

## SLEEP STATES IN TWIN GESTATION INFANTS

Leann Laubach, RN, BSN  
Southern Nazarene University  
6729 NW 39<sup>th</sup> Expressway  
Bethany, OK 73008  
Sleep, Co-Bedding, Twins

The need for sleep is a well-studied problem in premature infants; the impact of sibling presence on the sleep habits of multiple born infants is unknown. Co-bedding multiples is the practice of placing twins in the same bed, crib or incubator. This is done to foster the sibling attachment started in utero. Co-bedding is a developmental intervention practiced in the United States only since the late 1990's. A review of the co-bedding literature revealed very few published articles. The focus of these articles has been on developmental outcomes and parental satisfaction. A position paper from the National Association for Neonatal Nurses states "co-bedding cannot be endorsed until further research is available." The **purpose** of this research study is to determine how sleep states of the co-bedded premature infant are affected by the presence or absence of the twin. Is the amount of time spent in each sleep state altered by the presence or absence of the co-bedded sibling? The **method** for this research is a structured, within-subject, cross-sectional, experimental prospective trial study. The subjects (n=8) to be studied in this co-bedding research will be all twin sets in the Neonatal Services group at OU Medical Center who meet the criteria for co-bedding. Sleep states are not well defined in the literature prior to 32 weeks; this study will focus on those infants between 32 and 36 weeks gestation. The criterion for co-bedding is based on the unit policy on Co-bedding Multiples. Qualifying infant groups will be randomly chosen and placed in one of two study groups. The first study group consists of twins who are observed separately for 30 minutes using an observational assessment, then placed together and reassessed 24 hours later. The second study group will be studied while co-bedded then separated and reassessed 24 hours later. Anticipated **findings** will be that sleep states are normalized in the co-bedded infant because they are developmentally supported by the presence of their sibling. Three questions will be answered in this study: how much time do infants spend in each sleep state; is this altered by the presence or absence of the twin; and how does this compare to the single birth infant. **Discussion:** It is the opinion of this researcher that the presence of the sibling will decrease the number of apneas, bradycardias and desaturations for the premature twin, even if sleep states are altered.