



“A STUDY ON IMPLEMENTATION OF 5S- KAIZEN APPROACH IN IMPROVING QUALITY OF HEALTHCARE SYSTEM”

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SANKARA EYE HOSPITAL
YOUR VISION OUR MISSION

“Gift of Vision”

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The image shows the large Japanese character '改' (Kai) in a bold, black, serif font. It is positioned on the left side of a white rectangular box.

Kai = Change

The image shows the large Japanese character '善' (Zen) in a bold, black, serif font. It is positioned on the right side of a white rectangular box.

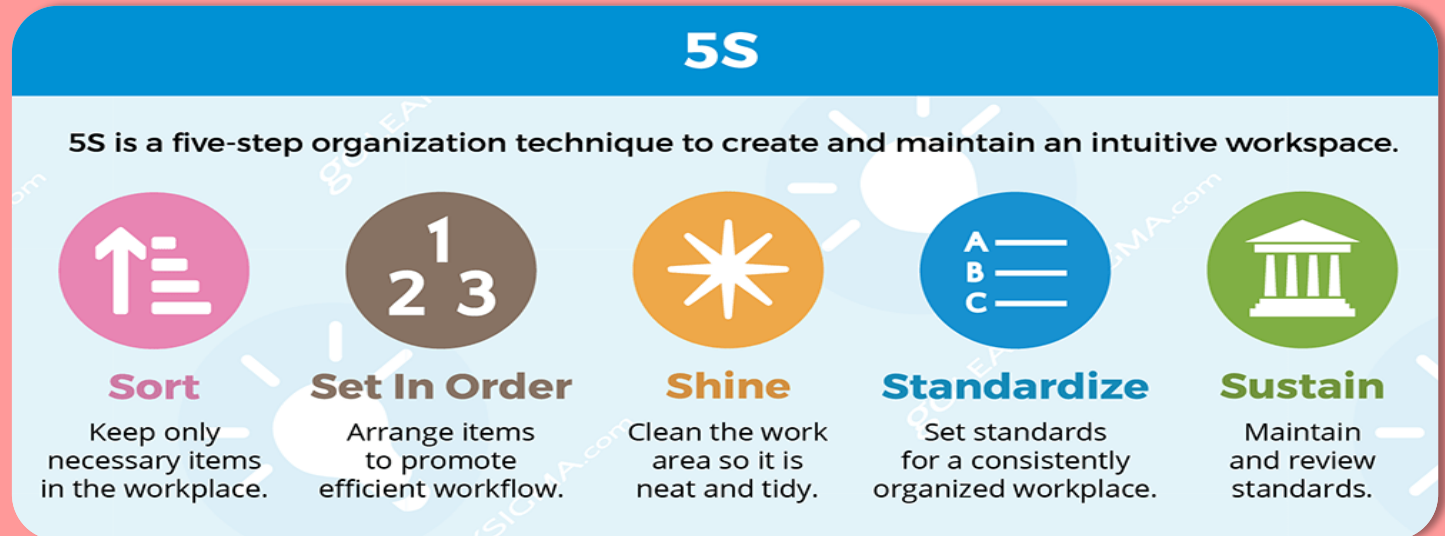
Zen = Good

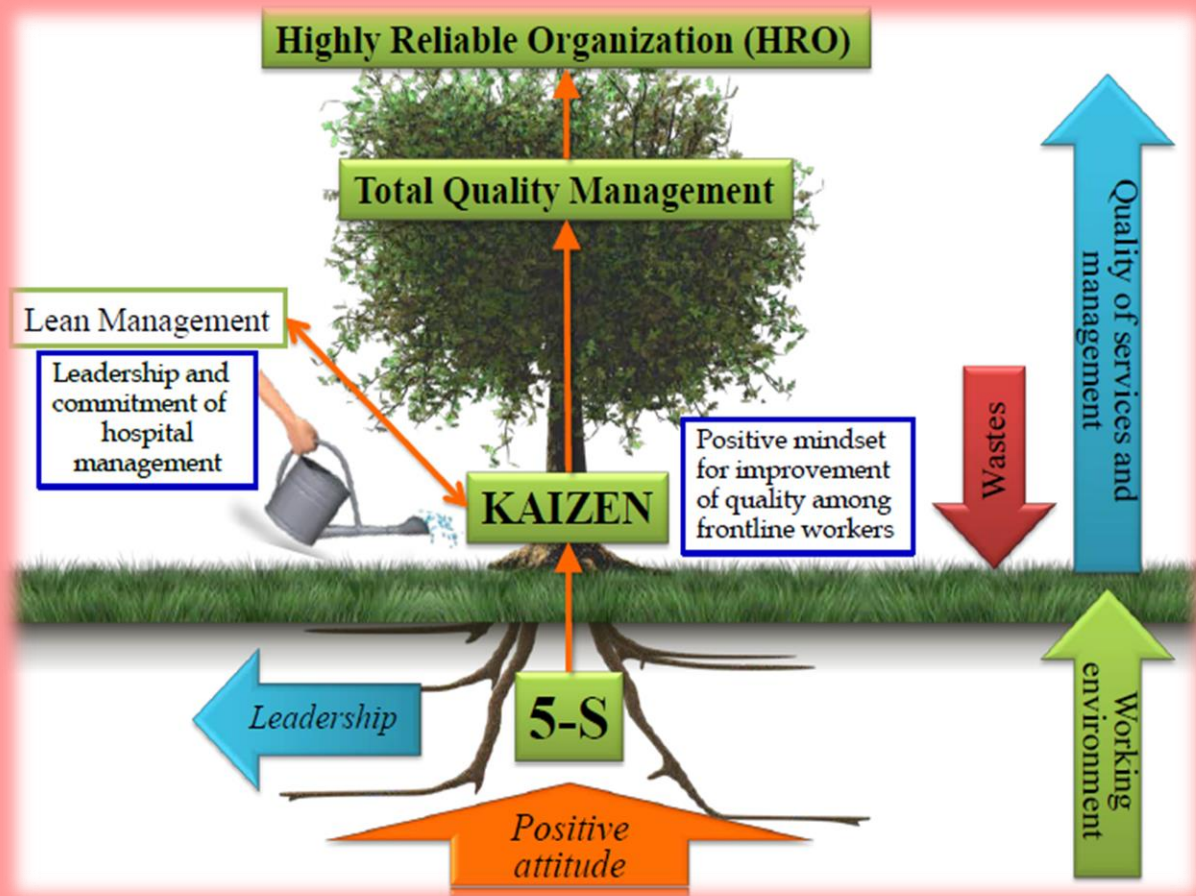
The word Kaizen is translated from Japanese in a number of ways, most simply as “change for the better.”

Kaizen is an ongoing methodology for challenging and empowering everyone in the organization to use their creative ideas to improve their daily work.

The 5S-kaizen method is a structured approach, which is used to achieve and enhance a specific work area so as to ensure the safety and efficiency of the operations with minimum waste at the lowest cost. This systematic approach is fundamentally used to improve productivity, quality, and safety in all types of organizations .

The five words in 5S are a convenient mnemonic device, which are derived from the equivalent Japanese starting with the letter "S", as follows:





RESEARCH QUESTION

Can kaizen approach significantly improve service delivery through evidence-based elimination of wastes?

