Media Use and Child Sleep: The Impact of Content, Timing, and Environment

WHAT'S KNOWN ON THIS SUBJECT: Media use has been shown to negatively affect child sleep, especially in the context of evening use or with a television in the child's bedroom.

WHAT THIS STUDY ADDS: Increased sleep problems were observed in preschool-aged children for each additional hour of daytime violent media content or evening media use. No such effect was observed with nonviolent daytime use.

BACKGROUND: Media use has been shown to negatively affect a child’s sleep, especially in the context of evening use or with a television in the child’s bedroom. However, little is known about how content choices and adult co-use affect this relationship.

OBJECTIVE: To describe the impact of media content, timing, and use behaviors on child sleep.

METHODS: These data were collected in the baseline survey and media diary of a randomized controlled trial on media use in children aged 3 to 5 years. Sleep measures were derived from the Children’s Sleep Habits Questionnaire. Media diaries captured time, content title, and co-use of television, video-game, and computer usage; titles were coded for ratings, violence, scariness, and pacing. Nested linear regression models were built to examine the impact of timing, content, and co-use on the sleep problem score.

RESULTS: On average, children consumed 72.9 minutes of media screen time daily, with 14.1 minutes occurring after 7:00 PM. Eighteen percent of parents reported at least 1 sleep problem; children with a bedroom television consumed more media and were more likely to have a sleep problem. In regression models, each additional hour of evening media use was associated with a significant increase in the sleep problem score (0.743 [95% confidence interval: 0.373–1.114]), as was daytime use with violent content (0.398 [95% confidence interval: 0.121–0.676]). There was a trend toward greater impact of daytime violent use in the context of a bedroom television (P = .098) and in low-income children (P = .07).

CONCLUSIONS: Violent content and evening media use were associated with increased sleep problems. However, no such effects were observed with nonviolent daytime media use. Pediatrics 2011;128:29–35