



## KEY POINT SUMMARY

### OBJECTIVES

The purpose of this paper was to conduct a literature review on medication errors and light.

## Light for Nurses' Work in the 21st Century: A Review of Lighting, Human Vision Limitations, and Medication Administration

Graves, K., Symes, L., & Cesario, S. K. 2014 | *Journal of Nursing Care Quality Volume 29, Issue 3, Pages 287-294*

### Key Concepts/Context

While there has been previous documentation about the impact of the built environment on staff efficiency, little has been documented about the role of architectural lighting on staff's ability to perform work tasks. The authors cite specific examples of how medications are often distributed on night shifts, sometimes when nurses use pen lights so as not to disturb patients. There is a need to increase awareness about the connection between poor lighting and the potential for patient harm in the medication administration process.

### Methods

A systematic literature review was conducted. Only work in English concerned with concept of visual acuity in relation to environmental lighting was included in the review. The authors found 11 review articles, two editorial pieces, and an additional seven empirical studies that met their criteria.

### Findings

Findings included that the nursing population is aging and with aging comes presbyopia and the need for more light. Increased computer use, "near work," and task complexity can cause eye fatigue, which may increase the need for lighting. And finally, the size of visual elements, contrast with the background, glare, reflection, and shadows can have an impact on visual comfort and performance.

### Design Implications

This study illustrates the importance of understanding the science behind lighting



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and visibility, awareness of lighting and safety guidelines, and the important role both play in the delivery of medication in healthcare settings.

### Limitations

This systematic literature review is limited by the criteria used by the authors to find the articles. Other criteria may have uncovered other resources.