## The Association between Clinical Laboratory Investigation and Labourer Sleep Duration from 2019-2020 in Taiwan

## 游鎮瑋

輔仁大學統計資訊學系

## Abstract

Sleep duration is a vital aspect of human health and well-being. Not only does sleep play a crucial role in physical and mental restoration, but it also has substantial implications for various physiological processes. Labourers are one of the key population groups in which sleep duration is significant worldwide. Labourers often engage in physically demanding work, face high levels of occupational stress, and require sufficient and quality sleep to support their overall health and performance in their workplace. The impact of poor sleep on daily functioning has been welldocumented, with evidence suggesting that it can impair cognitive function and lead to lower performance associated with human errors, accidents, poor decision-making, and adverse health behaviours. In addition, poor sleep has been associated with adverse health outcomes such as cardiovascular, mental, immunologic, and metabolic disorders. Sleep disturbances are a prevalent issue, with estimates suggesting that 13-18% of men and 17-25% of women in the US adult population report sleep disturbances. Given the significant impact of sleep quality on various aspects of daily functioning and health outcomes, it is crucial to understand and address factors contributing to poor sleep quality. The increasing trend of insufficient sleep among the population in Taiwan has become a significant concern. To our knowledge, no study has stratified analyses of the relationship between sleep duration and laboratory examination of the labourer population in Taiwan. Understanding the impact of sleep duration on the labourer force in Taiwan and in light of the potential clinical factors, the study aims to examine the relationship between sleep duration and clinical laboratory examinations in Taiwanese labourers' employment status from 2019 to 2020.