Title:
The Use of a Nursing Workload Tool to Reduce Burnout

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Session Title:
Leadership Poster Session 2
Slot (superslotted):
LDP PST 2: Monday, 19 September 2016: 7:00 AM-8:00 AM
Slot (superslotted):
LDP PST 2: Monday, 19 September 2016: 9:45 AM-10:15 AM
Slot (superslotted):
LDP PST 2: Monday, 19 September 2016: 12:00 PM-1:30 PM
Slot (superslotted):
LDP PST 2: Monday, 19 September 2016: 3:15 PM-3:45 PM

Purpose:
The purpose of this presentation is to show that decreasing workload improves the emotional exhaustion aspect of burnout.

Keywords:
Emotional Exhaustion, Nursing Burnout and Nursing Workload

References:

Abstract Summary:
The purpose of the project was to decrease nursing burnout on a Medical Progressive Care Unit (MPCU) by proper placement of patients according to both nursing workload and medical acuity through use of a nursing workload tool. Results demonstrate that decreasing workload can improve the emotional exhaustion aspect of burnout.

Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
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<tbody>
<tr>
<td>The learner will be able to demonstrate knowledge regarding nursing workload and staffing</td>
<td>-A relationship exists between staffing, decreased job satisfaction, and staff turnover (Pearson et al., 2006). -Aiken et al. (2008) Aiken et al. (2010) and Aiken et al. (2012) found staffing impacted burnout, job satisfaction, and quality of care. -Hospitals with improved staffing had a 4% decrease in burnout when compared to hospitals without</td>
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</table>
Nurses with highest workloads were 5x as likely to be burnt out as RNs with the lowest (Flynn et al., 2009).

<table>
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<tr>
<th>The learner will be able to demonstrate knowledge regarding the Nursing Activities Score</th>
<th>The Nursing Activities Score (NAS), an ICU workload tool, supported the intervention. A standard total workload score of one nurse per shift in an ICU is 100, with one nurse having two patients scoring 50 each. The standard score represents the work of one nurse per shift around the clock (Miranda et al., 2003).</th>
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The learner will be able to demonstrate knowledge regarding the Maslach Burnout Inventory.

-Subscales of the Maslach Burnout Inventory are individually analyzed: Personal Accomplishment, Emotional Exhaustion, and Depersonalization.
- The Emotional Exhaustion subscale measures feelings of being emotionally overextended and exhausted by one’s work (Maslach & Jackson, 1981).
- The Emotional Exhaustion subscale of the MBI has been used independently to evaluate burnout in relation to workload (Aiken et al., 2001, Flynn et al., 2009, Kutney-Lee et al., 2013).

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**Abstract Text:**

Nursing burnout and workload is a complicated issue with far-reaching effects. Nursing burnout and inappropriate nursing workload have been linked to increased risk of urinary tract infection, respiratory infections, decreased patient satisfaction, decreased quality and safety of care, and increased mortality. It has been estimated that if nursing burnout was decreased by 30%, there would be 6,239 infections, with a resulting savings of up to $68 million (Cimmotti et al., 2012). There has been an established relationship that exists between staffing, decreased job satisfaction, and staff turnover (Pearson et al., 2006). Aiken et al. (2008) Aiken et al. (2010) and Aiken et al. (2012) found that staffing impacted burnout, job satisfaction, and quality of care. In terms of workload, nurses with the highest workloads were five as likely to be burnt out as nurses with the lowest workload (Flynn et al., 2009).

Therefore, the purpose of the project was to decrease nursing burnout on a Medical Progressive Care Unit (MPCU) by moving patients with high workloads and medical instability to a higher level of care. The intervention consisted of a presentation to Intensive Care Unit (ICU)/Pulmonary physicians on the correlation between workload, burnout, and other issues pertinent to MPCU including current turnover rates and the experience level of the nurses. The project also included a daily workload tool, Nursing Activities Score (NAS), for each patient in the progressive care unit for the first two months in order to gather evidence for a previously submitted proposal by nursing management to improve nurse: patient ratios. The last four weeks of the project consisted of identifying patients at risk for transfer to the ICU due to their medical instability and then calculating the NAS.

The NAS is a validated ICU level nursing workload tool utilized for this project. Within the study by Miranda et al. (2003), the NAS for one patient was found to have a mean of 56 +/-17.5 (SD) with a median of 54 (Miranda et al., 2003). Therefore, a threshold of 54 was set as the ICU level workload per
patient. If the patient reached an ICU level workload of 54 and was deemed ICU appropriate, the goal was to move patients due to their workload and acuity. If the patient could not be moved due to extraneous factors such as lack of nursing staff in the ICU, then the pulmonary consult team, if appropriate, would consult.

The Maslach Burnout Inventory (MBI) was utilized to measure burnout. It is made up of three subscales that are scored individually: Emotional Exhaustion (EE), Personal Accomplishment (PA), and Depersonalization (DP). Pre and post burnout scores were gathered with a preliminary burnout score mean for the EE subscale of 29.88. Post EE scores were 23.32. The paired t tail for emotional exhaustion was 5.55 with a p-value of < .001. A significant decrease was found between the pre and post emotional exhaustion scores. The mean score for the pre emotional exhaustion score was 29.88 (SD = 10.13). This meets a high level for emotional exhaustion for the MBI. The post emotional exhaustion score was 23.32 (SD = 8.15), which lowers the emotional exhaustion scores to moderate. A statistically significant decrease was found with t (24) =5.55, p< .001. There was not found to be significant results with the depersonalization and personal accomplishment subscales. The mean DP subscale pre-implementation of project was 10.52 (SD = 5.16), post project implementation was 8.88 (SD = .95) with an overall t (24) =1.64, p=.114. Both pre and post project scores are considered moderate for the DP subscale of the MBI. The PA subscale had a pre project mean of 34.54 (SD = 5.76), post project mean of 35.21 (SD = 5.84) with a t(23) =.623, p=.539. Both pre and post scores are considered a moderate level for the PA subscale for the MB (Maslach & Jackson, 1981.)

In the original study by Miranda et al. (2003), a standard total score of 100 was supposed to indicate the patient workload of one nurse per shift for a 24 hour period. In other words, two patients scoring 50 each on the NAS would be assigned to one nurse per shift (Miranda et al., 2003). In the original study by Miranda et al. (2003), a standard total score of 100 was supposed to indicate the patient workload of one nurse per shift for a 24 hour period. In other words, two patients scoring 50 each on the NAS would be assigned to one nurse per shift (Miranda et al., 2003). In the MPCU, a median workload score of 41.8 and mean workload score of 43.55 (SD 14.57) per patient was found. Given that the standard ratio is 3 patients: 1 RN in the MPCU, a nurse’s work assignment per shift could easily exceed a total workload score of 100.

Results demonstrate that decreasing workload can improve the emotional exhaustion aspect of burnout. During the post project time-frame, the proposal to improve nurse: patient ratios was accepted and is currently being implemented.

References


