Risk Factors Associated with Hypertension Among Malaysian Military Officers in 2018

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ABSTRACT

Hypertension can have serious occupational implications for a military officer, especially for those who have specialised training and has become an essential asset to the organisation. The study aims to investigate the prevalence of hypertension among senior military officers and to determine the associated factors. We reviewed medical records of a senior officer that underwent a routine medical examination at the Military Medicine Department, Kuala Lumpur Armed Forces Hospital from January 2018 to December 2018. There were 625 officers with a majority from army 61.2% followed by navy 19.8% and air force 19.0%. The mean age of the officers was 47.4 (6.3) years, and the majority was a male officer 94.1%. The prevalence of hypertension was 8.8% (55 officers). Twenty-nine of them were known case of hypertension; meanwhile, 26 were newly diagnosed to have hypertension. Among senior officers who were known case of hypertension, nine officers have good BP controlled. There were 7.8% (49 officers) exhibited blood pressure in the range of pre-hypertension. Hypertension was significantly associated with elevated BMI (p=0.018), high serum uric acid (p=0.005) and elevated serum creatinine(p<0.001). None of the military factors, i.e. type of service, rank and responsibility was associated with hypertension. Multiple linear regression analysis showed that increasing age, high BMI, elevated fasting blood glucose and serum uric acid were significant determinants for systolic hypertension. In conclusion, the prevalence of hypertension in the senior military officer was low compared to the general population. However, they shared similar risk factors.

KEYWORDS: Military officer, hypertension, prevalence, risk factors

Risk of 28-Day Readmissions Among Stroke Patients in Malaysia: Trend, Reasons and Its Associated Factors

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ABSTRACT

BACKGROUND: Risk of early readmissions after a stroke is an important quality indicator for stroke care. This study aims to assess the trend in 28-day readmissions after a stroke from 2008 to 2015, and evaluate the causes and factors associated with readmissions in 2015. METHODS: Stroke patients were identified using discharge records from the Health Information Management System from 2008 to 2015. We included only patients who were discharged alive. The proportion of readmission within 28-days and its trend were analysed. Reasons for readmissions that were coded to International Classification of Diseases (ICD)-10 were determined for 2015. A multivariable logistic regression was performed to identify factors that are associated with the readmissions. RESULTS: Among 151,729 eligible stroke patients between 2008 and 2015, 12.3% were readmitted within 28 days post-discharge from their stroke events. The trend remained stable over the years. Proportions of early readmissions were slightly higher in women (range:11.6% to 13.3%) compared to men (range: 10.9% to 12.7%). The commonest cause of readmission was recurrent strokes (32.1%), followed by complications from stroke which include pneumonia (13.0%) and sepsis (4.8%). Older age groups, stroke subtypes (haemorrhagic stroke and subarachnoid haemorrhage), and longer length of stay (>3days) during the index admission were associated with a higher risk of early readmission. CONCLUSION: Findings from this study will allow us to review our current stroke management and establish areas for further improvement, which includes minimising potentially preventable admissions and identifying target groups of patients who are prone to early readmissions.

KEYWORDS: stroke, readmission, Southeast Asia, trends, risk factors