Basic Concepts of 5S-KAIZEN-TQM Approach

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25th October 2019
Bago Hospital
Objectives of the session

At the end of the session, trainees are able to:

1) Understand basic concepts of 5S-KAIZEN-TQM Approach
2) Understand what is high quality of health care services
3) Understand targets of 5S and KAIZEN activities
4) Understand benefits of 5S and KAIZEN activities
Introduction: “Lots of problems”

- Financial problems
- Technical problems
- Infrastructure problems
- Human Resource problems
- Time limitation

in health care provision
Aren’t you frustrated in your workplace?

Oh, this position makes me tired!

I cannot remember what/how to next...

Where is that document? I cannot find it!

Why I am making mistakes again and again

Oh time is not enough to complete this work!

Why we cannot communicate properly?
If you are facing problems, ...

Think inside the box and give up?

Waiting “resources” from somewhere.

OR

Work together and do something?

Work with “?” for improvement.
Are you **positive** thinker or **negative** thinker?
Even if we are a positive thinker, we still need “tools” to make our ideas realistic.

The tool is 5S-KAIZEN-TQM Approach
5S-KAIZEN-TQM Approach

Stepwise approach for better management & quality of health care

Highly Reliable Organization

Maximum use of the capacity of the entire organization

KAIZEN

Participatory problem solving process

TQM

Working environment improvement
Conceptual framework “5S-KAIZEN-TQM Tree”

Highly Reliable Organization (HRO)

Total Quality Management

KAIZEN

Positive mindset for improvement of quality among frontline workers

Wastes

Wastes and management

Working environment

Leadership

Leadership and commitment of hospital management

Lean Management

Positive attitude

Positive attitude for improvement of quality among frontline workers
What are the problems...?

- Group work 1
- 6 ~ 7 groups (8/9 persons per group)
- Different level of designation/duties & responsibilities
What is 5S?

• 5S is a philosophy and a way of organizing and managing the workspace and work flow with the intent to improve efficiency by eliminating waste, improving flow and reducing process unreasonableness.

It is for improvement of working environment
5S in Japanese/English

5S is literally five abbreviations of Japanese terms with 5 initials of S.

<table>
<thead>
<tr>
<th></th>
<th>Japanese</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-1</td>
<td>Seiri</td>
<td>Sort</td>
</tr>
<tr>
<td>S-2</td>
<td>Seiton</td>
<td>Set</td>
</tr>
<tr>
<td>S-3</td>
<td>Seiso</td>
<td>Shine</td>
</tr>
<tr>
<td>S-4</td>
<td>Seiketsu</td>
<td>Standardize</td>
</tr>
<tr>
<td>S-5</td>
<td>Sitsuke</td>
<td>Sustain</td>
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CANDO program:

- Cleaning up
- Arranging
- Neatness
- Discipline
- Ongoing improvement
What 5S can do?
Team work improvement through everyone’s participation
Identify Abnormalities
Identify **wastes** and reduce the **wastes**
The 7 wastes

1. Overproduction
2. Inventory
3. Waiting
4. Motion
5. Transportation
6. Rework
7. Overprocessing

Ref: Mr. Taiichi Ohno, Former President of Toyota Motors
Improve productivities
Improve safety
If no 5S activities....

- Hesitate what to do
- Looking for necessary items
- Remember what / how to do
- Making mistake
Details of 5S approach
5S: **Sort-Set-Shine-Standardize-Sustain**
S1: Sort

- Focuses on eliminating unnecessary items from the workplace
- Categorize equipment, furniture, tool in your working place into the following 3 categories
  1. Necessary
  2. Unnecessary
  3. May not necessary
- This step will also help with the “just in case” attitude
S1: Sorting activities

Equipment, material, tools, files, furniture etc. can be categorized based on the frequency of use:

- **Need it**: Items often used are in this category.
- **May need it**: Items only used occasionally are in this category.
- **Not need it**: Items not used in current work process are in this category.
Examples of “Sorting”

• Place “Red tag” for categorization of items to identify unnecessary items
• Move unnecessary items (broken tools, obsolete jigs and fixtures, scrap and excess raw material etc.) to central stored area
• Free up valuable floor space (Space utilization)
• Finding abnormality of equipment and tools (Out of order, missing parts etc.)
“Set” is based on finding efficient and effective storage of necessary items

Apply “Can see, Can take out, and Can return” philosophy

This will save time and energy to look for something
S2: Setting activities

Think not only “beatification. Need to consider workflow and arrange items

Have consensus among co-workers on where and how to organize necessary items

Use 5S tools for proper Organization of items such as
- Labeling
- Color coding
- Numbering
- Zoning etc.

