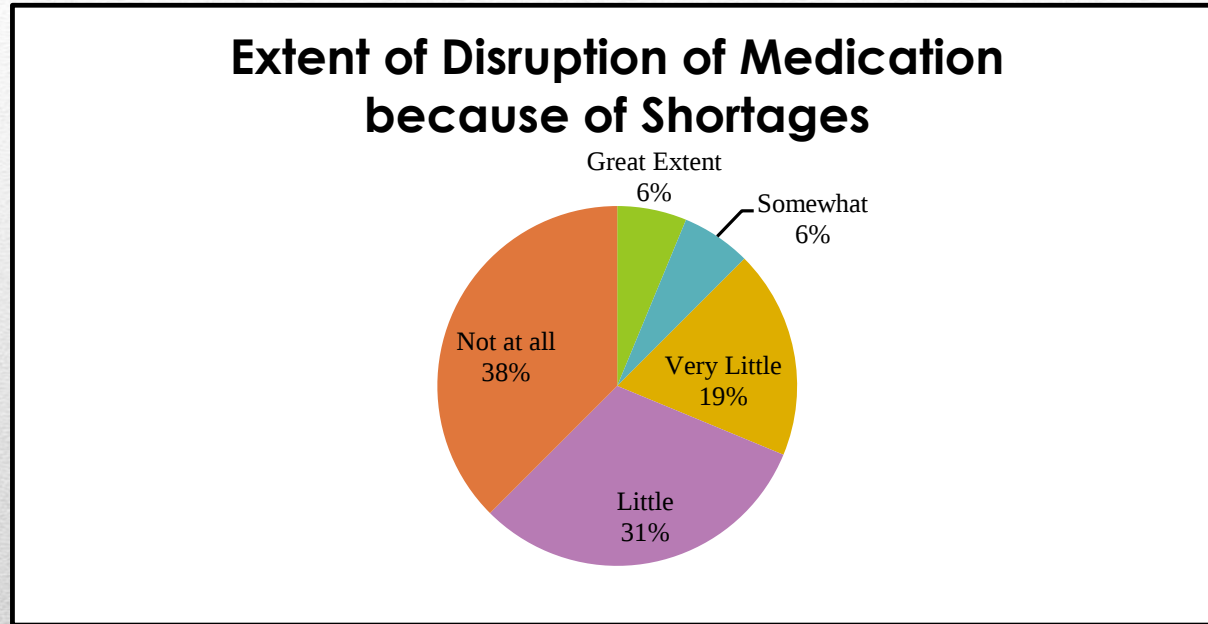
FINDINGS AND INTERPRETATIONS

5. To what extent patients are frustrated, angry & stressed -



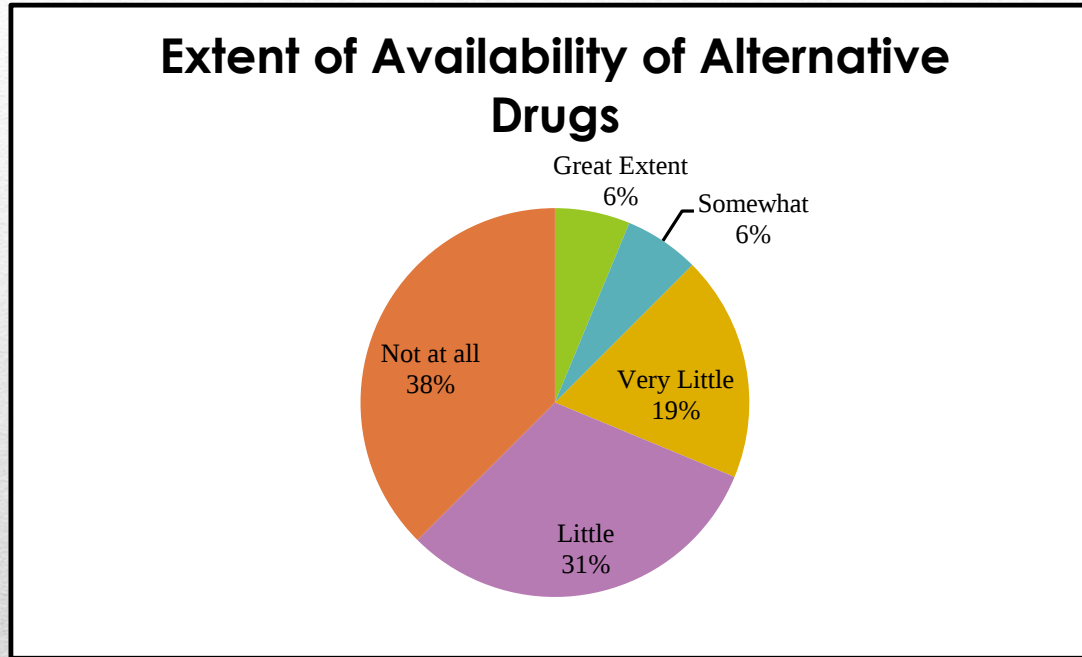
FINDINGS AND INTERPRETATIONS

6. To what extent the shortage had disrupted their continuity of medication -



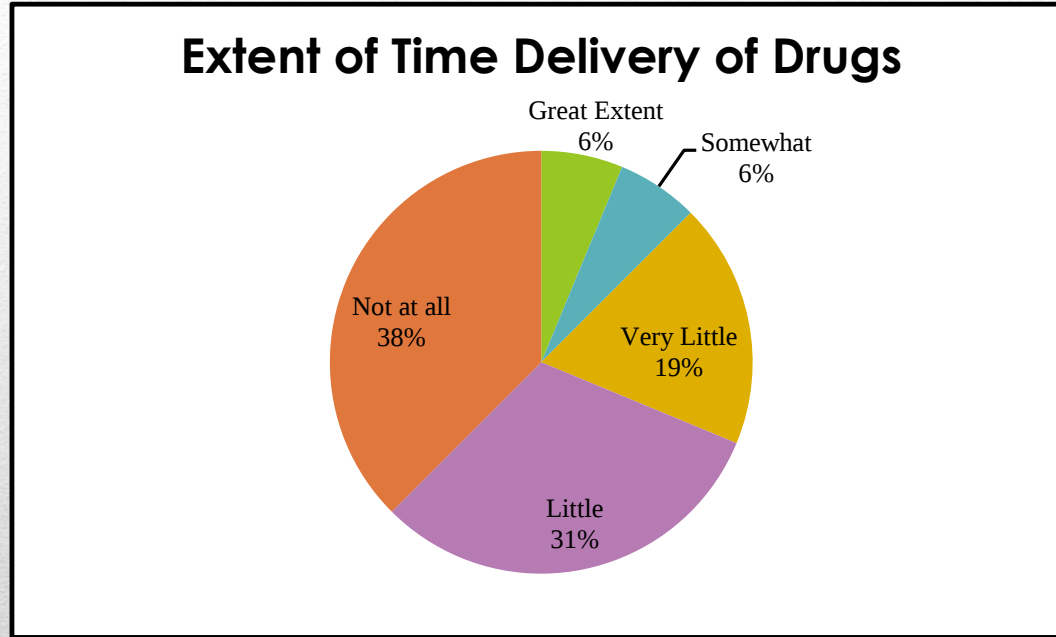
FINDINGS AND INTERPRETATIONS

