EXOGENOUS MELATONIN ADMINISTRATION AS TREATMENT OPTION FOR SHIFT WORK DISORDER IN HEALTHY ADULT SHIFTS WORKERS

CHEAH PEI LYNN 1001128184

MASTER OF SCIENCE (ANTI-AGING, REGENERATIVE MEDICINE AND MEDICAL ASTHETIC)

FACULTY OF MEDICINE AND HEALTH SCIENCES

UCSI UNIVERSITY

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ABSTRACT

Background:

Shift work disorder (SWD) is characterized by symptoms of excessive sleepiness during work hours or insomnia during allocated daytime sleep hours. Furthermore, it also disrupts the circadian rhythm. Many shift workers with SWD experience significant social, behavioural, and health problems as a result of this disorder. SWD is associated with a higher risk of occupational and motor vehicle accidents, hence, poses a public health risk. Currently there are both pharmacologic and non-pharmacologic treatments for this disorder that can be used to normalize the disruption of the circadian cycle which alleviate the symptoms of excessive sleepiness or insomnia. This article review focuses on using melatonin as treatment option for sleepiness and sleep disruption associated with shift work in healthy individuals.

Design and objective: This literature reviews the scientific data and clinical studies supporting the use melatonin use for swift work disorder for healthy adult workers.

Findings: Eight studies which are freely available full text and human as subjects were extracted for this review. Five studies out of eight favours the administration of melatonin to improve the quality and duration of sleep and alertness, however, it is still dose dependant to achieve the outcome.

Conclusion: There is no concrete evidence to show that melatonin restore altered circadian cycles aselme, however, melatonin is showed to alleviate daytime insomnia and sleep duration but not night time wakefulness in shift word disorder. Although no therapies (pharmacological or non-pharmacological) can restore altered circadian cycles to baseline levels, proper

management of SWD should reduce its negative sequelae and improved quality of life for patients.