PROJECT TITLE

Nocturnal Assisted practices for Sleep in the intensive Care Unit (NAPS in ICU).

INTRODUCTION

Polysomnography studies suggest that one sleep cycle takes 90-100 minutes to complete. Contrary to this, the normal sleeping patterns of critically ill patients in intensive care (ICU) are frequently being disrupted by visual, auditory and tactile stimulation. Accumulative sleep disturbances can result in sleep inertia and impaired cognitive and sensory-motor function, increase patients' propensity for delirium, prolong recovery and extend hospital length of stay. Identifying potential sleep barriers in ICU, may improve patient outcomes.

AIMS

To identify main sleep barriers for patients in ICU.

METHODS

Five methods were used: (i) root cause analysis of potential sleep barriers with ICU staff; (ii) benchmarking with other ICU's to ascertain if they had sleep promotion policies or protocols; (iii) recorded consumer's experience after 32 days in ICU; (iv) surveying ICU staff to identify primary and secondary barriers; (v) observing and analysing sound, light and patient interruptions for one ICU patient during one 10 hour night shift.

RESULTS

(i) Staff reported: ICU environment and culture, patient acuity, staff awareness regarding patients need to sleep. (ii) Benchmarking: n=3 ICU's. No policies or protocols. (iii) Consumer: 'constant interruptions made it difficult to sleep'. (iv) Staff survey: n=81, medical 11, nurses 70. Primary stimuli: 64% auditory, 11% visual; secondary stimuli: 25% auditory, 21% visual. (v) Observations: sound levels in ICU 38-85 decibels. Median times per hour: sound inducing activity occurred 45; lights turned on/off 2; patient interruption 14. Tactile stimuli identified as the main sleep barrier.

CONCLUSION

Even though the findings from the nocturnal observations in ICU, reflect only one patient and one night in intensive care, and therefore have limited generalizability; the findings have assisted in identifying potential sleep barriers for ICU patients, and correlate with the consumers' experiences. Further evaluations using a larger sample of consumers and nocturnal observations, or other ICUs are warranted.