Outcomes of Admission Screening for Obstructive Sleep Apnea in Hospitalized Patients with Cardiovascular Disease

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Session Title:
Rising Stars of Nursing Invited Posters - Group 2

Slot (superslotted):
RSG STR 2: Friday, September 26, 2014: 10:00 AM-10:30 AM

Slot (superslotted):
RSG STR 2: Friday, September 26, 2014: 11:45 AM-1:00 PM

Slot (superslotted):
RSG STR 2: Friday, September 26, 2014: 3:00 PM-3:30 PM

Keywords:
Cardiovascular, OSA and Screening

References:
preoperative screening of sleep apnoea by Berlin Questionnaire and Epworth Sleepiness Scale for postoperative atrial fibrillation. Heart, Lung and Circulation, 22(1), 38-42. doi:10.1016/j.hlc.2012.08.003

Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
<th>TIME ALLOCATED</th>
<th>FACULTY/SPEAKER</th>
<th>TEACHING/LEARNING METHOD</th>
<th>EVALUATION/FEEDBACK</th>
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<tbody>
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<td>Critique selected definition of the term, &quot;curriculum&quot;</td>
<td>Definitions of &quot;curriculum&quot;</td>
<td>20 minutes</td>
<td>Name, Credentials</td>
<td>Lecture PowerPoint presentation Participant feedback</td>
<td>Group discussion: What does cultural training mean to you?</td>
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<td>Planned engagement of learners</td>
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<td>The learner will be able to: understand the prevalence and impact of undiagnosed obstructive sleep apnea (OSA) in patients admitted to the hospital with a cardiovascular (CV) diagnosis. understand the benefits of utilizing an OSA screening tool to identify patients admitted with a CV diagnosis that are considered at high risk for OSA.</td>
<td>I</td>
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<td>Ellen Stemmler, BSN, CCRN, RN, RRT</td>
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**Abstract Text:**
Abstract

The purpose of this literature review was to assess the prevalence and impact of undiagnosed obstructive sleep apnea (OSA) in patients admitted to the hospital with a cardiovascular diagnosis, and to assess whether the data support the use of an OSA screening tool. An electronic data base literature search of English language publications between 2008 and 2013 was conducted. Study findings supported the use of screening tools to identify hospitalized patients with acute coronary syndrome (ACS), atrial fibrillation (AF), heart failure (HF) and coronary artery disease requiring coronary artery bypass graft (CABG) at high risk for OSA. In patients without a prior OSA diagnosis who were screened for OSA using the Berlin Questionnaire, rates for high probability of OSA were as high as 73.2% in patients hospitalized with ACS and 43.8% in patients with AF. Prevalence rates for previously undiagnosed OSA in studies utilizing a formal sleep study were as high as 65.7% in patients hospitalized with ACS, and 62.5% in patients with acute decompensated heart failure. Results also provided evidence of an increased rate of adverse hospital outcomes, including death, refractory unstable angina, bradycardia during percutaneous coronary intervention, residual ST-segment elevation and systolic retrograde flow after acute myocardial infarction, failed ablation for AF, and post-operative AF after CABG surgery, as well as long-term outcomes, such as death, reinfarction, stroke, unplanned target vessel revascularization, and HF in patients newly identified as having OSA compared to patients who were not identified as having OSA. Among hospitalized patients with HF, results showed an improvement in heart function in patients who received in-hospital treatment for newly identified OSA compared to those who did not receive treatment. Given the high prevalence of previously undiagnosed OSA in patients hospitalized for ACS, AF, and HF, and data suggesting OSA treatment improves hospital outcomes, it appears justified to include OSA screening as part of the nursing admission assessment in this patient population. However, future studies are needed to confirm the advantages of in-hospital identification and treatment of previously undiagnosed OSA in relation to short-term hospitalization outcomes as well as long-term outcomes and cost-effectiveness.