

Water Conservation through Maintenance and Practice Change Victoria Hospital, South Africa

GGHH Agenda Goals

- Water

Hospital Goals

- To completely stop the leakages from taps and other pipes within the hospital with the aim of conserving water and reducing pollution.
- To educate staff about the importance of Water Conservation, thereby strengthening their resolve on the issue

Progress Achieved

- **High Level Maintenance:** The leaking pipes within the hospital were identified and suitable replacements were installed. The initial amount of water consumed every month was determined from a baseline assessment and after the leaking pipes were corrected, there was a significant improvement in the amount of water saved.
- **Hospital Staff Practice Change:** Hospital staff changed their practices and stopped the wastage of water. The task team which comprised of the cleaners and house keepers were also very useful in ensuring that taps and other water sources were regularly turned off when not in use.

The Hospital Background and Issue

Victoria Hospital is a secondary district hospital situated in Wynberg, a Southern suburbs of the Western Cape, South Africa. It is a 158 beds hospital known for its high standard of care as well as its concern for the population it serves. It provides a wide range of both medical and surgical services and strives to reach out to the community that surrounds it. The hospital building itself is about 11,985m² sitting on a land of about 12,125 m². The water consumption of the hospital was observed to be quite high standing at 417 litres/bed/day. These figures raised concern among senior management staff and once the hospital became a member of Global Green and Healthy Hospital, they decided to embark on reducing their water usage by repairing those leaking pipes and taps within the hospital.



The Sustainability Strategy Implemented

Firstly, an investigation was carried out to identify all the areas within the hospital that had leaking taps. This was illustrated in a map so that appropriate measures can be put in place and also for easy tracking for monitoring. Hospital staff were also made aware of situations that occur and can be termed water wasting water. They were trained on how to ensure that they don't use excessive water for some of their activities. A framework that aspires to net zero water use was developed with 32 cleaners and 12 Housekeepers who were appointed to lead the project. This group was chosen as they responsible for to maintain the hospital hygiene. They were trained by the management to report the broken taps and leaking taps.



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Implementation Process

A training workshop was conducted for the task team charged with this responsibility. They were trained for three hours on how to identify leaking pipes and other water conservation strategies. Furthermore, a plumbing expert helped with installing efficient faucets, leaking pipes and toilets that use less water. A system was put in place where there is routine monitoring of plumbing and pipes to prevent leaking. Training was conducted by the CEO and Support service manager, during the training the cleaners and housekeepers



were given the authority to switch off unnecessary water, report wastage to the support service manager. The hospital also bought a new autoclave machine which saves 200 liters of water per cycle. The new autoclave machine only uses 80 liters of water per cycle. This has contributed to the savings.

Tracking Progress

Expenditure reports was used to track the progress, before the project commenced, the hospital were paying average per month on water of USD \$ 1,901.38 (R30,000). Six months later after the project has been implemented the hospital was paying average of USD \$ 1,457.73 (R23,000). The monthly meeting was used to as feedback session and to discuss any challenges that the Cleaners and the Housekeepers may be facing. Furthermore, it was observed that the attitude and mind-set of people when using water also changed as people were keen to save the hospital cost of providing water.

Challenges and Lessons Learnt

At the beginning of the project not all the staff showed interest into the project because they did not

understand the need for it. It was only after we did a community awareness campaign on water conservation that we got buy in especially from nursing and kitchen staff who showed keen interest. Behavioural change was another challenge as it was difficult for people to stop bad practices as leaving tap running while brushing teeth and washing dishes. So we had to explain to them using illustrations on the amount of water spent doing those activities and how much the hospital is paying for a litre of water. This gave a clearer picture in their minds and they understood the impacts of some of their actions. It is not always easy to change behaviour but the task team was persistent in their activities and this was instrumental to achieving the goal.

Next Steps

We also plan on using the food waste from the kitchen to develop a food garden within the hospital. This we believe will kill two birds with one stone in that it will help take care of our food waste and create a source of fresh oxygen from the plants in the garden.

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