OBJECTIVES

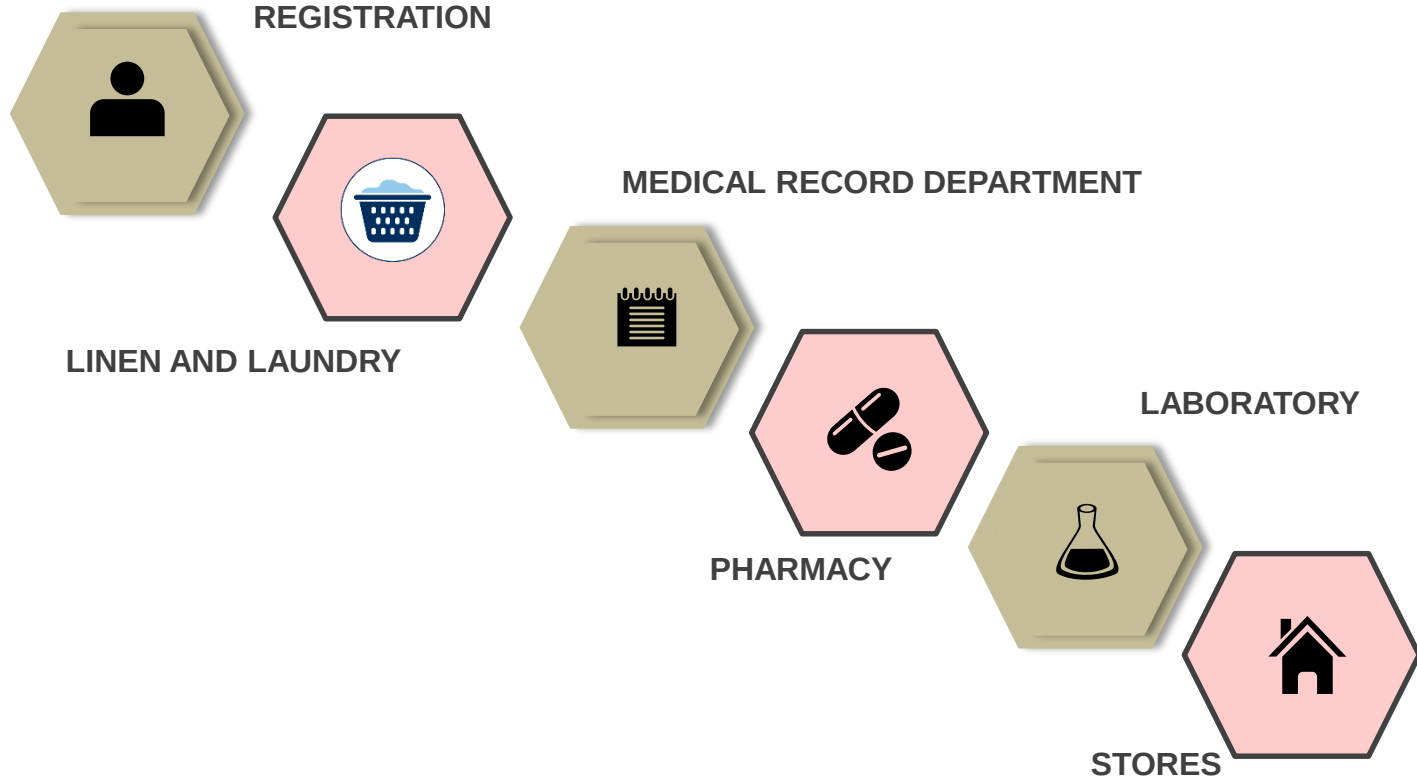
To improve service delivery in identified departments of a hospital using kaizen 5-S approach for a specific problem for reducing or elimination of wastes.

