

## Sleep Quality in Shift Workers

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Health care professionals generally work with shift system since they should be accessible by patients on a twenty-four hour basis. Costa defined "shift work" "a way of organizing daily working hours in which different persons or teams work in succession to cover more than usual 8-hour day, up to the whole 24 hours" [1]. Shift work stresses people and, thereby, demolishes their health, well-being, and lifestyles. Furthermore, the shift system worsens natural human circadian rhythm, sleep quality [2], and causes even more common sleep and health problems: gastrointestinal problems such as digestive disorders and ulcer, neck and back pain, fatigue, depression, tiredness, job stress, emotional disorders, and an increased risk of cardiovascular diseases [3-5] among nurses on rotating shifts than those in non-rotating shifts [6-8].

Sleeping at day time decreases the duration and the quality of the sleep partly because of Rapid Eye Movement (REM) period [9]. Strained people more likely experience depression, somatic disturbances, sleep disorders, and burnout, all of which threaten the quality of health care they provide [4,10]. Over-tiredness also decreases concentration and increases most likely errors and accidents [9,11]. Furthermore, scarce sleep shortens situational awareness, problem-solving capacity, and vigilance, even further jeopardizes patient safety [8]. Shift work, that involves circadian disruption is probably carcinogenic to humans [12], has been implicated as a risk factor for a number of chronic diseases, cardiovascular disease and metabolic syndrome and diabetes [13].

Burnout is another important problem for health care professionals in shifts [14,15]. Decreased sleep quality is considered to increase burnout level in nurses. Burnout is a psychological response to chronic emotional and interpersonal stressors on the job, and is defined by the three dimensions of emotional exhaustion, depersonalization and reduced personal accomplishment [16,17]. As a result; burnout creates higher expenses to all parts; patient, health care professionals, and the health system.

Demir Zencirci and Arslan [18] showed that majority of nurses had experienced poor sleep quality and increased levels of burnout. Especially, rotating shift nurses had more risks than others. One of the important precautions by the hospital administrations is, to take workers' chronotypes into account when preparing the shift lists. The precautions by the administrations would most likely improve nurses' overall well being and patients' safety.

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