

Risk of diabetes mellitus in patients in using different types of hypnotics: A population-based cohort study

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One tenth of Taiwanese suffer from chronic insomnia according to the research from Taiwan Society of Sleep Medicine in 2019. Research shows that the prevalence of Benzodiazepines drug use increased from 3.0% in 1997 to 3.3% in 2004. In Taiwan, the mortality rate of diabetes mellitus is among the top five causes of death. A study shows that the use of hypnotics is associated with abnormal blood glucose other research indicated sleep quality and quantity are the risk of new onset diabetes mellitus. Therefore, the study aims to investigate the relationship between hypnotics and new-onset diabetes mellitus. The retrospective population-based cohort study was conducted to investigate the relationship between the hypnotic use and new-onset diabetes mellitus from National Health Insurance Research Database (NHIRD). The study used statistical methods Cox proportional hazard model and Kaplan-Meier survival curve. A total of 263,484 people were tracked from 2004 to 2013 between the ages

from 40 to 90 after screening data by exclude criteria. The results of the study found that there were statistically significant difference between the cumulative medication duration ≥ 180 days (HR=1.780; 95% CI, 1.725-1.827), the use of benzodiazepines (HR=1.739; 95% CI, 1.680-1.800) and Z-drug (HR=1.706; 95% CI, 1.585-1.838), related to the new-onset diabetes.

Biography

Jin-Lin Chiu has completed her Master's Program of Pharmaceutical Manufacture from China Medical University in Taiwan. She has expertise in statistical analysis of epidemiology and clinical pharmacology. She is also a teaching assistant and research assistant in Pharmacy department.