

## Prevalence of Shift Work Disorders among Mongolian Nurses

**Authors :** Davaakhuu Vandannyam, Amarsaikhan Dashtseren, Oyungoo Badamdorj

**Abstract :** Background: Shift work and extended working hours are increasing in many industries and organization's in the world. Over a 24 hour period, the circadian clock regulates sleep/wake patterns, body temperature, hormone levels, digestion and many other functions. Depending on the time of day or night, the human body is programmed for periods of wakefulness and sleep, high and low body temperature, high and low digestive activity and so on. Shift work is highly prevalent in industrialized societies (>20%) but, when it includes night work, it has pronounced negative effects on sleep, subjective and physiological sleepiness, performance, accident risk, as well as on health outcomes such as cardiovascular disease and certain forms of cancer. Method: In this cross-sectional field study, 634 shift work and day work nurses from a plant were involved, with participation rate of 100% (634 nurses). The general health questionnaire (GHQ-28) and RLS, ESS, ISI, FSS were used to evaluate the level of insomnia, sleepiness, fatigue and restless legs syndrome, respectively. Results: As a result of research on some indicators of health risks caused from work shift, it was proven that prevalence of restless legs syndrome was at 5.5% and 25.9% are in risk of becoming sick, 42.3% are in fatigue, 3.5% in high stage of insomnia and 27.4% are sleepy on duty. Insomnia of nurses mainly affected from long-hour shift, dissatisfaction, workload, lose of focus and use of coffee. There is sleepiness lies in the workplace due to number of shifts, unsatisfactory performance and emergency calls between shifts. It has been determined that risk of sickness influenced by number of shifts in a month and long hour shift, dissatisfaction and use of coffee and divisions are causing restless legs syndrome. Conclusions: Among the nurses, it was found that the prevalence of insomnia is 31.6%, sleepiness 27.4%, fatigue 42.3%, restless legs syndrome 35% and stress 25.9%. These factors of shift work affecting health tend to go up as working hours increase and more common among shift work nurses.

**Keywords :** shiftwork, insomnia, sleepiness, restless

**Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020