Faktor-faktor risiko yang mempengaruhi tuli akibat bising pada penerbang TNI AU

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Abstrak

LATAR BELAKANG: Para penerbang helikopter yang terpajan terhadap bising intensitas tinggi dalam jangka tertentu dan beberapa faktor lainnya meningkatkan risiko tuli akibat bising (TAB). TAB dapat menyebabkan kecelakaan. Oleh karena itu perlu diteliti faktor-faktor risiko yang berkaitan dengan TAB.

METODE: Desain penelitian adalah nested case-control. Data diekstrak dari rekam medik penerbang helikopter TNI AU yang melaksanakan indoktrinasi latihan aerfisiologi (ILA) di Lakespra Saryanto Jakarta tahun 1980 sampai Maret 2004. Kasus ialah penerbang dengan gambaran audiogram terdapat takik pada intensitas 40 dB atau lebih pada frekuensi 4000 Hertz pada salah satu atau dua telinga. Seorang kasus dipadankan dengan dua orang kontrol (yang tidak menderita TAB sampai tahun 2004) menurut tahun kasus didiagnosis.

HASIL: Rekam medik yang tersedia sebanyak 187. Kasus yang diperoleh sebanyak 32 orang, dan 64 orang kontrol. TAB berkaitan dengan total jam terbang, masa kerja, dan tekanan darah. Subjek dengan total jam terbang 500 jam atau lebih mempunyai risiko TAB hampir 2,5 kali lipat (95% interval kepercayaan (CI) = 0,66-9,29; p=0,180). Jika dilihat dui masa kerja, subjek dengan masa kerja 11-24 tahun mempunyai risiko TAB sebesar 2,7 !tali Iipat (rasio odds suaian = 2,71; 95% CI = 0,90-8,10; p=0,075). Sedangkan subjek dengan prahipertensi dan hipertensi stage 1 mempunyai kecenderungan kenaikan moderat risiko TAB.

KESIMPULAN: TAB berkaitan dengan total jam terbang, masa kerja, dan tekanan darah.
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Risk Factors Related To Noise Induced Hearing Loss Among Indonesian Air Force Helicopter PilotsBACKGROUND: Helicopter pilots exposed to high intensity noise for a given period and other risk factors had increased risk to be noise induced hearing loss (NIEL). Therefore, it is beneficial to study several risk factors related to NIHL.

METHODS: This study was a nested case-control. Data was extracted from available medical records among helicopter pilots who performed aerophysiology training indoctrination (ILA) during 1980 through March 2004 at Lakespra Saryanto. Case was a subject who had audiogram with a notch at 40 dB or more and at 4000 Hertz on one site or bilateral ears. A case was matched by 2 controls free from NTHL up to 2004 by the year of respective case was diagnosed.

RESULTS: There were 187 medical records available for this study. A number of 32 cases and 64 controls were identified. The final model reveals that NIHL was related to total duration of works, flight hours, and blood pressure. Those who had 500 hours or more than less 500 hours had moderate increased risk for 2.5 to

be NIHL [95% confidence intervals (CI) 0.66-9.29; p=0.180]. Those who had total duration works 11-24 years had a moderate increased to be NIHL for 2.7 times (adjusted OR = 2.71; 95% CI=0.90-8.10; p=0.075). Furthermore, prehypertension and hypertension stage I subjects than normal blood pressure had moderate trend increased risk to be NIHL.

CONCLUSION: Total flight hours for 500 hours or more, total duration works 11-24 years, or prehypertension and hypertension stage 1 increased risk for NIHL.