



KEY POINT SUMMARY

OBJECTIVES

To develop prototypical patient rooms in healthcare facilities for people with infectious diseases that are spacious and have “a high ventilation standard,” as well as their accompanying anterooms.

Design for the Post-Antibiotic Era: Experiences from a New Building for Infectious Diseases in Malmo, Sweden

Holmdahl, T., Lanbeck, P. 2013 | *Health Environments Research and Design Journal* Volume 6, Issue 4, Pages 27-52

Key Concepts/Context

Healthcare facilities must carefully consider how facilities are designed as infection control mechanisms evolve.

Methods

Data were collected via a literature review, focus groups with staff members, study visits to other infectious disease facilities, an interview with Roger Ulrich, interviews of unidentified other subject matter experts, and a full-scale mock-up of the proposed rooms and anterooms with “ventilation, electrical, and other systems.” The mock-up was used to test design concepts and to train employees on how to best use the spaces developed.

Findings

A system with all single rooms was recommended. Additional related suggestions included creating rooms large enough to accommodate family visits, with natural light and views and where noise is kept to low levels. The researchers also recommended that “as many patient rooms as possible should be built with negative pressure.” Holmdahl and Lanbeck “argued for spacious single rooms that could be converted to use as small double rooms” as well as “inner and outer anterooms.” The researchers suggested that instead of physically distancing isolation wards from other patient areas as has previously been done, there are “technical solutions like separate and advanced ventilation, isolated elevators, separate sewage systems, and exterior entrances to patient rooms (and outdoor air) via circulation balconies.”



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Design Implications

This research needs to be applied because of “antimicrobial resistance, emerging diseases, healthcare-associated infections and outbreaks” of disease. The space developed is “a specialized unit where a high degree of standardization and flexibility [which] has made it possible to have a unique standard of preparedness for the post-antibiotic era.”

Limitations

All data were collected at one institution.