

Cost Effectiveness Analysis of Environmental Cleaning Materials used for Housekeeping Practices

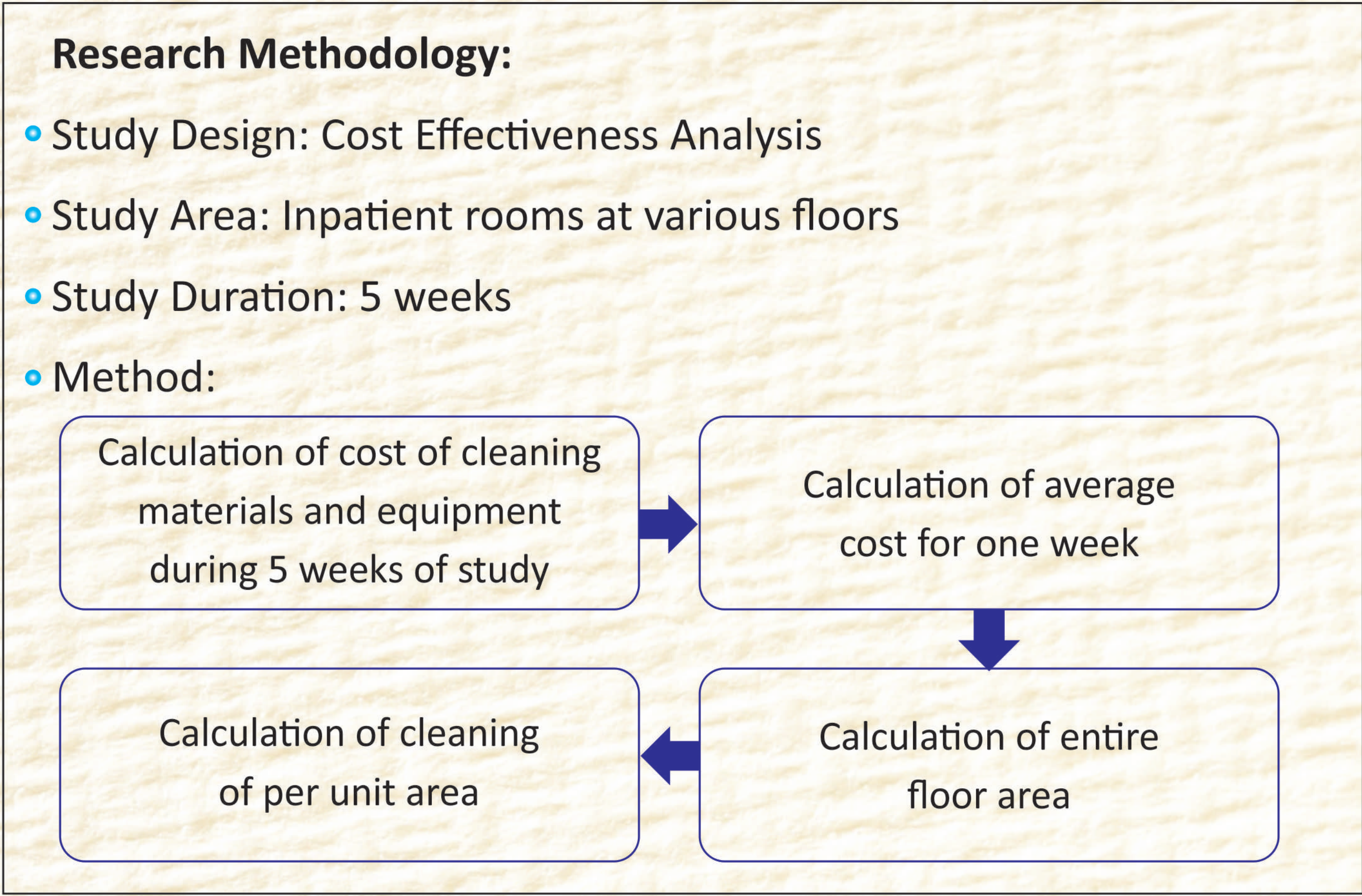
Gap Evaluation and Possible Substitutes of Cleaning Agents and Disinfectants used for Housekeeping Practices

