



KEY POINT SUMMARY

OBJECTIVES

This study aimed to measure the satisfaction of the staff with the newly furnished modular OTs.

Does Effective Designing of Operation Theaters Contribute Towards Staff Satisfaction: A Cross-Sectional Study

Rinkoo, A.V., Singh, S.P., Mishra, S., Vashistha, G., Chandra, H., & Singh, P.K. 2015 | *Facilities Volume 33, Issue 9/10, Pages 622-630*

Key Concepts/Context

Design has an impact on staff satisfaction. Operation theaters (OTs) are a primary source of revenue for the study hospital. The operation theaters of the hospital recently underwent renovation. Determining the staff satisfaction with the new work environment was crucial, as literature indicated that staff satisfaction was tied to patient satisfaction and higher financial returns. The study examined 12 aspects of the newly designed OTs through a questionnaire that was circulated among three different categories of staff end-users of the OTs. Staff satisfaction was found to be high with 11 of the design aspects of the OTs; it was low with one.

Methods

The authors conducted a cross-sectional observational study. The method involved distributing questionnaires among surgeons, nurses, and anesthetists (25 each). The participants were asked to rate their satisfaction with 12 design aspects (referred to as probable advantages) of the newly designed OTs using a Likert scale. This study was conducted at an 868-bed tertiary care super specialty hospital-cum-research institute in India.

Findings

The data show that the mean rate of staff satisfaction of the 12 probable advantages of the modular OTs was between 'Satisfaction' and 'Total Satisfaction.' Overall the staff is satisfied with the different design aspects of the OT. The anesthetists are significantly more satisfied than the nurses and the surgeons, whereas there was no significant difference between satisfaction of the nurses and the surgeons. Only one of the probable advantages was rated as 'neither satisfaction nor dissatisfaction' by nurses, surgeons, and anesthetists – the air showers. The probable advantage of aseptic environment was rated to be the most



DESIGN IMPLICATIONS

Materials that are anti-microbial are recommended for use in OTs.

Modular OTs are flexible as they can be dismantled and customized to suit the users' requirements.

Anti-static flooring material help protect against electrostatic hazards.



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satisfying by all subject types, followed by the Hatch box with ultraviolet technology. The anesthetists rated the protection against electrostatic hazards, the ceiling-mounted pendants, 100% fresh-air AHU, BMS, and flexibility as 'Total Satisfaction.' The authors surmise that this could be because anesthetists are the ones who mainly use these pendants in an OT.

Limitations

1. According to the authors, the limitation of this study is that it is a cross-sectional observation study. Hence, cause-effect relationships could not be obtained.
2. Other limitations of this study
 - a. The primary limitation of this study is that there is no declaration of conflict of interest. The newly designed modular OTs are in the same hospital where four of the six authors are part of hospital administration. This renders it difficult to rule out bias.
 - b. There is no reference to whether the IRB (or similar body) was approached before the start of this research.
 - c. The questionnaire preempts an unbiased response as it tells the subjects that 'the statements were designed to highlight the advantages of the new modular OT over the traditional OT.'
 - d. Some design aspects have been dubbed as one variable and there is no explanation in the text why this was done. For example: Aesthetics is referred to as "Aesthetics like vibrant colors, better illumination, and fine interiors."
 - e. The sample is not adequately defined as to the number of participants who had worked in the traditional OTs and the duration of their work in the new OTs.