

An analysis of inadequacies in public health facilities: A case study of a government multispecialty tertiary care hospital

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Bathing is an important activity of daily living and should be a pleasurable experience. Adequate and suitable bathing and washing facilities can help to ensure that patients are bathed in private and with dignity. The study was conducted in a Government Multispecialty Hospital with the objective to assess and analyze the inadequacies in public health facilities. Poor access and inadequate adaptations for wheelchair users were also highlighted. A total of 74 baths, 142 washrooms and 124 washbasins (both in IPD and OPD of Hospital) were surveyed. None such studies had been conducted to assess the inadequacies in the public health facilities in health care organizations. All bathrooms and washrooms had proper location and were spacious. 99.5% of the baths had dual water supply; cold and hot. 99.5% baths were clean and non slippery. No bath hoists and non slip mats were present in any of the bath, while 37.8% (28) didn't have bath rods. There were separate male and female washrooms with having appropriate signage (98.0%). About 15.5% (22) washrooms were not properly clean and 17.6% (25) were foul smelling. The facilities for the handicapped and wheelchairs users were not appropriate. 97.0% (121) of the washbasins have mirrors, while towel rods and soap cases were found in 88.7% (110) and 97.5% (121) respectively. So, lot emphases need to be given to improve the decor, cleanliness, and general environment for making washing and bathing a dignified and relaxing experience. Hospital managers, doctors, and matrons should focus on these important issues and it might be a good idea to make these facilities a key factor in star ratings of hospitals.

Keywords: washrooms, bathrooms, inadequacies, quality, infection

Bathing is an important activity of daily living for all Hospitalized patients. Ideally, it should be a pleasurable experience for them. Helping a patient to maintain personal hygiene is a fundamental aspect of nursing care. However, bathing of disabled and elderly people can be difficult and time consuming. Adequate and suitable washing and bathing facilities can help to ensure that patients are bathed in private and with dignity. If inadequate aids, equipment and facilities compound the difficulty, the process can become arduous for busy ward staff.

Generally, in India it has been seen that bathrooms and toilets are not well maintained in public places including hospitals. A study by Alfa et al have found that up to one-third of patient toilets are not properly cleaned and about 40% of the samples taken from the cleanest toilets contained *C. difficile* spores, suggesting the lack in either cleanliness or efficacy of cleaning agents.

If hospitals are to be centres of excellence, consideration needs to be given to the public requirements and inadequate facilities must be upgraded. In a study conducted by Travers to assess the quality of public toilet facilities available in a large provincial teaching hospital, it was found that although the quality of toilet facilities varied, but none met the recommended standards. The worst facilities were found on a ward accommodating elderly patients, where the toilets were unsuitable for use by disabled people and bedside commodes had were used instead.

In a similar study by Chamberlain who investigated the physical characteristics of bathrooms, lavatories, and washing areas in a hospital, it was found that many of the bathrooms were large and lofty, with big windows and austere decor. Out of the total, 20% baths had no formal heating systems, 17% of the bathroom door widths fell

below the minimum standards. With respect to lavatories, ratio of lavatories to patients was highly variable, ranging from 1:4 to an unsatisfactory 1:16, whereas, the recommended provision is 1:6 on acute wards and 1:4 on wards with more dependent patients.

Similarly, in a study conducted at PGIMER to assess the inadequacies in hand-washing facilities, it was found that physical facilities required for hand washing were adequate though not perfect. Out of the total, hand-washing facilities were available in 99.05% rooms and almost all sinks had hand-operated taps. On the contrary, 16.75% sinks had no soap stand, and 10.5% sinks, soap stands were found broken.

Also, 1.91% sinks had no towel stand, 20.57% sinks had no towel available and 11% sinks were with dirty towels. No sink had hand-washing instructions displayed demonstrating correct technique of hand washing.

Objective of the study

This study was conducted, in a multispecialty tertiary level teaching hospital of North India region to assess and analyze the quality of public health facilities.

Method

Participants

It was a cross sectional study. A check list was prepared to assess the quality of public health facilities. The hospital has a total of 28 wards, whereas OPD block has a total of 16 OPDs. The wards with 15 beds had one bath and one wash each, while ward with 30 beds had three each.

There were 74 washrooms and bathrooms and 56 wash basins in wards and 68 washrooms and 68 wash basins in OPD block. Thus, a total of 74 bathrooms, 142 washrooms and 124 washbasins were surveyed.

Procedure

The hospital has four blocks (namely Block A to D), all the blocks having five or more than five floors. Block-A and C have General and Emergency wards, whereas Block-B has OPD and Block-D in-houses all the departments of the hospital. The annual IPD load is around 40,000 while annual OPD load is about 4.5 lakhs, with the average daily OPD patients' attendance of 1500-2000.