Arrange them properly based on “Can see, Can take-out, Can return” Philosophy
Example of “Setting” activities

- Labeling, numbering, zoning for clear identification of storage areas to keep necessary items
- Set necessary items matching with workflow to minimize unnecessary movement and transportation time
BASELINE PHOTOGRAPHS
AUGUST 2018

ADMINISTRATION

PROCESS

SEPTEMBER 2018

Before 5S 

MID. YEAR

After 5S
S3: Shine

• Cleaning up one’s workplace daily so that there is no dust on floors, machines or equipment.
• It will create ownership and build pride in the workers.
S3: Shining activities

- Clean floor, windows and walls.
- Clean and Maintain office automation machines, medical equipment and tools, office furniture
- Develop and follow regular cleaning and Maintenance schedule
Example of “Shining” activities

- Daily sweeping and mopping of floor, bathroom, corridor etc.
- Regular cleaning and maintenance of equipment and tools
- Periodical check for changes in equipment and the service area such as: leaks, vibration, misalignment, breakage etc.
- IPC activities such as hand hygiene, waste segregation are also part of shine
Video clip

- 01:00 ~ 01:33
- Manufacturing company - 30 mins. Voluntary cleaning
  (including Senior Management personnel)
S4: Standardize

- Maintain an environment where S1 to S3 are implemented in the same manner throughout the organization
- Give opportunities to employees to take active part in the development of these standards.
S4: Standardizing activities

Develop mechanism to standardize S1-S3 implementation for continuation

Standardization will lead to equalization of activities
= “Production leveling and smoothing”

Standardization is useful for;
• Easy implementation of S1 to S3 activities
• Equalization process output
• Everyone’s participation
Example of “Standardize” activities

- Work instructions, Standard Operating Procedures (SOPs)
- Checklist development and regular usage for SOPs
- Mechanism and format development for ordering supplies, reporting etc
- Color coding for waste segregation
- Standardized common symbols
Video clip: The Next Guy

• 08:00 ~ 09:40
• Magnets on Kitchen Table
What to standardize @ Bago Hospital?

- ရုံးတက္ဆင္ျပန မေမ့ရန မီး ပန္ကာပိတ

- ရပ္ကြက္သန ရွင္ေရး စေနေန တုိင္း လုပ္အာေပး

- Let’s discuss .......... (Group work 2)
S5 : Sustain

- Maintain S1-S4 through discipline, commitment and empowerment
- It focuses on defining a new mindset and a standard in workplace
S5: Sustainability activities

People get bored if no changes. Need to develop a mechanism to make staff exited and motivated.

Further Improvement

Prevent fallback

Imrovement

Measure improvement with proper periodical monitoring
Example of “Sustain” activities

• Regular progress reporting
• Refresher training
• Periodical evaluation of 5S activities with proper advices for continuation and further improvements
• Appreciation, recognition and awarding on good 5S activities
• Reminder using 5S corner, new letters, good practice sheet etc.
5S Conceptual Framework

- Sustain
- Sort
- Standardize
- Set
- Shine
5S is becoming popular for seven solid reasons

1. **Visible results** enhance the generation of more and new ideas
2. The workplace gets **cleaned up** and better organized
3. Hospital and office operations become **easier and safer**
4. Results are visible to everyone - **insiders and outsiders**
5. People are **naturally disciplined**
6. **People take pride** in their clean and organized workplace
7. As a result the company’s **good image** generates more better
5S-KAIZEN-TQM Phases

- **Preparatory phase**
  - 3 month
  - Situation analysis
  - Training of managers

- **Introductory Phase**
  - 6 month
  - Training of staff
  - Sorting
  - Setting
  - Shining

- **Implementation phase**
  - 2 years
  - Standardizing
  - Sustaining
  - Expansion areas to practice 5S activities

- **Maintenance phase**
  - On going
  - Continue 5S cycle
Target of 5S

Targets of Five-S include:

- **Zero** changeovers leading to product/ **service diversification**
- **Zero** defects leading to **higher quality**
- **Zero** waste leading to **lower cost**
- **Zero** delays leading to **on time delivery**
- **Zero** injuries promoting **safety**
- **Zero** breakdowns bringing **better maintenance**
Example of 5S activities

**Before 5S (2009)**
Disorganized items in the store. Took long time to searching items needed

**After 5S (2010)**
Use labeling and organize items lead to minimize time for searching items, easy to control stocks
Example of 5S activities

Before 5S
Disorganized cabinet in a ward at Usangi DH

After 5S
Using color coding for Visual control of ampules in a ward at MNH

Green means “enough stock”
Yellow means giving warning on “stock is getting less”
Red means giving warning on “close to stock out and refill”
Conclusion

- **5S-KAIZEN-TQM** Approach is one of the tools for quality improvement in health care
- The one of important purposes of 5S-KAIZEN is to eliminate waste in work place
- Maximum utilization of existing resources
- Anyone can do it with:
  - Little knowledge
  - Little dedication
  - Little hard work and
  - A very big positive attitude
- Our wisdom has no limitation
KAIZEN Mind will help you to solve problems
Thank you for listening!

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Health Workforce Ratio (2016)

Ref: https://www.sciencedirect.com/science/article/pii/S2405844018349983