Abstract Title:
Implementation of a Quiet Time (QT) period in a busy Level I trauma center’s Trauma Intensive Care Unit

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Background & Purpose:
Our goal was to lower noise levels in our ICU at set times in the day to provide patients and families with uninterrupted periods of rest during their stay. Elevated noise levels are an issue for ICUs, which are busy and loud environments. Frequent alarms, multiple interventions and procedures lead to continuous stimulation and increased stress. These stressors negatively impact patients’ abilities to sleep, recover from injury and immune function, which in turn can increase levels of delirium. Based on the evidence that sleep deprivation negatively affects patients’ outcomes, staff nurses proposed to implement a Quiet Time (QT) period in our ICU.

Study/Project Design:
This study is a single-site experimental pretest-posttest trial that took place between December 2010 and April 2011

Setting:
The 26-bed unit of a Trauma Surgical Intensive Care Unit of an academic Level I trauma center.

Sample:
The sample was a subset of the TSICU patient population. The survey sampled the TSICU nurses (total staff of about 80 RNs), and had 39 respondents.

Procedures:
Two blocks of time were chosen: once during day time (1400-1600) and the other at night (0000-0200). Literature on the topic of hospital noise and its effects on patients was reviewed, presented and discussed at Journal Club meetings to increase staff’s awareness. A committee of nurse and physician champions was created to develop the Quiet Time experience. Patients, visitors and ancillary staff were educated on the process and benefits of QT. Signage was developed and placed at the ICU’s entrance. Today, a unit-wide announcement initiates QT twice daily. Nursing staff position patients for comfort, pre-medicate for pain, and take steps to avoid unnecessary alarms. Care packs for patients including ear plugs and eye masks are offered. Lighting is dimmed, telephone and intercom volumes decreased, and families, when appropriate, are asked to step out to the waiting rooms.

Findings/Results:
Decibel monitoring pre and post intervention showed a sharp decrease (up to 10 decibels) in noise levels during QT. The nursing staff completed a post implementation survey on the perceived benefits and satisfaction level with QT, which showed 100% of respondents (39) perceiving a clear benefit to the patient (uninterrupted sleep) and themselves (calmer environment, able to catch up on charting, attend educational meetings such as M&M, Journal Club, VAP review). In addition, hospital wide survey documented patients’ families about their perception of noise in the ICU before and after QT implementation. Comparison of survey results showed a 20% increase in satisfaction with noise levels in the TSICU post QT implementation. Barriers encountered were initial staff resistance to the concept, staff concern regarding limited care during QT, and communicating the process to all other disciplines.

Discussion/Conclusions/Implications:
The implementation of a Quiet Time period in our unit has shown benefits to our patients, their families and our staff. Other units in the hospital have adopted the practice and night shift’s QT time period has been extended from 2 to 4 hours.