HYPOTHESIS

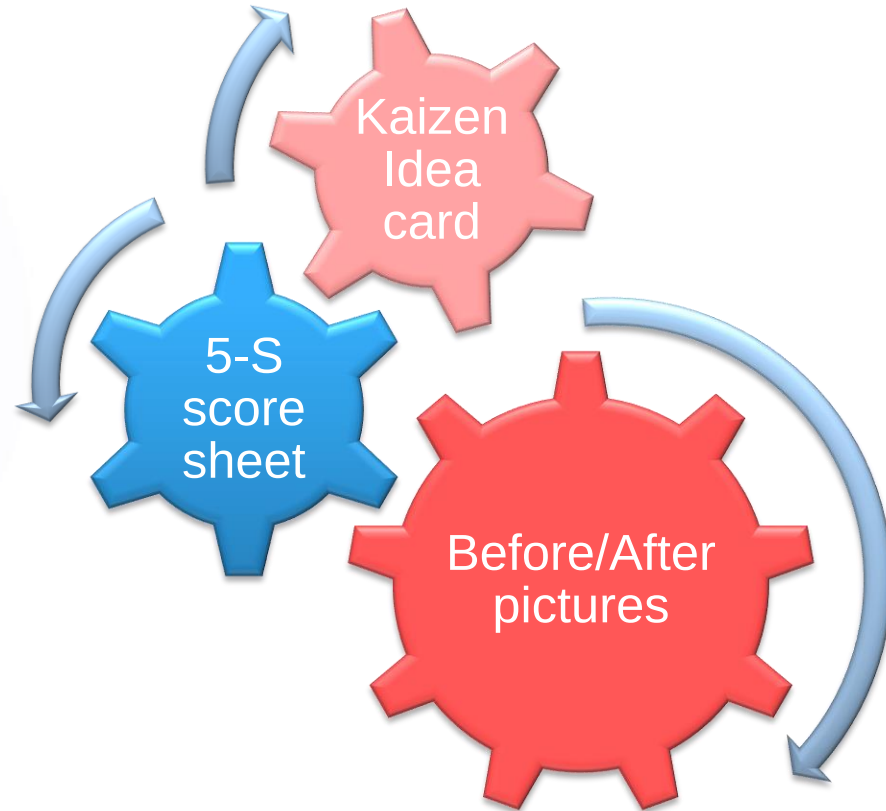
H₀: There is no difference in service delivery before and after implementation of Kaizen 5-S approach

H₁: There is difference in service delivery before and after implementation of Kaizen 5-S approach

DEPARTMENTS



STUDY TOOL



SAMPLE SIZE: 20 Kaizners from 6 different departments

SAMPLING TECHNIQUE: Convenience Sampling Technique .

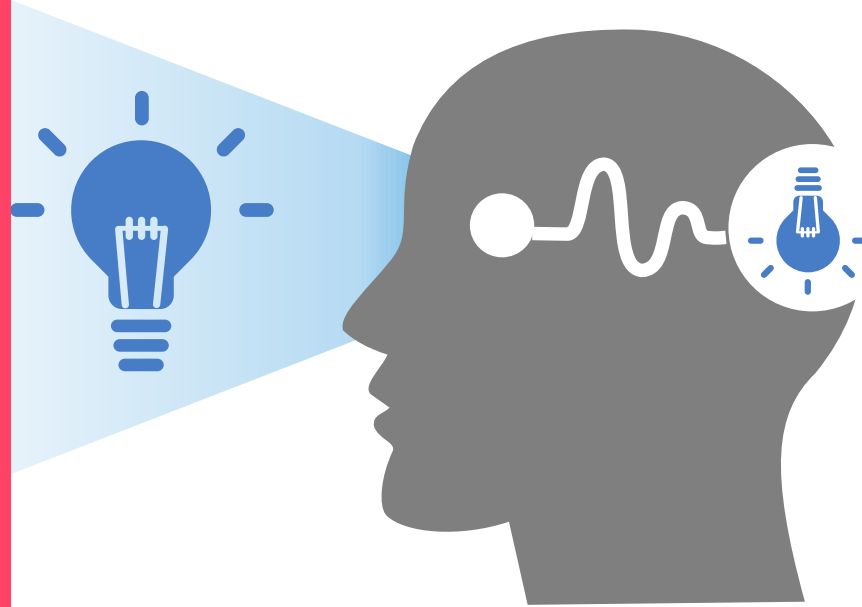
DATA COLLECTION PROCEDURE: The research was conducted in three stages:

1. Situation analysis: This is the first stage done by using a self-administrated, structured questionnaire (Kaizen Idea cards) for the employees, direct observation of the process, conducting in-depths interviews with the employees.