Introduction:

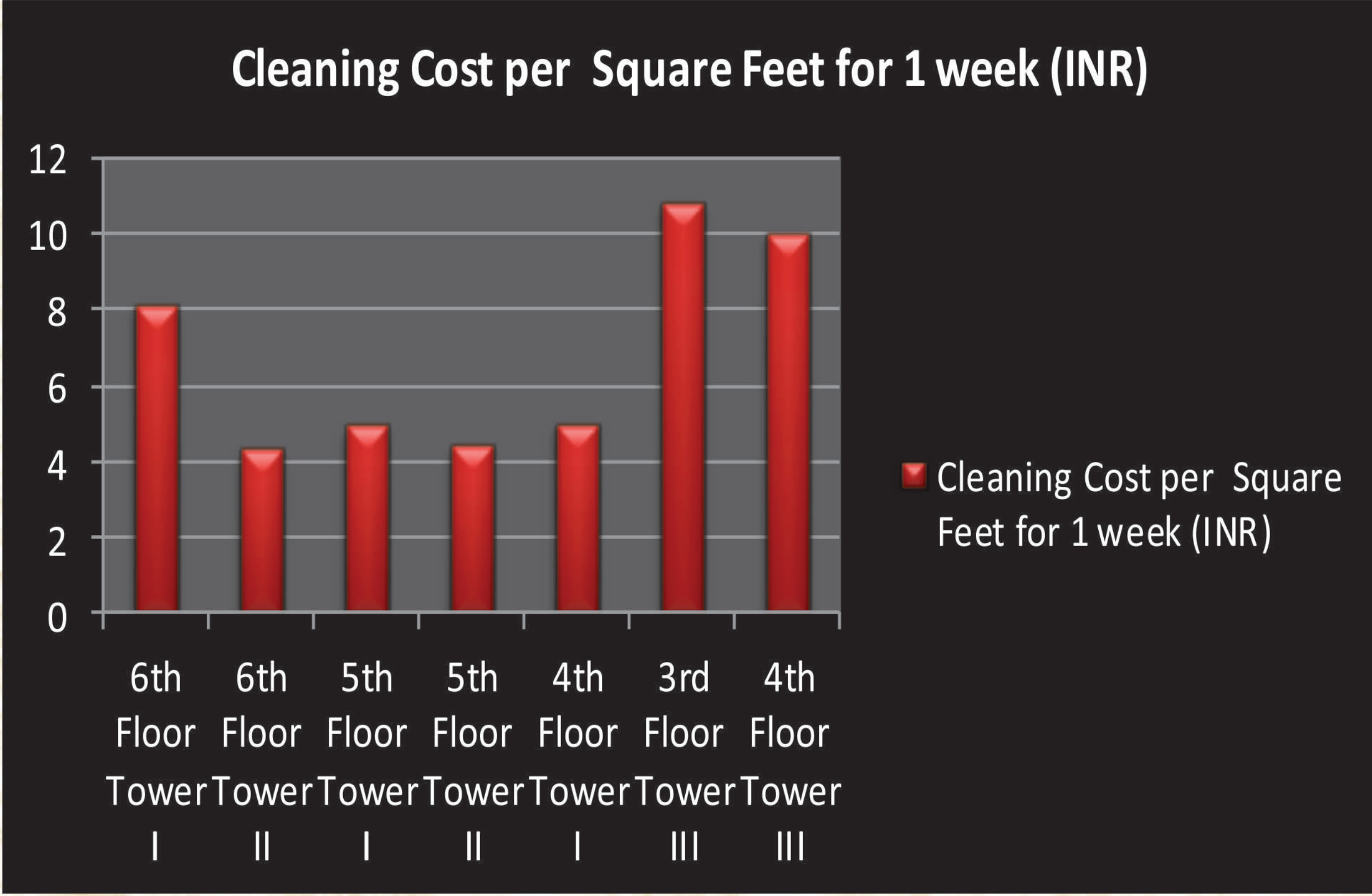
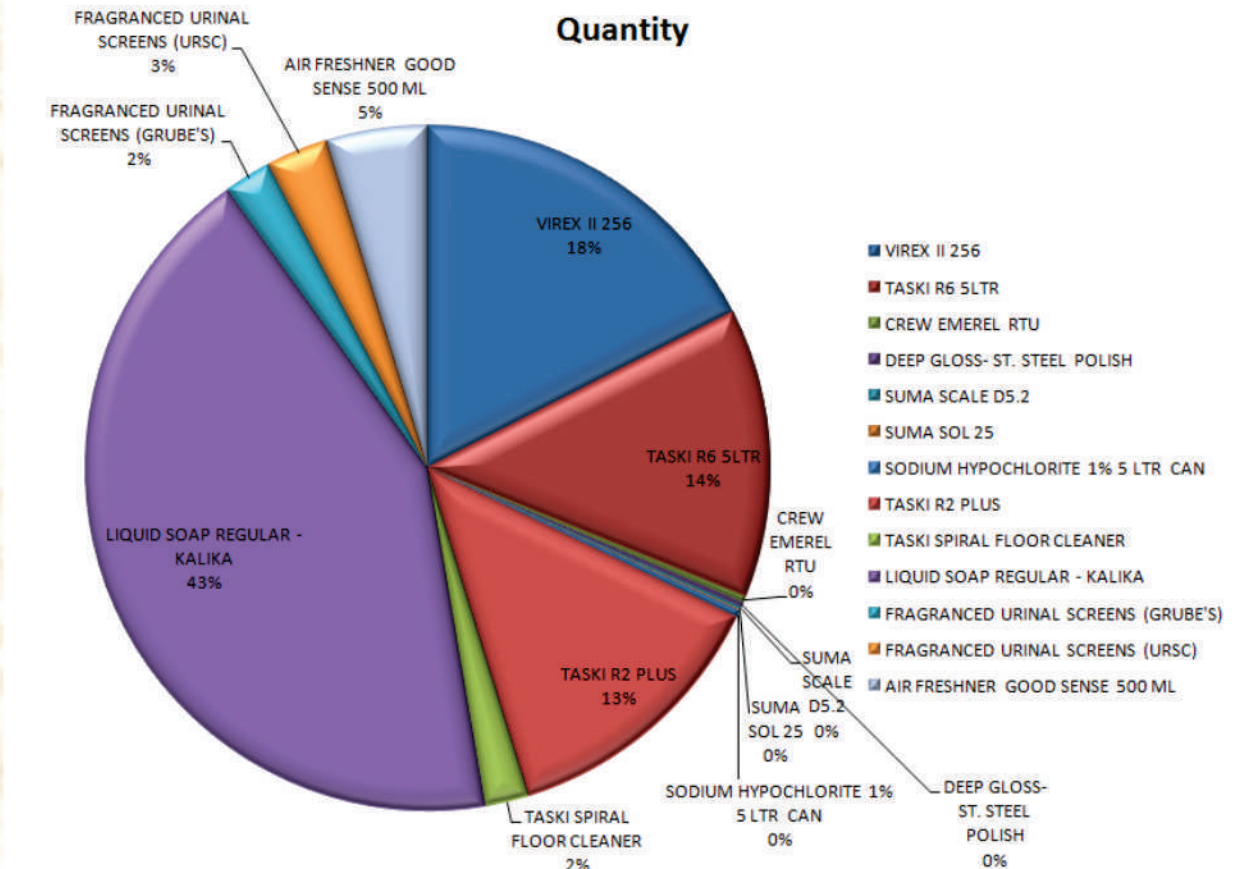
- The building of Indraprastha Apollo has 3 Towers named Tower I, Tower II and Tower III.
- Cleaning Materials for Tower I and Tower II are provided by the hospital whereas the cleaning materials for Tower III is outsourced.

