

## Safety and Maternal Anxiety in Mother's and Baby's Sleep: Cross-sectional Study

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**Abstract :** Introduction: The lack of regulation of the baby's sleep-wake pattern in the first years of life affects the health of thousands of women. Maternal sleep deprivation can trigger or aggravate psychosomatic problems such as depression, anxiety and stress that can directly influence maternal safety, with consequences for the baby's and mother's sleep. Such conditions can affect the family's quality of life and child development. Objective: To correlate maternal security with maternal state anxiety scores and the mother's and baby's total sleep time. Method: Cross-sectional study carried out with 96 mothers of babies aged 10 to 24 months, accompanied by nursing professionals linked to a Federal University in Northeast Brazil. Study variables were maternal security, maternal state anxiety scores, infant latency and sleep time, and total nocturnal sleep time of mother and infant. Maternal safety was calculated using a four-point Likert scale (1=not at all safe, 2=somewhat safe, 3=very safe, 4=completely safe). Maternal anxiety was measured by State-Trait Anxiety Inventory, state-anxiety subscale whose scores vary from 20 to 80 points, and the higher the score, the higher the anxiety levels. Scores below 33 are considered mild; from 33 to 49, moderate and above 49, high. As for the total nocturnal sleep time, values between 7-9 hours of sleep were considered adequate for mothers, and values between 9-12 hours for the baby, according to the guidelines of the National Sleep Foundation. For the sleep latency time, a time equal to or less than 20 min was considered adequate. It is noteworthy that the latency time and the time of night sleep of the mother and the baby were obtained by the mother's subjective report. To correlate the data, Spearman's correlation was used in the statistical package R version 3.6.3. Results: 96 women and babies participated, aged 22 to 38 years (mean 30.8) and 10 to 24 months (mean 14.7), respectively. The average of maternal security was 2.89 (unsafe); Mean maternal state anxiety scores were 43.75 (moderate anxiety). The babies' average sleep latency time was 39.6 min (>20 min). The mean sleep times of the mother and baby were, respectively, 6h and 42min and 8h and 19min, both less than the recommended nocturnal sleep time. Maternal security was positively correlated with maternal state anxiety scores ( $r=0.266$ ,  $p=0.009$ ) and negatively correlated with infant sleep latency ( $r=-0.30$ ,  $P=0.003$ ). Baby sleep time was positively correlated with maternal sleep time. ( $r=0.46$ ,  $p<0.001$ ). Conclusion: The more secure the mothers considered themselves, the higher the anxiety scores and the shorter the baby's sleep latency. Also, the longer the baby sleeps, the longer the mother sleeps. Thus, interventions are needed to promote the quality and efficiency of sleep for both mother and baby.

**Keywords :** sleep, anxiety, infant, mother-child relations

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