2. Implementation phase: The second stage is the implementation stage, which consisted of orientation sessions, and lectures on the 5S-KAIZEN approach.

3. Evaluation phase: The final stage is performed using Kaizen 5-S Score card Sheet in order to assess the effect of the 5S-KAIZEN approach in the organisation.

MEASURABLE OUTCOMES

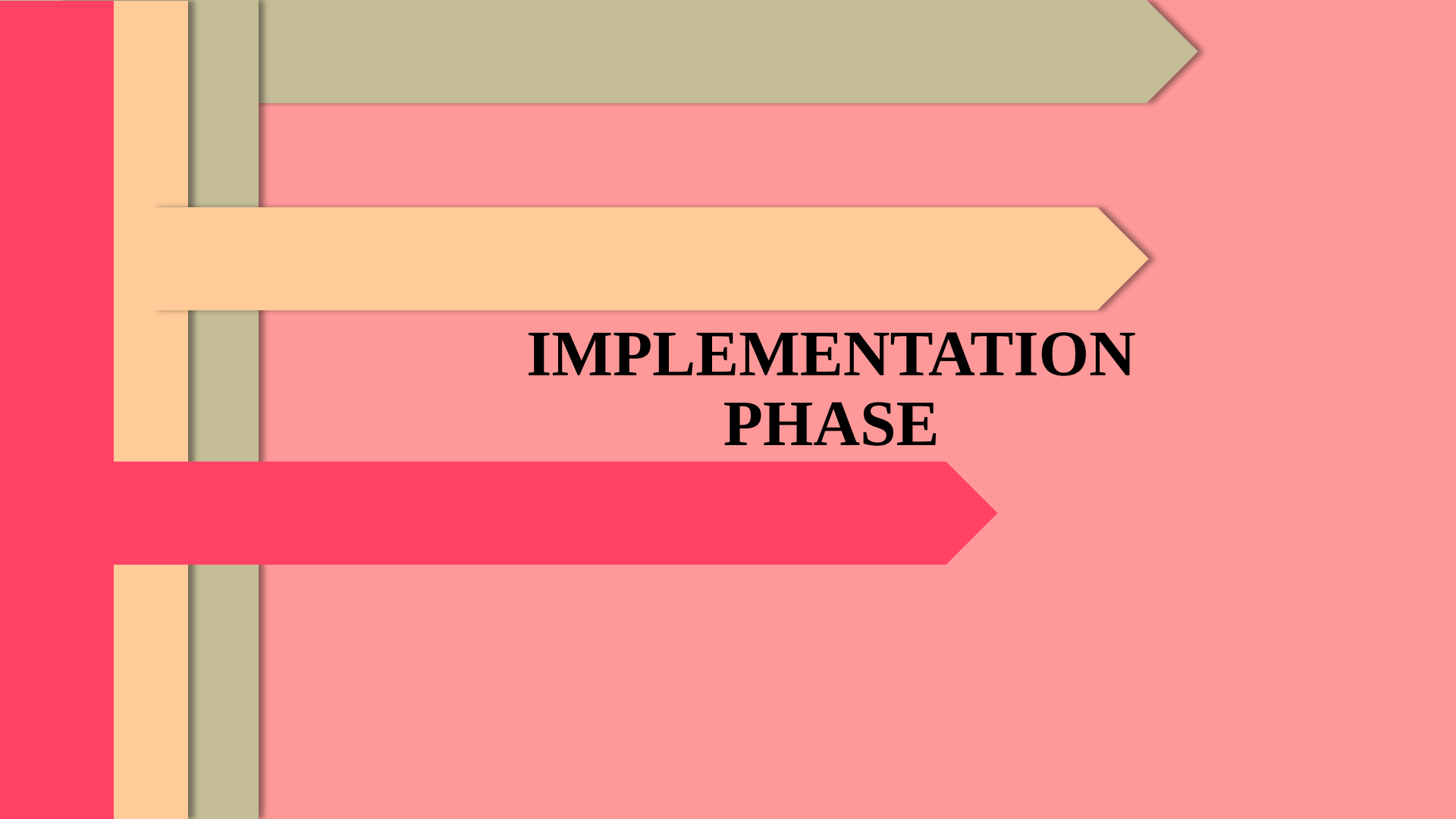


Improvement and innovation practices that help staff and managers to address complex issues.



Incremental changes applied over a long period of time that combines to a major effect on business result.



The background features a light pink field. On the left, there are three vertical stripes: a wide red one, a narrower yellow one, and a thin green one. Overlaid on these are three horizontal bars with arrowheads pointing right: a green bar at the top, a yellow bar in the middle, and a red bar at the bottom. The text 'IMPLEMENTATION PHASE' is centered in the middle of the slide.

