

This study aims to analyze the relationship between long sleep duration and the risk of falls among middle-aged and elderly individuals, a significant health concern amidst an aging population. Utilizing data from the China Health and Retirement Longitudinal Study (CHARLS), the analysis includes 12,957 individuals aged 45 and above. Econometric methods and an innovative instrumental variable, average annual daylight hours, were employed to address the unclear association between long sleep duration and fall risk. The findings indicate that, after adjusting for confounding factors and addressing endogeneity, long nighttime sleep duration (>8 hours/night) is associated with a reduced risk of falls by 19.26%. While acknowledging the study's limitations, including unobservable factors and self-reported data, these findings contribute valuable evidence to inform fall prevention strategies and underscore the need for further research to refine our understanding of sleep's role in promoting healthy aging.