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Assessment of implementation of “5s” in phc of Ahmedabad

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Abstract

Introduction - 5s is the part of Japanese term “kaizen” means good change. 5S is the name of a workplace organization method that uses a list of five Japanese words, translated into English, they all start with letter “s”. E.g. Sort, Set in order, Shine, Standardize, Sustain. 5S describes how to organize a work space efficiently and effectively by identifying and storing the items used, maintaining the area and items, and sustaining the new order. 5S describes how to organize a work space efficiently and effectively by identifying and storing the items used, maintaining the area and items, and sustaining the new order. The 5S’s characterize a continuous and never-ending methodology for creating and maintaining an organized, clean, and safe high-performance environment.

Methodology - This study was done by purposive sampling technique by taking 1 PHC (named sugad) & it’s 2 sub centres (named Chiloda & Koba) of Ahmedabad district using ready to use checklist form for implementation of 5S. For each S, scoring ranges from 0 to 5 given depending on answers. Data entry & analysis was done in Microsoft excel.

Observations & discussion - Phc sugad scored 80%, 60%, 63%, 70%, 76% respectively for S1 to S5, Sub centre Chiloda scored 70%, 50%, 51%, 62%, 64% respectively for S1 to S5, Sub center Koba scored 73%, 45%, 49%, 62%, 68% respectively for S1 to S5.

Conclusions - The findings of this study revealed that there was not major difference for 5s implementation between phc & sub centres in most of the groups. Due to 5S clean, organized and safe work place is noticeable, pride is created in the workplace due to change in organization culture. Involvement of staff is the key driver to sustain 5S.

Recommendations - The scope of this project did not go past the planning stage; nevertheless room for improvement can be seen visually throughout all groups of 5S in all study centres.

Keywords: Quality, healthcare, 5S strategy, PHC

1. Introduction

5s is the part of Japanese term “kaizen” means good change. 5S is the name of a workplace organization method that uses a list of five Japanese words, translated into English, they all start with letter “s”. E.g. Sort, Set in order, Shine, Standardize, Sustain. 5S was developed in Japan and was identified as one of the techniques that enabled Just in Time manufacturing. Although the origins of the 5S methodology are in manufacturing, now it is widely use in many industries including healthcare. 5S describes how to organize a work space efficiently and effectively by identifying and storing the items used, maintaining the area and items, and sustaining the new order.

The 5S’s characterize a continuous and never-ending methodology for creating and maintaining an organized, clean, and safe high-performance environment. The first S, sort, is about removing items that do not belong or are not needed in the workplace. Straighten, the second S, focuses on having a place for everything in the best possible manner. Shine the third S, sets the pace of the classical idea of housekeeping, inspection, and preventative maintenance by making sure everything is clean. The cleaner an area is, the easier it is to identify issues that may hurt quality. The forth S, standardize, is what allows the recursive process of the first three S’s to occur by creating standard procedures. Fifth S, sustain, which keeps the lean implementations maintenance in the long-term and ideally part of the culture. To improve work environment both for employees & for patients, Government of Gujarat has implemented above said 5S strategy throughout health department from district hospitals

to CHC, PHC & sub-centres. At its core this strategy focuses on the elimination of the waste which is defined as any activity that consumes resources (staff, money, time, space) without adding value to those being served by the process. In healthcare organization this strategy is directed towards improving efficiency, clinical outcomes or health status & financial performance.

Rationale behind implementation of 5S in healthcare –

- 1) Higher authorities sent high logistics to each health center but as it was not arranged properly, when it is needed staff can't find it out & ultimately they it costs time & money.
- 2) Things which are outdated or condemn still persists in almost all health centers. This creates space, money problem.
- 3) Over a period of time population has increased many times but area of health center remains same, this creates overcrowding in all health centers. So there was urgent need for proper management.
- 4) Since long our focus was only to give services to large population but now time has come to shift from quantity services to quality service.
- 5) 5S doesn't cost much as it uses our existing human resources & we are developing them on other hand output & outcome of 5S are very much fruitful. So it cost effective.

As our new PM Mr.Narendra Modi has initiated vision of 'Clean India', 5s is just 1 step in the right direction to achieve it.