IMPLEMENTATION PHASE

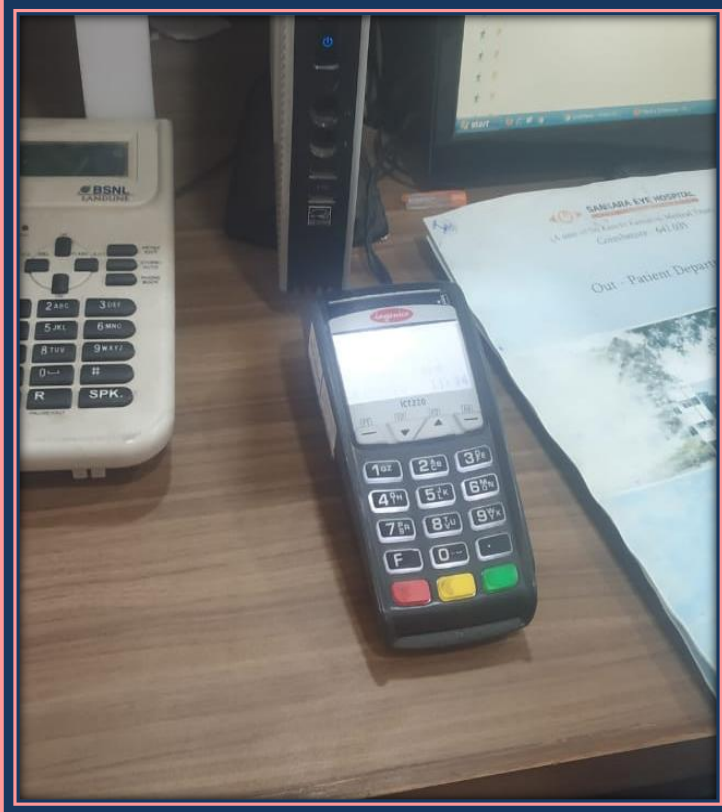


REGISTRATION DEPARTMENT

Adjustment in siting arrangement



Transaction Method



- Cashless payment method
- Installation of Swipe machines

Registration form filling desk near entrance gate



BEFORE 5-S



AFTER 5-S



AFTER 5-S

BEFORE 5-S





BEFORE 5-S



AFTER 5-S