7. To what extent the alternative drugs are available –



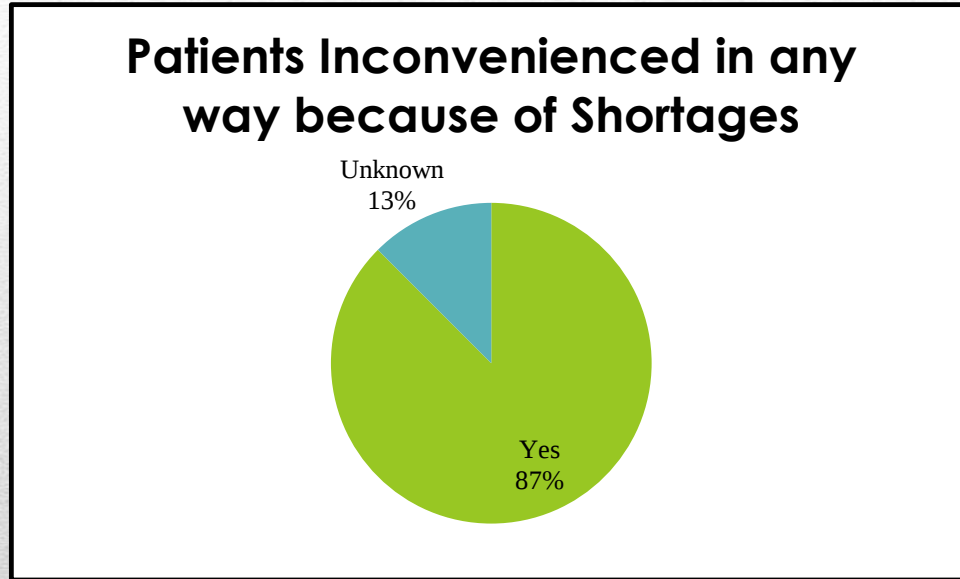
FINDINGS AND INTERPRETATIONS

8. To what extent the drugs are delivered on time -



FINDINGS AND INTERPRETATIONS

9. Have your patients been inconvenienced in any way as a result of drug shortages?



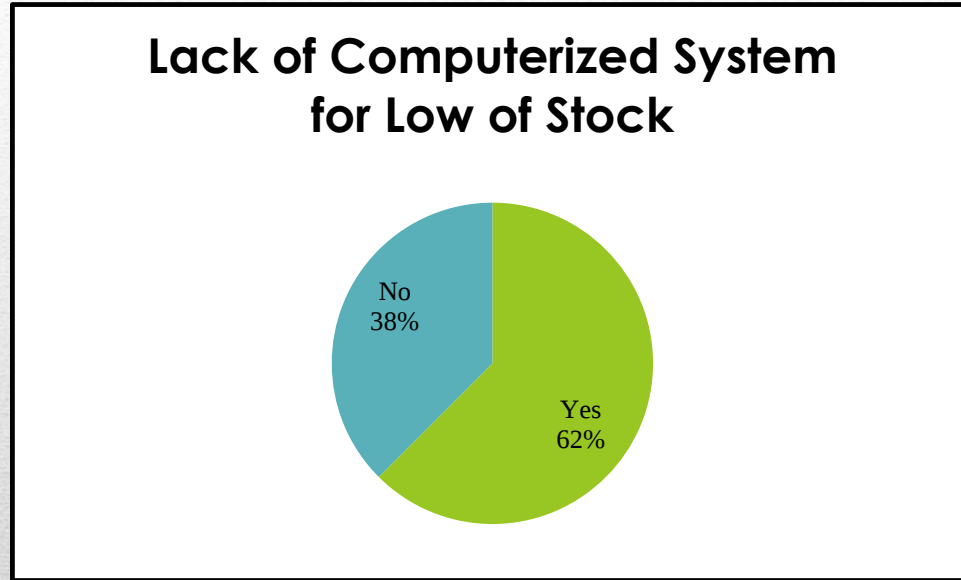
FINDINGS AND INTERPRETATIONS

10. Make a top 20 drug shortages list –

EDL	Non-EDL
Glimepiride Tab	Cadex Syrup
Telmisetron Tab	Rexcof Dx Syrup
Voglibodge Tab	Ecosprin Tab
Losartan Potassium Tab	Diclofenac + Paracetamol Tab
Dextromethorphan Syrup	ORS Powder
Metoprolol Tab	Bisoprolol Tab
Lactulose Solution	Prazosin Tab
Atorvastatin Tab	Prasugrel Tab
Metformin HCL Tab	Tamsulosin Cap
Fluconazole Tab	Letrozole Tab

