

**HUBUNGAN KARAKTERISTIK DAN SIKAP KERJA KARYAWAN  
TERHADAP VIDEO DISPLAY TERMINAL DENGAN KELUHAN  
MUSCULOSKELETAL DISORDERS**

**(Studi pada Karyawan Tele Account Management PT TELKOM Divisi Business Service  
RUDATY ARIANI**

Mulyono, S.KM, M.Kes  
KKC KK FKM 21/11 Ari h  
2011

**ABSTRACT**

Musculoskeletal Disorders (MSDs) are the most commonly reported complaint in most offices. The most prevalence of MSDs in office were found at video display terminal (VDT) users than non video display terminal users. The aim of this study were to analyze the association between individual characteristics, working posture and musculoskeletal disorders.

This was an observational study with cross sectional design. The respondents were all the tele account management operators in PT TELKOM Division Business Service. Thirty four sample size was taken from 49 as population by purposive sampling with given criteria. Data were collected by means of questioner and measurement of anthropometric and VDT dimensions. MSDs was dependent variable and independent variables were the individual characteristic (i.e.: age, gender, length of employment, vehicle, the time to get to the office, anthropometric and working posture). Data obtained were analyzed with a computer program was used to determined the strength of association by contingency coefficient.

The result of the study showed that most of the respondents were aged 21 – 30 years, female workers, length of employment for 1 – 3 years, they spent 10 – 20' to get to the office and all use motorcycle. VDT dimensions had complied with anthropometric of the respondent and ergonomic criteria as well. Most of the respondent (61,8%) experienced heavy MSDs mostly it's in their shoulder. The statisticly showed the weak association were found more than the medium ones. The medium found were between the level of complaint with length of employment ( $C=0.297$ ), duration of getting arrive the office ( $C=0.291$ ), angle view monitor ( $C=0.400$ ), distance view monitor ( $C=0.297$ ).

In order to minimize the occurrences MSDs, it is recommended that the company for socials of ergonomic norm to all operators and performed stretching exercise as well.

Keywords: video display terminal, operators, musculoskeletal disorders 9

## **ABSTRAK**

*Musculoskeletal Disorders* (MSDs) merupakan keluhan yang paling sering dialami karyawan perkantoran. Prevalensi MSDs lebih banyak ditemukan pada operator *video display terminal* dibandingkan operator non *video display terminal*. Penelitian ini bertujuan untuk menganalisis hubungan antara karakteristik individu, sikap kerja individu dan *musculoskeletal disorders*.

Penelitian ini merupakan penelitian observasional dengan pendekatan rancangan *cross sectional*. Respondennya adalah seluruh karyawan *tele account management* PT TELKOM Divisi *Business Service*. Jumlah sampel 34 orang dari populasi 49 orang dengan menggunakan *purposive sampling* dengan kriteria inklusi. Data didapatkan dengan cara kuisioner dan pengukuran anthropometri serta dimensi VDT. MSDs merupakan variable tergantung dan variable bebasnya adalah karakteristik individu (umur, jenis kelamin, masa kerja, kendaraan yang digunakan bekerja, lama perjalanan ke kantor, anthropometri dan sikap kerja). Data dihasilkan dari analisis program computer untuk menentukan kekuatan hubungan dengan menggunakan *contingency coefficient*.

Hasil penelitian menunjukkan terdapat paling banyak responden berumur 21 – 30 tahun, berjenis kelamin perempuan, dengan masa kerja 1 – 3 tahun, seluruhnya mengendarai sepeda motor untuk bekerja, selama 10 – 20 menit. Variable *video display terminal* sudah memenuhi anthropometri responden dan kriteria ergonomis. Paling banyak responden (61,8%) mengeluhkan *musculoskeletal disorders* tingkat kategori berat dengan frekuensi paling banyak pada otot bahu. Hasil analisis menunjukkan nilai kekuatan hubungan kategori lemah lebih banyak dibanding kategori sedang. Ditemukan nilai kekuatan hubungan kategori sedang antara tingkat keluhan *musculoskeletal disorders* dengan masa kerja ( $C=0.297$ ), lama perjalanan ke kantor ( $C=0.291$ ), sudut pandang mata ke monitor ( $C=0.400$ ), jarak pandang mata ke monitor ( $C=0.297$ ).

Untuk mengurangi kejadian MSDs disarankan pada perusahaan untuk mensosialisasi mengenai tata cara bekerja yang ergonomis pada semua operator dan juga melakukan pemanasan olahraga.

Kata Kunci : *video display terminal*, operator, *musculoskeletal disorders*.