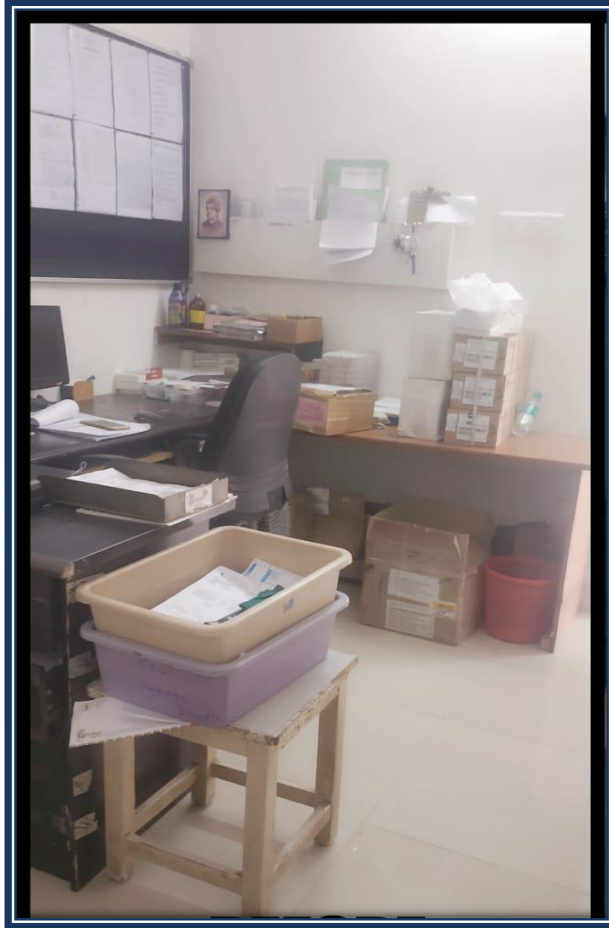
STORES DEPARTMENT



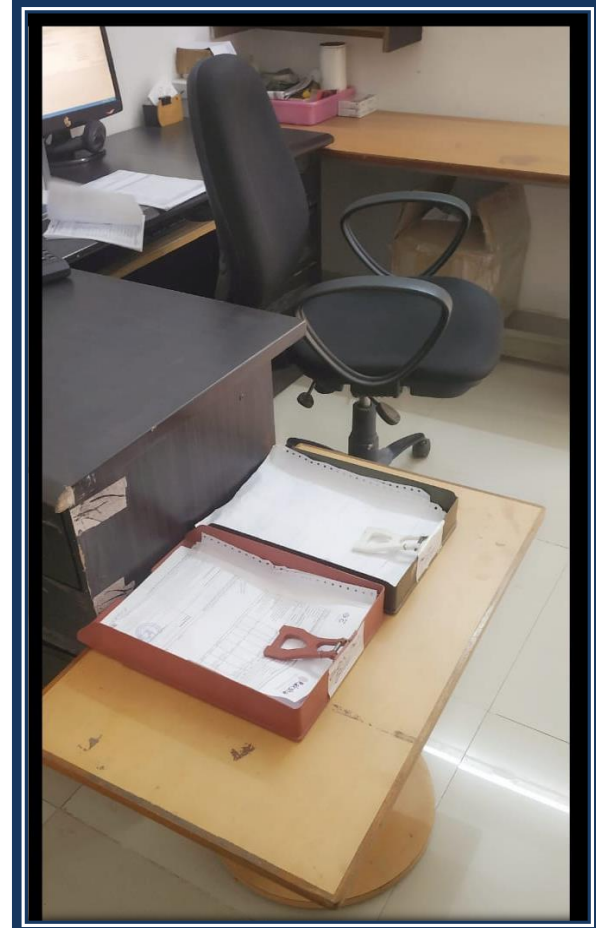
BEFORE 5-S

AFTER 5-S





BEFORE 5-S



AFTER 5-S





PHARMACY DEPARTMENT

Sorting Of Desk Area

- Barricades for proper flow of work.
- 1 Barricade/door for counter area as patient's move inside the pharmacy creating chaos.

