Fatigue, Sleep Deprivation, and Safety

If not addressed, fatigue, sleep deprivation, and long periods of on-duty time can present potential safety risks for midwives, midwifery students, and the women and families for whom they provide care. The American College of Nurse-Midwives (ACNM) and its members are committed to providing safe, ethical, and high-quality care for women and infants. To achieve this commitment, it is the position of the American College of Nurse-Midwives (ACNM) that

- Midwives have a professional responsibility to be aware of the effects of sleep deprivation on clinical and personal safety and take steps to limit those effects as suggested below.
- Midwives and midwifery services have a responsibility to create and use strategies to address and minimize sleep deprivation through which personal, physical, and mental/cognitive limitations are acknowledged. These strategies should take into account acute issues (eg, prolonged wakefulness during labor support) and chronic issues (eg, call schedules and staffing patterns) to minimize the risks of sleep deprivation.
- Midwives should plan a rest period after 16 hours of continued wakefulness and be aware that the urge to sleep is strongest between 3AM and 5AM.¹
- Midwives are encouraged to schedule 7 hours of uninterrupted sleep on a regular basis.²
- Midwives who are sleep deprived or feel drowsy are advised to take naps before operating motor vehicles.

In recognition that practicing student midwives are also learners, it is the position of ACNM that midwifery students should be well-rested before scheduled call times, have a period of 4 hours of uninterrupted rest after 16 hours of active on-duty time, and/or take rest breaks before working more than 16 hours.

Background

Adequate, restful sleep is critical to normal human functioning.³ The American Academy of Sleep recommends that adults should obtain quality sleep of 7 or more hours per night on a regular basis.⁴ Despite this, in a 2013 survey by the National Sleep Foundation, 32% of U.S. adults reported sleeping less than 7 hours per night, and 21% reported regularly getting less than 6 hours of sleep.² Approximately one-third of health care workers reported less than or equal to 6 hours of sleep in 24 hours.⁵ In another study, Australian midwives frequently recorded inadequate sleep hours with a total sleep time of 6 to 7 hours in a 24-hour period.⁶ This lack of sleep was associated with moderate to high levels of physical and mental exhaustion. In a study from the United Kingdom, midwives who worked long hours, particularly on-call hours in community-based midwifery services, had higher rates of burnout on a Maslach Inventory Scale.⁷ In a recent national survey, 71% of survey respondents who were not in full scope midwifery practice (n=103) reported that fatigue and/or sleep loss was a reason they left full-scope midwifery practice, retired, or changed schedules.⁸
Health care workers who are subject to rotating shifts and on-call duties are at risk for chronic and acute sleep deprivation. Chronic sleep deprivation is associated with significant health risks, including obesity, diabetes, cardiovascular disease, stroke, depression, hypertension, and increased mortality.\textsuperscript{3,4} Acute sleep loss contributes to cognitive impairment, decreased reaction times, impaired motor skills, attentional failures, workplace errors, and motor vehicle accidents.\textsuperscript{9-16} Researchers found the effect of 17 hours of wakefulness was equivalent to or worse than a blood alcohol level of 0.05% on cognitive psychomotor test responses. After 24 hours of wakefulness, performance was equivalent to a blood alcohol level of 0.10%.\textsuperscript{17}

In the aforementioned national survey, 67\% of midwife respondents who took call shifts reported being on call for an average of 13 to 48 hours; another 12\% reported being on call for more than 48 hours at a time. Approximately one-fourth reported that they made clinical errors, and 40\% reported near miss clinical errors that they attributed to sleep deprivation or sleepiness.\textsuperscript{8} In a review of the literature on sleep deprivation and safety in health care, 24-hour shifts versus 16-hour shifts increased the rate of medical errors by 36\%, including a 5-fold increase in diagnostic errors. Needle-stick injuries increased by 60\% after 20 hours of continuous work.\textsuperscript{10}

Other medical professionals with irregular work hours were 2.3 times more likely to be involved in motor vehicle accidents and were 5.9 times more likely to report near-miss motor vehicle accidents after extended shifts of at least 24 hours.\textsuperscript{18,19} Nearly one-third of midwife survey respondents admitted to nodding off or falling asleep while driving home from call shifts; approximately three-fourths reported they experienced drowsiness and inattentiveness while driving home after call shifts; and nearly half reported they did not nap before driving home after long, particularly exhausting shifts, even when break rooms were available.\textsuperscript{8}

ACNM recognizes that the midwife’s ability to sleep is contingent on many factors, including the type and location of the practice, institutional policies, and the midwife’s personal sleep needs. Given the compelling evidence that supports the need for adequate sleep and rest periods, ACNM recommends that midwives, midwifery education programs, and health care institutions evaluate policies on rest and sleep safety to ensure that women and families receive optimal, safe care. Additionally, given the role of sleep and fatigue in decision making in the workplace, midwives must be aware that personal practices influence the long-term health and well-being of themselves and the families in their care.

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Note. Midwifery as used throughout this document refers to the education and practice of certified nurse-midwives (CNMs) and certified midwives (CMs) who have been certified by the American College of Nurse-Midwives (ACNM) or the American Midwifery Certification Board, Inc. (AMCB), formerly the American College of Nurse-Midwives Certification Council, Inc. (ACC).

Source: ACNM Sleep and Safety Taskforce & Clinical Practice & Documents Section of the Division of Standards and Practice
Approved by the ACNM Board of Directors: March 2017