The study was conducted in OPD Block and Hospital ward areas, having more Bed Occupancy Rate (BOR). The survey was aimed to assess the quality of inpatient bathing, washing and washbasin facilities, especially bathing aids in the hospital. This also included assessment of features viz. bath aids, heating, floor surfaces, sink accessibility, privacy, and cleanliness on one occasion at middle of the day. The situation present in the OPD areas was also analysed. In OPD areas, baths are not present. So, only the analysis for washrooms and wash basins was done in OPD block.

Ease of access and adaptations for wheelchair users in both IPD and OPD were also assessed. Details of door widths, height of light switches, mirror height, easy use of taps, accessibility for wheelchair occupants, alarm call systems were also studied.

The present study is first of its kind and none such studies had been conducted to assess the inadequacies in the public health facilities in health care organizations.

Results

Bathrooms and Washrooms: All washrooms had proper location and were quite spacious. All 74 baths had latches and could be easily bolted. The glass panes were either painted or made opaque to make them not see through. A lot emphasis was given in maintaining the privacy of the patient. All expect one bathroom had properly working dual taps, one for general regular water, while other for hot water supply. The hospital had installed solar energy operated water heating systems on the roof tops and was used to supply the hot water to all the wards; so, there are no geysers in any of the baths. All expect one baths were clean and non slippery. Out of total, 12.2% (9) baths had no shower, and whereas 22.8% (17) were not working and needed either repair or replacement. There were no bath hoist (ambulift) and non slip mats (not favoured because of the theoretical risk of infection spread) in any of the bath, while bath rods were not available in 37.8% (28) of the baths. The width of all wash and bath doors was 76 cm. (as per Government Standards), which is below the minimum recommended (80 cm) to allow access for a wheelchair. Otherwise, there was no non-usable item lying in any of the bath or washrooms.

The taps were at reachable height (70 cm. off the ground) for the handicapped person. No special emphasis had been given while installing them or no alteration had been made later on for taking into account the requirements of the wheelchair users. The height (122 cm.) of the light switches was beyond the reach of the wheel chair users and no alarm bells installed in any of the baths rooms.

There were separate washrooms for patients and there was not a single combined bath and toilet. In 24.6% (35) toilets, there was no appropriate signage to guide the location of the washrooms, while signages differentiating male and female washrooms were present in 97.8% (139) of washrooms. 15.5% (22) washrooms were not properly clean and 17.7% (22) washrooms smelled of urine. Sanitation people were otherwise deployed throughout the day to wash and clean the washrooms regularly.

Washbasins

Most washbasins were at a suitable height (76 cm.) for those needing to sit and wash and had adequate legroom space. 99.2% (123) of washbasins were in working condition and had regular water supply, while are not installed with easy to use taps. 97.0% (121) of the washbasins have mirrors; out of which 8.8% (11) were 80-100 cm off the ground (not accessible for wheelchair patients), while rest 91.2% (113) were <80 cm off the ground. 90.3% (112) wash basins were clean and no leakage was found. Towel rods and soap cases were found attached in 88.7% (110) and 97.5% (121) of washbasins respectively, but, towel and soaps were found in 71.8% (89) and 92.0% (114) only. Out of total, 90.4% (112) washbasins have light arrangements.

Repair and maintenance

On discussion with all ward sister in-charges, 70% reported that minor problems were rectified on the same day. There are certain long pending problems of leakage or seepage in 8.4% (12) of the washrooms and 8.1% (6) baths. 4.0% (3) of baths were under repair or renovation, where some broken furniture was found.

Discussion

An assessment of other Northern Indian Hospitals, especially Government hospitals, can be made, from this analysis, as under study Hospital is one of the top hospitals of the region. While all the baths were neat and clean and have proper latches and bolts, while wash rooms have concerns about cleanliness. The privacy concerns of the patient are also well taken care off. The main deficiencies were of non functional or under repair showers, poor signage, baths rods and unpleasant smells. The mirrors and switches were quite high, which limits the accessibility for the wheelchair users. Mirrors should be lowered or enlarged to make washing, shaving and grooming easier for those who need to sit for this activity. The findings, for example, all rooms should have functioning alarm call systems, a bath hoist; the most important bathroom aid for disabled patients should be placed in context also. There were also the issues of long pending complaints of delayed repairs.

More consideration might be given to improve the decor, cleanliness, and general environment of these rooms, helping to make washing and bathing a more dignified, pleasurable and relaxing experience for all involved.

Though the recommended standards for wheelchair users and disabled using hospitals say little about bathrooms and showers in India⁵, but measures to improve overall quality of care, privacy, and facilities in hospital are in the National Service Framework for Older People in UK⁶. Hospital managers, doctors, and matrons should focus on these important deficiencies in the bathing and washing facilities of most hospital wards. It might be a good idea to make bathroom standards a key factor in government star ratings of hospitals. The aim should be to provide bathing facilities that we would be happy to use for ourselves.

Limitations of the study

The limitations of the study were, viz., some components were assessed subjectively and user satisfaction was not taken into account.

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