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In Search of Sleep: It's a Family Affair

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It was only 1953 when the first laboratory sleep studies were initiated with healthy young men as research subjects. Today, we know more about women's sleep and that poor sleep affects health in many ways. However, we are no closer to understanding the basic function of sleep or how to best intervene to prevent or minimize the adverse health effects of poor sleep. As diurnal creatures, we are meant to sleep when it is dark and be awake when it is light. As experienced shiftworkers will tell you, it is very difficult to work when it is dark, but nurses manage to do so when called upon. Sleep during pregnancy and postpartum poses more of a challenge than even a shiftworker faces, with the start of essentially what becomes a "double shift" maternal role involving scheduled employment during the day and seemingly endless nightly awakenings for infant care.

This In Focus series focuses on sleep in selected groups of childbearing families. Rosen reviews the literature on sleep during fetal and infant development and stresses the role of the nurse in providing anticipatory guidance about sleeping arrangements during the couple's transition to parenthood. What some parents think of as "sleeping through the night" may be defined very differently by their healthcare providers.

For most of the past 50 years of sleep research, sleep could only be measured with electrodes on the scalp and face to yield stages of sleep and wake according to brain activity. Today's technology allows for differentiating sleep from wake by detecting movement in a much less invasive way and in a more natural setting using an actigraph monitor placed on the wrist or ankle. The remaining papers in this issue deal with sleep in high risk childbearing women and estimate sleep using this technology.

Gallo and Lee use actigraphy to describe sleep disruption in hospitalized antepartum patients who need bedrest as well as a good night's sleep. For clinical practice, the question here becomes how to weigh the benefits of adherence to bedrest that a hospital setting can assure to a good night's sleep that the home setting provides. Nursing interventions to protect women during the night from hospital-induced awakenings cannot match the home environment for attenuation of noise and light exposure, but interventions need to be developed and tested to protect sleep for all types of hospitalized patients.

Posmontier uses gold standard clinical measures of depression in her study comparing sleep in women with postpartum depression to those who are not depressed and shows clear differences in their sleep. She and the other authors in this issue call for intervention research to facilitate sleep in childbearing families.

Damato and Burant use actigraphy to describe sleep patterns over time in parents of twins and compare sleeping arrangements as well as fatigue ratings at three and four months

postpartum. Their work points to the need for more research on new fathers as well as more research on the daytime sequelae of poor sleep, not just for parents of twins. Even with valid and reliable measures of fatigue, depressive symptoms, and daytime sleepiness, these instruments assess overlapping behaviors. It remains difficult to discern whether new parents may be excessively sleepy and at risk of endangering their infant, fatigued from taking on the new role of parent who's left with no energy to do other activities or depressed because of the sleep deprivation and the fatigue and the limited social interactions.

Research has also shown that sleep loss impairs function, with elegant studies comparing decrements in performance to various blood alcohol levels. It is not uncommon for new parents to get less sleep, but as a society, we need to be well aware that getting two hours less sleep over the course of one week is akin to the legal blood alcohol limit set for driving a car. This series contributes much needed knowledge about high-risk childbearing families and their sleep patterns. Sleep loss for new parents is inevitable, but nursing interventions that can be easily implemented as part of childbirth education programs are still needed to promote sleep. These articles go a long way toward raising awareness of the importance of sleep to the health and safety of childbearing families.