

Assessment of hospital hygiene in selected patient care areas of tertiary care hospital, Kakinada

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Abstract— Hospital hygiene is a part of infection control programme of the hospital. The primary objectives of hospital cleanliness are twofold: To disinfect, so that the threat of nosocomial infection is reduced to create a clean, safe, attractive environment for patients, staff and visitors. Aim & objectives: To assess cleanliness and hygiene in selected patient care areas and to identify bottle necks in a tertiary care hospital, Kakinada. Methodology: Hospital based cross sectional study done in fourteen selected patient care areas. Study tools: semi structured questionnaire based on review of literature. Results: The number of toilets are inadequate as per norms, no provision for urinals in any part of the hospital study areas except the lab. In general Out of 14 ward areas 1(7%) area was graded as excellent, 5(35.7%) areas graded as good, 6(42%) areas graded as fine, and 2 areas graded as bad. Of verandas adjacent to these 14 patient care areas 1(7%) graded as excellent 4(28.5%) graded as good, 7(50%) graded as fine, and 2(14%) graded as bad. Of 10 toilets attached to these patient care areas 2(20%) graded as good, 3(30%) graded as fine, 4(40%) graded as bad, 1 (10%) graded as very bad.

Keywords—*hygiene; patient care areas; tertiary hospital*

I. INTRODUCTION

Hospital hygiene is a part of infection control programme of the hospital. The primary objectives of hospital cleanliness are two folds: To disinfect, so that the threat of nosocomial infection is reduced. To create a clean, safe, attractive environment for patients, staff, visitors. Hospital sanitation depends on types of resources, housekeeping practices, & appropriate cleaning techniques, & practices.

With this back ground, this study was undertaken for short period of time, for analyzing sanitation services in selected patient care areas in a tertiary care hospital, Kakinada, established in the year 1958.

II. AIM

To assess sanitary aspects in selected patient care areas in a tertiary care hospital, Kakinada.

III. OBJECTIVES

1. To assess the cleanliness and hygiene in selected patient care areas.
2. To identify bottle necks in sanitation practices & to suggest necessary correction measures.

IV. METHODOLOGY

Hospital based cross sectional study was done in 14 selected patient care areas in tertiary care hospital, Kakinada. They include 4 general wards, 3 intensive care units (ICU), 2 operation theatres (O.T), 2 labs, casualty, labour room, and kitchen. General appearance of ward, veranda adjacent to ward, and toilets were graded based on Likert scale, 1 being very bad and 5 being excellent.

V. STUDY TOOLS

Semi structured questionnaire based on review of literature was prepared & filled by the investigator.

VI. RESULTS

Frequency of sweeping is 6 times in kitchen and operation theatres, 4 times in ICU's and general wards and 2 times in lab. Mopping frequency is 5 times in operation theatres, 4 times in ICU's, 4 times in wards and kitchen and 2 times in lab. This is presented in the following table 1.

VII. OBSERVATIONS AND SUGGESTIONS

TABLE 1. FREQUENCY OF SWEEPING, EMPTYING DUSTBINS, MOPPING AMONG PATIENT CARE AREAS.

Name of patient care area	Frequency of sweeping	Frequency of emptying dust bins	Mopping frequency
I.C.U	4	4	4
O.T	6	5	5
General wards	4	3	4
Lab	2	2	2
Kitchen	6	1	4

The hospital is run in 3 shifts in most of the areas except the laboratory and a minimum of 3 times the cleaning of wards should be done and sometimes they may have to be cleaned based on need as and when it arises. Of studied 14 patient care areas 13(93%) had dust bins and all the 13(100%) had no covering lids, of the 13, 7(54%) do not have inner lining bags. Dust bins located at the entrance in 4 areas, near bathrooms in 4 areas, in front of O.T in theatres, and outside in the kitchen. . Frequency of emptying dust bin is 5 times in operation theatres, 4 times in ICU's, 3 times in general wards, 2 times in lab and 1 time in kitchen.

Of 9 patient care areas bed making done in 5 areas with a frequency of 1 time per day. Right now the dhobi's are on strike and the patients are asked to get their own sheets which are changed once a day. Ideally the sheets are arranged during the three shifts and at the time of patient admission and discharge. Of 4 general wards 2 areas had shelf for keeping medicines and liquids.

11(78.5%) windows, 10(71%) windows pans and sills were found clean. Patient excretions and food materials are not seen on floor in Patient care areas except in kitchen where food materials seen. Of studied areas stains on floor seen in 6(43%) areas of which 5 are long standing. Stains on walls are seen in 2(14%) areas are of long standing. Operation theatres, ICU's, and kitchen are dusted once in 15 days and general wards, labs are dusted once in a month. 9(64%) of 14 areas are provided with soap, or hand wash gel for health care personal. In verandas adjacent to wards 7(50%) had long standing stains. No food material & excretions seen on the floor. Number of toilets in 5 (50%) are found inadequate as per Bureau of Indian standards (BIS) 2007^[2]. The BIS stipulates one toilet for every eight beds^[2]. There are no urinals except in the lab which again does not conform to BIS norms. 10 toilets have no sink. 12 areas have continues water supply for every eight beds. There are no urinals except in the lab which again does not conform to BIS norms. 10 toilets have no sink. 12 areas have continues water supply.

In all patient care areas phenol is used as disinfectant with a dilution of 15 liters of phenol in 100 liters (1 liter of phenol in 6.5 liters of water). 12(85%) patient care areas have mosquitoes, 4(28.5%) have flies and in 3 areas dogs roaming at night time.

In these 14 patient care areas 80% of wards and verandas are acceptable 20% of areas are not acceptable and need more attention. Improvement is needed in 50% to increase the cleanliness among patient care areas from fine to goo. Number of toilets is inadequate in 50% study areas as per bureau of Indian standards. Of toilets 50% are not acceptable and more focus on number and sanitation of toilets and patient or attenders sensitization regarding the use of toilets is needed. In 80% of toilets areas, sink is not available for use by patients.

In all areas dust bins are not covered with lids and their maintenance is poor. Foot operated dust bins are needed. Dust bins should also made available in corridors, bath rooms, in verandas adjacent to ward and outside the clinical labs to avoid indiscriminate dumping of food materials or other wastes.

Only 2 areas under our study were provided with screening. Screening of buildings necessary for fly and mosquito control and also controls indiscriminate dumping of materials through the windows.

Out of 14 ward areas 1(7%) area was graded as excellent, 5(35.7%) areas graded as good, 6(42%) areas graded as fine, and 2 areas graded as bad. Of verandas adjacent to these 14 patient care areas 1(7%) graded as excellent 4(28.5%) graded as good, 7(50%) graded as fine, and 2(14%) graded as bad. Of 10 toilets attached to these patient care areas 2(20%) graded as good, 3(30%) graded as fine, 4(40%) graded as bad, 1 (10%) graded as very bad.

The hospital is a place where hygiene should be implemented 100% in all the areas without neglecting any given area to prevent spread of nosocomial infections and enable patients to have appropriate care and comfort during their stay and build their confidence that good facilities are available for an early discharge.

VIII. References

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