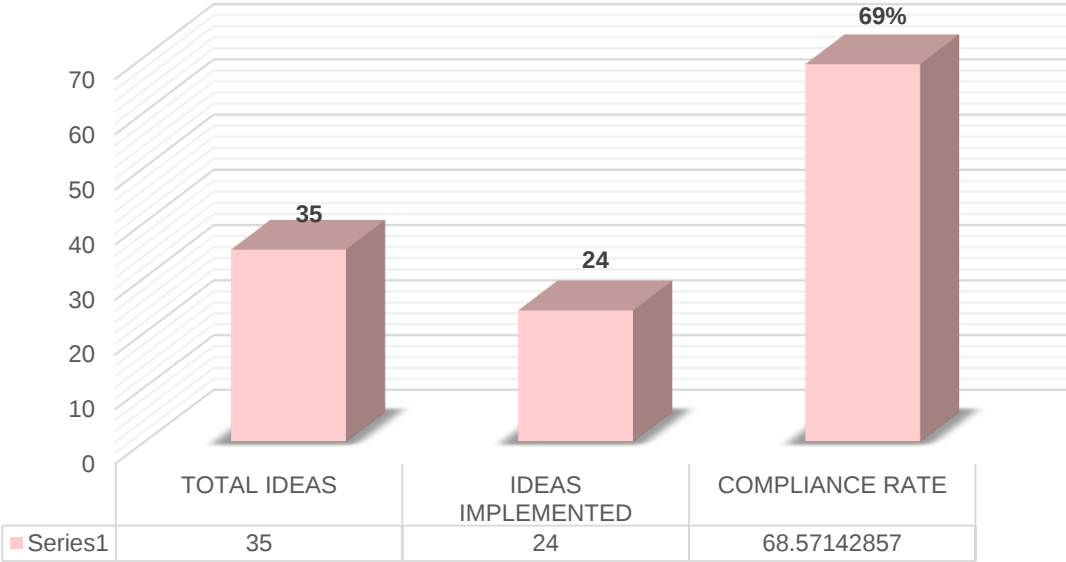




RESULTS



KAIZEN



RESULTS



Pre-test and Post-test photographs were taken for assessment of the progress of approach. Chi-square test was used for testing the null hypothesis for 3 (Stores, Registration, Pharmacy) departments out of 6.

STORES			
	LOW EFFORT	HIGH EFFORT	TOTAL
PRE-TEST	35	4	39
POST-TEST	3	36	39
TOTAL	38	40	78

For the degree of freedom **1** , value of chi-square is **52.54** and p-value is **0.0039** which is lesser than **0.05** , hence we reject the null hypothesis. Indicating there is statistically significant improvement after implementation 5-S Kaizen.

RESULTS



PHARMACY

	LOW EFFORT	HIGH EFFORT	TOTAL
PRE-TEST	34	5	39
POST-TEST	7	32	39
TOTAL	41	37	78

For the degree of freedom **1**, value of chi-square is **53.11** and p-value is **0.0039** which is lesser than **0.05** , hence we reject the null hypothesis. Indicating there is statistically significant improvement after implementation 5-S Kaizen.

REGISTRATION

	LOW EFFORT	HIGH EFFORT	TOTAL
PRE-TEST	37	2	39
POST-TEST	8	31	39
TOTAL	45	33	78

For the degree of freedom **1** , value of chi-square is **44.12** and p-value is **0.0039** which is lesser than **0.05** , hence we reject the null hypothesis. Indicating there is statistically significant improvement after implementation 5-S Kaizen.

- Time and effort
- Decreased work-related stress
- Reduced supply waste
- Improved staff and patient safety, efficiency, productivity, and problem-solving capability.

RECOMMENDATIONS



- Use of i-kaizen Software tool for easy application and filling of kaizen card.
- Appreciation awards can be given to best implemented kaizen department for motivating employees.

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THANK
YOU

A decorative illustration featuring the words "THANK YOU" in a black, serif, all-caps font. The text is arranged in two lines, with "THANK" on top and "YOU" below it. The letters are slightly shadowed, giving them a three-dimensional appearance. Intertwined with the text are several autumn-themed elements: red and pink leaves of various shapes and sizes, some with white veins, and small clusters of green berries. The entire composition is set against a plain white background, which is itself framed by a dark brown border.