

Higher noise tolerance may be associated with more refreshing sleep

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ABSTRACT

Studies have shown indication of an association between noise tolerance and non-restorative sleep. However, most of them had inadequate sample size and residual confounding which may obscure the association. Therefore, we aimed to assess the association between noise tolerance and non-restorative sleep. We recruited 202 Chinese adolescents and adults from a representative household survey. Their noise tolerance was assessed by an audiometric test and non-restorative sleep was assessed by self-report on a 0-10 scale. The mean age was 32 years. After adjusting confounding effects, people who can tolerate one more decibel would be associated with 0.1 unit increase ($p=0.001$) in feeling refreshed after sleep. Hence noise tolerance was associated with non-restorative sleep. Clinical consultations may involve the assessment of noise tolerance in people with sleep complaints.