Impact of acuity-adaptable rooms on patient outcomes: A literature review

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Abstract

Introduction: According to WHO, patient safety is the prevention of errors and adverse effects to patients associated with health care. There is a significant impact of physical environment on health and patient safety. Identifying and eliminating built environment conditions that negatively impact patient safety during various phases of construction of healthcare facilities is a strong need of the hour. Methods: A comprehensive literature review retrieved 15 research articles related to acuity-adaptable patient rooms presenting evidence of the positive impact on patient safety. The literature review was focused on all the research articles, which showed impact of acuity-adaptable rooms on various factors like infection control, medication errors, patient falls, noise levels, patient and staff satisfaction, and average length of stay. Results: Acuity-adaptable patient rooms reduce both intra hospital patient transfers and errors related to medication that in turn help to improve patient safety. Single-patient rooms in contrast to multi bed patient rooms have been associated with lower infection rates, better staff communication, fewer patient transfers and medication errors, lower noise levels, and improved sleep quality. Conclusion: Though, there is an increasing evidence of positive outcomes of acuity-adaptable rooms, there is still a very limited use in real projects. Evaluation and implementation of the concept of acuity-adaptable rooms suggest that they reduce intra hospital transfer of patients and medication errors, and may reduce the incidence of patient falls and increase patient satisfaction.

Key words: Acuity-adaptable rooms, patient safety, hospital acquired infections, patient transfer, integrated patient care, patient environment, medication errors, patient satisfaction.