

## Association of sleep disturbances with reduced semen quality: a cross-sectional study among 953 healthy young danish men

Deskripsi Lengkap: <https://lib.fkm.ui.ac.id/detail.jsp?id=102110&lokasi=lokal>

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### Abstrak

Several studies have found an association between sleep duration and morbidity and mortality, but no previous studies have examined the association between sleep disturbances and semen quality. We conducted a cross-sectional study among 953 young Danish men from the general population who were recruited in Copenhagen at the time of determination of fitness for military service between January 2008 and June 2011. All of the men delivered a semen sample, had a blood sample drawn, underwent a physical examination, and answered a questionnaire including information about sleep disturbances. Sleep disturbances were assessed on the basis of a modified 4-item version of the Karolinska Sleep Questionnaire, which includes questions on sleep patterns during the past 4 weeks. Sleep disturbances showed an inverse U-shaped association with sperm concentration, total sperm count, percent motile and percent morphologically normal spermatozoa, and testis size. Men with a high level of sleep disturbance (score  $\geq 50$ ) had a 29% (95% confidence interval: 2, 48) lower adjusted sperm concentration and 1.6 (95% confidence interval: 0.3, 3.0) percentage points' fewer morphologically normal spermatozoa than men with a sleep score of 11-20. This appears to be the first study to find associations between sleep disturbances and semen quality. In future studies, investigators should attempt to elucidate mechanistic explanations and prospectively assess whether semen quality improves after interventions restoring a normal sleeping pattern.