Impact of nightly earplugs on Medical/Surgical patients' perceptions of noise level and quality of sleep

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Impact of nightly earplugs on Medical/Surgical patients’ perceptions of noise level and quality of sleep

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Background
Sleep has been documented to be therapeutic for health, healing and recovery. Several studies have shown that illness, trauma and surgery significantly increase sleep requirements for hospital inpatients (Gardner, et al, 2009). The majority of the patients admits in this Medical/Surgical unit are older adults whose quality of sleep is impaired, and surgical patients dealing with multiple stressors such as pain, anxiety over post-operative complications, and environmental stimuli. Sleep deprivation in patients may have adverse effect on their cognition, fall risk and mortality (Missildine, 2008). External environmental factors such as light and noise play a major factor in relation to the quality and quantity of patients’ sleep.

Purpose
The purpose of the study is to assess the impact of nightly earplugs on patients’ perception of quality of sleep and noise level at night on a Medical/Surgical unit. The specific aim of the study is to compare pre and post implementations of nightly earplugs in determining patients’ perception of quality of sleep and noise level in Medical/Surgical unit. The secondary aim of this study is to assess patients’ perception of quality of sleep and noise level at night on a Medical/Surgical unit.

Methods
This is a quasi-experimental pilot study using research team developed pre/post questionnaires.

Preliminary Findings

Perceptions of Sleep Quality (n=42)

Perceptions of Noise Level at Night (n=42)

Perceptions of Satisfaction Level with Earplugs Use(n=42)

Discussion
The research team has enrolled 42 of their target goal of 50 participants. Preliminary reports show positive outcome in the use of earplugs at night time. The pre- and post-survey results shows improved quality of sleep overall and decreased noise level with the use of earplugs. This shows that there is a direct relationship between noise level and quality of sleep. As the graph shows, when the noise level decreased during the night the participants were wearing their earplugs, they reported having uninterrupted sleep, leading to increased rate of restful sleep.

The initial results are very remarkable and encouraging. The earplugs use can be a very cost-effective and simple way of improving patient satisfaction score and patient recovery.

Implications for Practice
Medical/Surgical units are capable of increasing patient satisfaction simply by improving patients’ quality of sleep and decreasing noise level at bedtime which can easily be done through simple steps such as providing patients with foam earplugs to filter the noise. If the study gets favorable final results, earplugs use can have a positive impact in the overall hospital’s patient satisfaction score and patient recovery. Furthermore, it is an easy intervention to implement in any size hospital.