

# **HUBUNGAN KONFIGURASI TANGAN, PERGELANGAN TANGAN DAN PERGERAKAN REPETITIF TERHADAP SKOR *Boston Carpal Tunnel Questionnaire* PADA PEKERJA SEWING DI PABRIK SEPATU**

**Dena Triana**

## **Abstrak**

*Carpal Tunnel Syndrome* adalah neuropathy akibat tekanan pada N. Medianus yang terdapat pada terowongan karpal. Penjahit merupakan jenis pekerjaan yang berisiko tinggi terkena CTS karena jam kerja yang lama dan memerlukan gerakan tangan berulang dalam pekerjaannya. Penelitian ini ingin mengetahui hubungan antara konfigurasi tangan, pergelangan tangan, dan gerakan repetitif terhadap skor BCTQ pada pekerja *sewing*. Jenis penelitian ini adalah analitik observasional dengan desain penelitian potong lintang. Teknik pengambilan sampel menggunakan *non random sampling*. Sampel penelitian yang digunakan sebanyak 38 orang. Pengambilan data dilakukan di PT PWI1 dengan instrumen penelitian berupa kuesioner, *metallic calliper*, dan perekam video. Hasil penelitian menunjukkan bahwa pekerja yang mendapatkan skor  $\geq 3$  sebanyak 16 orang (42,1%) dan skor  $< 3$  sebanyak 22 orang (57,9%). Hasil analisis regresi logistik menunjukkan terdapat hubungan antara skor BCTQ dengan gerakan repetitif ( $p=0,018$ ) dan rasio pergelangan tangan ( $p=0,04$ ). Pekerja yang melakukan gerakan repetitif  $\geq 30$  kali berisiko 9,6 kali dan yang memiliki rasio pergelangan tangan  $> 0,7$  berisiko 6,6 kali untuk mengalami CTS. Rasio tangan merupakan variabel perancu terhadap keluhan CTS.

**Kata Kunci:** *carpal tunnel syndrome*, gerakan repetitif, konfigurasi tangan, konfigurasi pergelangan tangan, pekerja *sewing*

# **ASSOCIATION OF REPETITIVE MOTION, HAND AND WRIST CONFIGURATION WITH BOSTON CARPAL TUNNEL QUESTIONNAIRE SCORES ON SEWING WORKERS AT SHOES FACTORY**

**Dena Triana**

## **Abstract**

Carpal Tunnel Syndrome is neuropathy due to pressure of N.Medianus in the carpal tunnel. Tailors have high risk affected CTS because of the long working hours and repeated hand motions in work. This study aims to determine the relationship between repetitive motions, hand and wrist configuration with BCTQ scores on sewing workers. This study was an observational analytic study using cross-sectional research design. The study was conducted at PT PWI1. The samples were 38 respondents and used non simple random sampling techniques. The data was collected by using questionnaire, metallic caliper and video recorder. The results of this study showed that there were 16 workers (42,1%) had scores  $\geq 3$  and 22 workers (57,9%) had scores  $< 3$ . Logistic regression analysis showed that repetitive motions ( $p=0,018$ ) and wrist ratio ( $p=0,04$ ) domain affected BCTQ scores. Workers with repetitive motions  $\geq 30$  times/minutes were 9,6 times and workers with wrist ratio  $> 0,7$  were 6,6 times more likely to develop CTS. Hand ratio is confounding factor for CTS.

**Keywords :** carpal tunnel syndrome, repetitive motion, hand configuration, wrist configuration, sewing workers