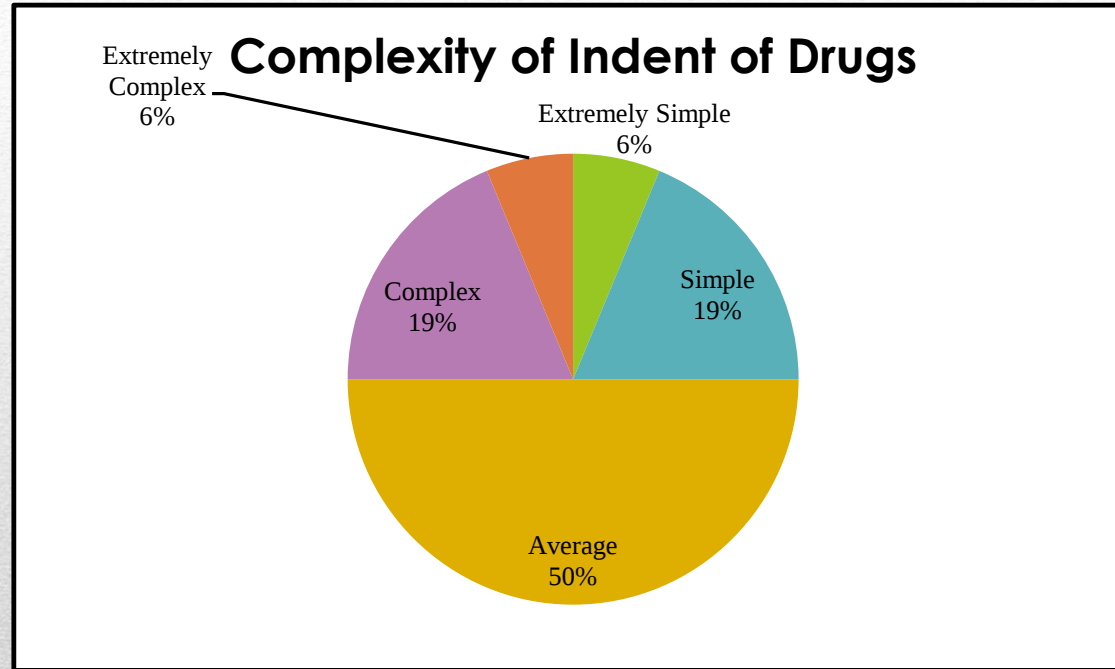
FINDINGS AND INTERPRETATIONS

11. Lack of computerized alert system for low of stock drugs –



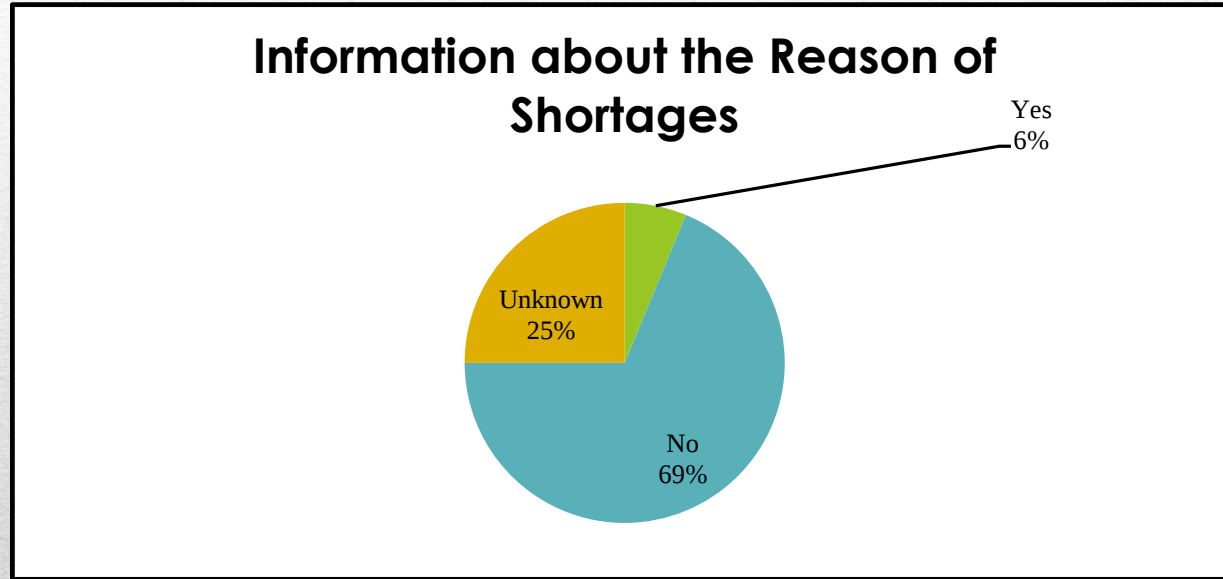
FINDINGS AND INTERPRETATIONS

12. Complexity of indent for required drugs -



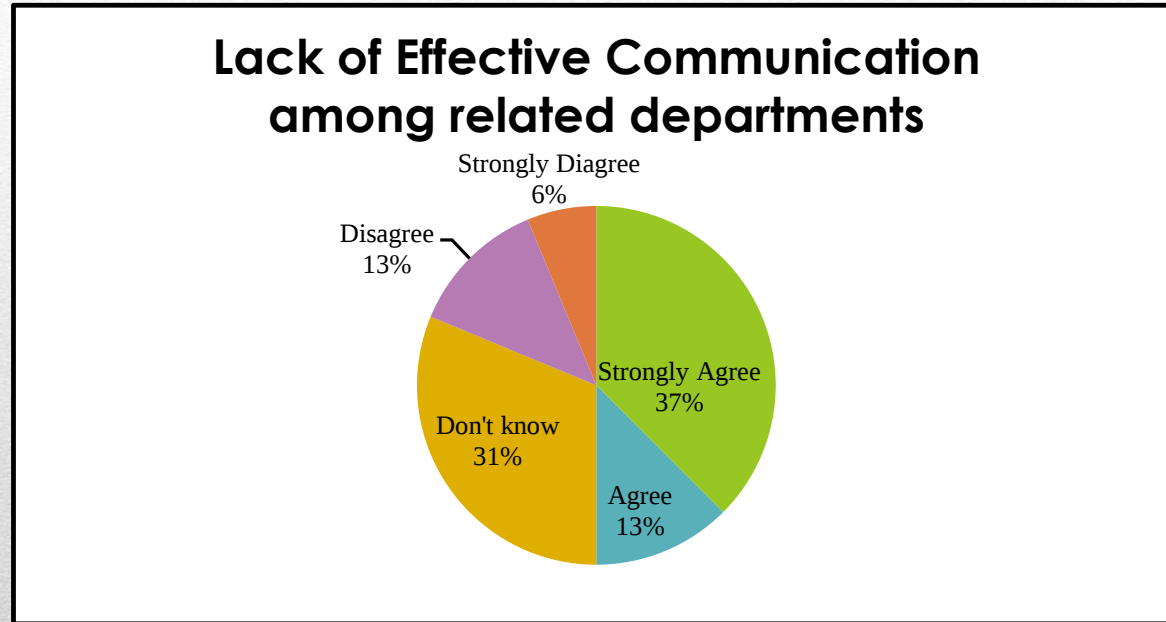
FINDINGS AND INTERPRETATIONS

13. Do you know the actual reason for the delay of supply or drug shortages at the store?



FINDINGS AND INTERPRETATIONS

14. Lack of effective communication among pharmacy, pharmaceutical warehouse & related staff -



FINDINGS AND INTERPRETATIONS

The cause of drug supply shortages survey has helped the organization to identify the extent of drug shortages and its reasons. It is a **preliminary step in the formative planning of a well-addressed process** that will address the needs and solutions in all the Deendayal Pradhan Mantri Jan Aushadhi Stores. Thus, the study suggests implementing a computerized alert system for low drug stocks so that the cost of inventory to the organization can be reduced to an extent. Also, this implementation helps in committing to the patients in regards to the availability of required drugs. There is a need to activate and coordinate the communications among pharmacy, pharmaceutical warehouse and related staff through multiple channels in order to control any problem related to drug supply shortages.

In addition, the study recommends adding alternative drugs for at least the critical drugs that can have an effect on patient health in case of shortages. I plan to extend the survey to include all 52 Deendayal Pradhan Mantri Jan Aushadhi Stores in Gujarat.

RECOMMENDATIONS

The results indicate that the majority (75%) of participants **do not get notices** of drug shortages in advance.