Aims & objectives

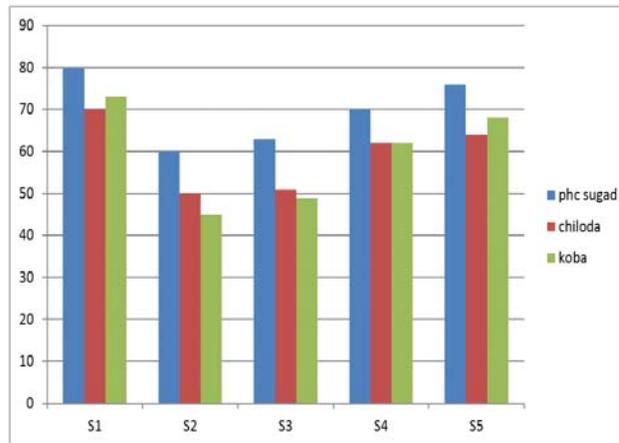
- To study the implementation of 5S in PHC sugad & its 2 sub centres named Chiloda & Koba in Ahmedabad district.
- To see whether there is any major difference in implementation of 5s in phc & sub centres.
- To study the perception of staff regarding 5S.
- To study upto what extent 5S implemented effectively & efficiently.
- To assess the effect of 5S implementation in improving work environment.

2. Methodology

This study was done by purposive sampling technique by taking 1 PHC (named sugad) & its 2 sub centres (named Chiloda & Koba) of Ahmedabad district. Study was done using ready to use checklist form for implementation of 5S, prepared by department of health & family welfare, Government of Gujarat. Study was done between 1/10/14 to 15/10/14. For each S, scoring ranges from 0 to 5 given depending on answers - where 5 denotes for excellent while 0 denotes for doesn't apply. For S1 (sorting), S2 (set in order), S3 (Shine), S4 (standardize), S5 (sustain) total 6, 4, 3, 8, 5 questions were asked respectively. Highest possible score for S1 to S5 is 30, 20, 165, 40 & 25 respectively. Data entry & analysis was done in Microsoft excel.

3. Results

- Phc sugad scored 80%, 60%, 63%, 70%, 76% respectively for S1 to S5 & overall scored 67%
- Sub centre Chiloda scored 70%, 50%, 51%, 62%, 64% respectively for S1 to S5 & overall scored 56%
- Sub center Koba scored 73%, 45%, 49%, 62%, 68% respectively for S1 to S5 & overall scored 55%



4. Discussion

As seen from the result there is not much difference between phc & subcentre. Although phc able to score high compare to both sub centres in all groups. The reason why phc scored better compare to both sub centres might be because it is directly under supervision of medical officer daily. While medical officer tends to visit sub centres once in a while. So because of lack of supervision might be the important factor why sub centres scored less.

As per result for S1 (sort) mostly all centers did well. Almost all staff took training of 5s. Routinely used things were sorted & kept handy. Only laggard in this group was – we couldn't find any red tag on unused items. S2 (set in order) was lowest performing among all. Though things were arranged properly we couldn't find any labeling on cupboard, rack, drawer etc. in all health centres. S3 (shine) performed lower in all centres. Overall cleanliness was satisfactory in all centres. But low result was due to non-existence of operation room, x-ray room, generator room, autoclave etc. which scored 0 (doesn't apply) according to scoring system. Sub centres score less than 50% because apart from above reason there was non-existence of medical officer room, emergency room, wards, laboratory etc. S4 (standardize) scored satisfactory in all centres Work distribution for cleanliness was done. Also cleaning material was available in almost all centres. Display of 5S was present. But we couldn't find any monitoring sheet for cleanliness & so does the supervision of it was also missing. S5 (sustain) good in all centres. Overall perception of staff towards 5S was good but we could not find any separate visit book as mentioned in check list.

5. Conclusion

Overall implementation of 5s in phc sugad was 67%, sub centre chiloda was 56% & sub centre koba was 55%. There was not major difference for 5s implementation between phc & sub centres in most of the groups. Due to 5S clean, organized and safe work place is noticeable, pride is created in the workplace due to change in organization culture. 5S increases quality of services given to patients in terms of cleanliness, less waiting time etc. Involvement of staff is the key driver to sustain 5S.

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