



BUKU LAPORAN AKHIR GERAN USM JANGKA PENDEK

**WORK-RELATED FACTORS OF CARPAL TUNNEL SYNDROME
IN COMPUTER USERS AMONG CLERICAL STAFFS
IN GOVERNMENT HEALTH FACILITIES, KOTA BHARU, KELANTAN**

Researcher

Dr Zaliha Ismail
Dr. Sarimah Abdullah
Dr Mohd Iskandar Mohd Amin

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ABSTRAK – Bahasa Malaysia

FAKTOR BERKAITAN PEKERJAAN SINDROM TEROWONG KARPAL
DALAM KALANGAN PENGGUNA KOMPUTER KAKITANGAN PERKERANIAN
DI KEMUDAHAN KESIHATAN KERAJAAN, KOTA BHARU, KELANTAN

PENGENALAN: Sindrom terowong karpal (STK) adalah situasi di mana saraf median terhimpit di terowong karpal dan menyebabkan berlaku gejala dan tanda penyakit. Ketidakpastian prevalen tempatan dan kegagalan untuk menyingkirkan sumbangan faktor-faktor pekerjaan boleh menyebabkan kejadian semula atau perkembangan tanda-tanda STK, perubahan penggunaan tangan, dan keperluan rawatan pembedahan. Tujuan kajian ini dilaksanakan bagi menentukan prevalen dan faktor-faktor hubungan STK berkaitan pekerjaan, dalam kalangan pengguna komputer kakitangan perkeranian, di kemudahan kesihatan kerajaan, Kota Bharu, Kelantan.

KAEDAH KAJIAN: Satu kajian hirisan lintang telah dilaksanakan di dua kemudahan kesihatan kerajaan, di Kota Bharu, Kelantan dari bulan Januari hingga Jun 2008. Prevalen dan faktor-faktor hubungan STK berkaitan kerja telah dikenalpasti dikalangan pekerja perkeranian. Pendedahan terhadap factor-faktor hubungan terbabit telah dinilai melalui jawapan borang soalselidik, sukatan antropometri, dan pemerhatian terus. Status penyakit telah disahkan melalui sejarah yang menjurus kepada sindrom terbabit dan ujian provokatif atau ujian konduksi saraf. Data telah dianalisa melalui analisa 'simple' dan 'multiple logistic regression'.

Lampiran 1

HASIL KAJIAN: Sejumlah 300 pekerja (108 STK dan 192 bukan STK) telah mengambil bahagian dalam kajian ini. Prevalen STK adalah 36.0% (95% Selang keyakinan: 31.5, 41.5). Faktor-faktor yang termasuk dalam model akhir adalah satu faktor individu - sejarah keluarga STK dan satu faktor masa berkaitan kerja - masa papan kekunci (jam/hari). Seseorang yang mempunyai sejarah keluarga STK mempunyai 9.41 (95% Selang keyakinan: 1.09, 81.65, nilai P: 0.039) kali ganda odd untuk mendapat STK berbanding tiada sejarah keluarga STK, dan peningkatan satu jam sehari masa penggunaan papan kekunci mempunyai 1.11 (95% Selang keyakinan: 1.01, 1.23, nilai P: 0.039) kali ganda odd untuk mendapat STK.

KESIMPULAN: Prevalen sindrom terowong karpal dikalangan pengguna komputer adalah tinggi menunjukkan tingginya morbiditi di dalam kumpulan pekerjaan ini . Kaitan antara masa papan kekunci dan sindrom terowong karpal menunjukkan STK dikalangan pengguna komputer adalah berkaitan pekerjaan. Program-program kesihatan terutamanya pendidikan dan promosi kesihatan perlulah direkabentuk berdasarkan faktor-faktor yang menyumbang kepada risiko sindrom terowong karpal.

Kata kunci: Sindrom terowong karpal, pengguna komputer, prevalen, faktor risiko berkaitan pekerjaan

ABSTRACT - English

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INTRODUCTION: Carpal tunnel syndrome (CTS) is the situation when the median nerve is compressed within the carpal tunnel and causes the signs and symptoms. Uncertainty of local prevalence and failure to eliminate contributory job factors can result in recurrence or progression of CTS symptoms, impaired use of the hand, and the need for surgical treatment. The aim of this study was to determine the prevalence and work-related associated factors of CTS in computer user among clerical staffs in government health facilities, Kota Bharu, Kelantan.

METHODOLOGY: A cross sectional study was carried out at two government health facilities in Kota Bharu, Kelantan, from January until June 2008. Prevalence and work-related factors of CTS were identified in clerical workers. Exposure to associated factors was assessed by worker's responses on self-administered questionnaire, anthropometric measurement, and direct observation. Disease status was confirmed by history that was suggestive to the syndrome and provocative test performed by a hand surgeon or nerve conduction study. Data was analysed by using simple and multiple logistic regression analyses.

Lampiran 1

RESULTS: A total of 300 workers (108 CTS and 192 non-CTS) participated in the study. The prevalence of CTS was 36.0% (95%CI: 31.5, 41.5). The final model included one personal factor - family history of CTS and one work-related time factor - keyboard time (hrs/day). A person with family history of CTS has 9.41 (95%CI: 1.09, 81.65, P value 0.039) times the odds to get CTS as compared to no family history of CTS, and an increase in 1 hour/day of keyboard time has a 1.11 (95% CI: 1.01, 1.23, P value 0.039) times the odds to have CTS, when adjusted for keyboard time and family history of CTS, respectively.

CONCLUSION: The prevalence of carpal tunnel syndrome in computer users was high, indicates high morbidity in this occupation. The relationship of keyboard time and carpal tunnel syndrome showed that carpal tunnel syndrome in computer users was work-related. Health programmes especially health educations and promotions should be designed based on the factors that influenced the association of carpal tunnel syndrome.

Keywords: carpal tunnel syndrome, computer user, prevalence, work-related factors