This study says that **drug shortages in all the pharmacy stores have greatly increased** over last 6 months and **patients' health outcomes have adversely been affected** because of drug shortages. **Patients are frustrated, angry and stressed** to an extent. Also, the shortage of medicines had **disrupted patients' continuity of medication**. Patients face inconveniences in many way only because of drug shortages. The **availability of alternative drugs** is not there to a required amount in the pharmacy stores and this may be a cause of drug supply shortages in the stores.

It was found that there is a **lack of computerized system** for low of stock to a greater extent. More than half of the participants (62%) usually learn that a drug is in short supply when it becomes zero stock on the shelves so there is a need to implement a computerized system at the store. It was found that only 19% pharmacists face difficulties in order to make a request for medicines. It was found that about 69% pharmacists have no idea about the delay of supply or drug shortages at all the pharmacy stores.

Most of the pharmacists feel a **communication gap** between pharmacy, pharmaceutical warehouse and related staff. The lack of communication between pharmacy store and warehouse is a most common cause of delay in drugs supply & delivery so there should be a **proper follow-up with the warehouse to deliver the drugs on the promised date** in order to avoid a shortage of drug supplies.

CONCLUSION

- The research study is limited to only Saurashtra region in Gujarat.
- Out of 52 stores all over the Gujarat, the study includes the responses from only 16 stores that come under my job responsibilities.

LIMITATIONS

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THANK YOU
