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Nursing Interventions to Manage Postoperative Delirium

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Nursing Interventions to Manage Postoperative Delirium

Abstract

Background

Delirium is a highly prevalent clinical condition in postoperative patients. It has various adverse effects on patients and healthcare organizations, including increased health care costs, long-term cognitive impairments, and in-hospital mortality. Although nurses have a distinctive role in identifying and managing delirium, there are currently very few studies that have examined the effect of nursing interventions on postoperative delirium.

Objective

The objective of this integrative literature review was to explore and evaluate the effect of nursing interventions in preventing and managing postoperative delirium.

Methods

Six databases (Academic Search Premier, CINAHL, Medline, APA Psycarticles, Psychological and Behavioral Sciences Collection, and APA PsycInfo) were searched from September 2020 to November 2020. Articles published from January 15 to November 2020 were searched using the following keywords: delirium, post operative, post-operative, postoperative, post surgery, nursing, nurse, nurses, nursing care, and nursing practices. Eight articles were included in the final review. The evidence level and quality of the studies were evaluated using the Johns Hopkins evidence appraisal tool. All eight studies but one (87.5%) were rated with high level evidence in terms of evidence strength and quality.

Results

Nursing interventions were categorized into physical, environmental, and social and emotional components. Common nursing interventions provided in the studies included reduction of environmental stimuli, early mobilization, frequent reorientation, and inclusion of the family members in the care plan. The majority of the studies (87.5%) found statistical significance in the reduction of delirium incidence rate. Multiple studies observed decreased delirium severity, delirium duration, length of hospital stay, and mortality with the nursing interventions although several studies reported no statistical significance.

Conclusion

The findings of this integrative literature review indicate nursing interventions have positive implications on preventing and managing postoperative delirium. With further research and promotion of appropriate nursing interventions, there is a high prospect for improving patient outcomes.

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Rationale

- Prevalence of delirium is approximately 22-31% in admitted patients and 37% in postoperative patients.
- The annual cost resulting from delirium is \$152 billion, and the financial burden on each patient increases by \$2,697.
- Older patients are at higher risk for developing postoperative delirium.

Purpose

The purpose of this study is to evaluate the efficacy of nursing interventions in preventing and managing postoperative delirium.



Methods

- Research question: In surgical patients, what is the effect of nursing interventions on postoperative delirium?
- Databases including Academic Search Premier, CINAHL, Medline, APA Psycarticles, Psychological and Behavioral Sciences Collection, and APA PsycInfo were searched (2015 to 2020) using the following keywords: *delirium, post operative, post-operative, postoperative, post surgery, nursing, nurse, nurses, nursing care, and nursing practices.*

Results

Level of Evidence	# of Articles
I	3
III	4
V	1

- The search generated 335 articles, and 6 articles were relevant to the topic. Two articles were found through a manual search, resulting in a total of 8 studies.
- Nursing interventions performed throughout the studies included early mobilization, frequent assessment of pain, decreased environmental stimuli, sleep promotion, and increased family visits.
- Majority of the evidence illustrated a statistically significant reduction in delirium incidence with nursing interventions.
- Positive effects of nursing interventions were shown in delirium severity, duration, length of hospital stay, and mortality rates, although not all results were statistically significant.



Clinical Relevance

- Nursing interventions can play a significant role in decreasing delirium incidence and improving patient outcomes.
- Ask: How can the hospital or the unit encourage nurses to provide appropriate postoperative nursing interventions in their care?
- Recommendations:
 - Assess risk factors of delirium and provide education to surgical floor nurses on postoperative delirium.
 - Frequently screen for delirium and intervene accordingly.

Conclusion

- Nursing interventions have positive effects on preventing and managing delirium.
- Nurses are in a unique position in providing direct care to the patients and improving patient outcomes following surgical procedures.
- The findings in the current study suggest a need for further research on this topic.



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