

**ANALISIS HUBUNGAN KUALITAS TIDUR DAN  
*SITUATIONAL AWARENESS* TERHADAP RISIKO  
KECELAKAAN KERJA PADA PEKERJA  
PENANGGULANGAN KEBAKARAN DAN PENYELAMATAN**

**Kholis Sari**

**ABSTRAK**

Petugas Penanggulangan Kebakaran dan Penyelamatan menjalankan sistem kerja 24 jam yang berpotensi mengganggu kualitas tidur dan kewaspadaan dalam pelaksanaan tugas operasional. Penelitian ini bertujuan menganalisis hubungan kualitas tidur dan situational awareness terhadap risiko kecelakaan kerja pada petugas Penanggulangan Kebakaran dan Penyelamatan Sektor I Cengkareng Jakarta Barat. Penelitian menggunakan pendekatan kuantitatif observasional analitik dengan *desain cross-sectional* terhadap 90 petugas operasional yang dipilih menggunakan *proportionate stratified random sampling*. Data dikumpulkan menggunakan kuesioner *Pittsburgh Sleep Quality Index* (PSQI), *Situation Awareness Rating Technique* (SART), dan kuesioner risiko kecelakaan kerja berbasis Teori Domino Heinrich, kemudian dianalisis menggunakan uji korelasi *Pearson Product Moment* dan regresi linear berganda. Hasil penelitian menunjukkan bahwa kualitas tidur tidak berhubungan signifikan dengan situational awareness ( $r = 0,077$ ;  $p = 0,471$ ), kualitas tidur berhubungan signifikan dengan risiko kecelakaan kerja ( $r = 0,207$ ;  $p = 0,050$ ), situational awareness tidak berhubungan signifikan dengan risiko kecelakaan kerja ( $r = -0,021$ ;  $p = 0,844$ ), serta secara simultan kedua variabel tidak berhubungan signifikan terhadap risiko kecelakaan kerja ( $p = 0,139$ ;  $R^2 = 0,044$ ). Rekomendasi perbaikan difokuskan pada penataan jadwal istirahat (sleep management), edukasi sleep hygiene, penerapan *Fatigue Risk Management System* (FRMS), serta recovery management program untuk mendukung keselamatan operasional petugas di lapangan.

**Kata kunci:** Kualitas Tidur, *Situational Awareness*, Risiko Kecelakaan Kerja, Pemadam Kebakaran, PSQI

# ***ANALYSIS OF THE RELATIONSHIP BETWEEN SLEEP QUALITY, SITUATIONAL AWARENESS, AND OCCUPATIONAL ACCIDENT RISK AMONG FIREFIGHTERS AND RESCUE WORKERS***

**Kholis Sari**

## ***ABSTRACT***

*Firefighters and rescue personnel work on a 24-hour shift system, which has the potential to impair sleep quality and alertness during operational duties. This study aims to analyze the relationship between sleep quality and situational awareness and the risk of workplace accidents among firefighters and rescue personnel in Sector I Cengkareng, West Jakarta. This study uses a quantitative, observational, analytical approach with a cross-sectional design involving 90 operational personnel selected using the proportionate stratified random sampling method. Data were collected using the Pittsburgh Sleep Quality Index (PSQI) questionnaire, the Situation Awareness Rating Technique (SART), and a workplace accident risk questionnaire based on Heinrich's Domino Theory, and were analyzed using the Pearson product-moment correlation test and multiple linear regression. The results showed that sleep quality was not significantly associated with situational awareness ( $r = 0.077$ ;  $p = 0.471$ ); sleep quality was significantly associated with the risk of workplace accidents ( $r = 0.207$ ;  $p = 0.050$ ), situational awareness was not significantly associated with the risk of workplace accidents ( $r = -0.021$ ;  $p = 0.844$ ), and simultaneously, these two variables did not have a significant association with the risk of workplace accidents ( $p = 0.139$ ;  $R^2 = 0.044$ ). Recommendations for improvement focus on organizing rest schedules (sleep management), sleep hygiene education, implementing a Fatigue Risk Management System (FRMS), and a recovery management program to support the operational safety of field personnel.*

**Keywords:** *Sleep Quality, Situational Awareness, Workplace Accident Risk, Firefighter, PSQI*