Research Objectives:

- To find out the difference of cost of cleaning inpatient floors of Tower III (where cleaning chemicals are outsourced) in comparison to Tower I and Tower II.
- To check out of all cleaning materials which material is used in highest percentage.



Results:



Suggestions :

- Any cost control initiatives must take into account this variability to ensure adequate targeting of costs per floor per bed type rather than across the broad consumption cuts.
- A further study of efficacy of cleaning vs patient satisfaction with hospital cleanliness vs consumption in that area is needed to understand causation if any.

Suggestions:

- Different colour mops should be used for cleaning different areas. For example, the inside of the sink can be cleaned by red coloured duster whereas the outer slab can be cleaned by white duster
- Different mops should be used for different rooms especially when the patient is infected.
- Microfiber Mop can be used which are reusable, used by soaking into the chemical, wringing, attaching to the mop head with the help of Velcro Strips, removed and set aside for laundering after cleaning each room.
- An automatic combine machine is recommended which performs the four processes of laying the detergent/ cleaning/germicidal agent, scrubbing, rinsing the floor and vacuuming back the water.
- Supervisor should do spot checking.
- Use of audio/visual training aids.
- Knowledge about cleaning agents should be checked from time to time. Appraisals can be designed accordingly.
- Bactericidal action of detergents and disinfectants in use should be evaluated from time to time.

Introduction:

- In a tertiary care institute, cleaning of hard surfaces of hospital rooms and public areas become critical for reducing health care associated infections.
- Improving cleaning practices in hospitals will contribute towards controlling nosocomial infections and associated costs.

Research Objectives:

- To check the efficacy of housekeeping staff in cleaning various floors and maintenance areas.
- To check availability of written set policies of cleaning.
- To check if the standard recommendations are followed up to the desired standards.

Research Methodology:

- Study Design: Qualitative Observational Study, Gap Analysis
- Study Area: Medium Risk areas of Hospital
- Study Duration: 5 weeks
- Method: Staff involved in cleaning were keenly observed, compared with the protocols and gaps were identified.

RECOMMENDED ACTIONS	ACTIONS PERFORMED
DURING CLEANING	
Clean hands and wear gloves	✓
Do not swipe out infectious solid waste across the room. Collect it and dispose it in colour coded bag according to hospital policy.	X
Progress from clean to dirty areas	X
Wash the mop under running water before doing wet mopping	X
Do not double dip mop in same cleaning solution.	✓
Change mop after cleaning 3 rooms.	X
Remove gloves and clean hands before leaving room.	X

RECOMMENDED ACTIONS	ACTIONS PERFORMED
AFTER CLEANING	
Tools used for cleaning and disinfection must be cleaned and dried between uses.	X
Laundry mop heads daily	✓
All washed mop heads should be dried thoroughly before re-use	✓
Clean sanitation cart and carts used to transport bio medical waste daily.	✓

Gap Analysis according to type of Cleaner :

Taski R 2 Plus	Standard Protocols	Actions	Gaps
Dilution	6ml in 1 Litre water	6ml in 1 Litre water	No Gap
Application	Small Areas : 1) Spray a small quantity on damp cloth and clean the surface. 2) Let the solution stay for at least 5 minutes. 3) Rinse with fresh water or wipe with a clean damp cloth.	1) Disinfectant is directly sprayed on the surface. 2) It is not left for any amount of time. 3) Surface is not cleaned with a clean cloth.	1) Disinfectant should not be directly sprayed upon objects. 2) It should be left for at least 5 minutes. 3) After cleaning with disinfectant the area