



EFFECTIVITY AND SAFETY ON THE USE OF EARMUFFS FOR SOUND REDUCTION ON THE WEIGHT GAIN VELOCITY AMONG VERY LOW BIRTHWEIGHT (<1500 GRAMS) AND PREMATURE INFANTS (28-32 WEEKS) ADMITTED AT THE PHILIPPINE CHILDREN'S MEDICAL CENTER

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Introduction:

Over the years, significant advances in neonatal care resulted in increased survival rate. However, with these advances the NICU noise became far from ideal. A setting closest to that of the intrauterine environment is imperative for holistic optimum growth and development of the premature neonate. Developmental care is an evolving practice that aims to provide the neonate a comfortable environment. Decreasing stimulation from noise is one of its component, that can result in improved weight gain.

Objectives:

This study determined the effect of earmuffs to minimize the perception of NICU ambient sounds on the weight gain velocity among the premature neonates.

Methods:

This is a prospective randomized controlled trial that included very low birth weight (<1500 grams) and preterm newborns (28-32 weeks) admitted at a tertiary hospital. A total of 32 neonates were randomized into the earmuffs group and control group. The earmuffs group utilized a MiniMuffs and was observed for weight gain, vital signs pattern (Heart Rate, Respiratory Rate, and Oxygen Saturation), and occurrence of apneic episode for a total of 14 days.

Results:

A statistically significant and favorable observation was noted in terms of daily weight gain and heart rate pattern among the earmuffs group. However, no noted difference on the duration of hospital stay, respiratory rate and oxygen saturation patterns, and occurrence of apneic episode.

Conclusions and Recommendations:

Use of earmuffs is effective to aid the premature neonates in their continuous growth and development post-natally. It is a low-cost means and can be easily incorporated in the daily routine neonatal care.

