

Repetitive strain injury epidemics. A demand study from the ERSA-6 SES northean district workers health program

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Repetitive strain injury (RSI) has generated a great deal of concern in the Workers Health Centers nationwide, mainly because of the growth in the rate of occurrence, its chronic character and its effects on the lives of workers who acquired RSI.

The author will be employing the name RSI to define clinical situations whose origins were occupational. These clinical situations are caused by organic or functional disorders due to local fatigue. They can also be due to a dysfunction in the muscles, tendons, synovia, fascias, nerves or ligaments. They can occur in an isolated form or in association with other disorders.

Until this time, there are no data compiled concerning the incidence or prevalence of RSI in counties, states and even in the country. The INSS data are incomplete, although RSI has inundated medical requests for physical disability, and it is well known that the rate of occurrence is largely under-reported. One of the most sought alternatives by workers to obtain a medical diagnosis and treatment has become public health resources. Referrals are made by labor unions, spontaneously or other types of referrals. The analysis of the demand for public health resources does not reveal the real incidence of RSI, but it may demonstrate that a significant increase of RSI has taken place among different classes of workers. Despite the fact the title of this manuscript refers to the demand of only one health center, the author considers it relevant to present the data from two other non-private workers health centers: Reference Center for Workers Health in Campinas - SP (CRST-Campinas) and the Workers Health Program in Jundiaí - SP (PST-Jundiaí).

Methods:

The occupational morbidity was analyzed from the data bank containing all medical visits. Special emphasis was placed during the analysis of the characterization of subjects with a diagnosis of RSI. The time period for CRST-Campinas

was 1993-94. The time period for PST-Jundiaí and Northern District Workers Health Program (PST-ZN) was 1994. Also analyzed was the data bank of patients with RSI seen at the PST-ZN between 1988 and 1993.

Results:

Workers Health Program from Jundiaí - SP (PST-Jundiaí):

In 1994, 576 diagnoses of occupational disorders were made. Those having RSI were 186 subjects (32.29%), the second most-prevalent occupational diagnosis. Females comprised 65.6% of the cases, with a mean age of 32.39 years. Mean employment time was seven years and 9.23 years in the position. RSI occurrence rate was also analyzed separately in the first and second half of 1994. In the first semester, RSI ranked as the third most-prevalent diagnosis, with 19.03% of all 308 diagnoses. It ranked first in the second semester with 43.83%. In the first semester, 29.4% were steel workers and 21.6% were bank clerks. In the second semester, 39.3% were steel workers and 23.7% were shoe industry workers.

Reference Center for the Workers Health from Campinas - SP (CRST-Campinas):

In 1993-94, 994 diagnoses were made. Among them, 280 (28.17%) were RSI and 79.3% were females, with a mean age of 33.8 years. In 1993, hearing problems comprised the most frequent diagnosis, and RSI followed with 20.35% of the 398 confirmed occupational diagnoses. Bank clerks predominated with 50.6% of all cases. In 1994, RSI took the lead, with 33.55% of 596 valid occupational diagnoses, 32.1% of them bank clerks, and 30.4% were steel workers.

NORTHERN DISTRICT WORKERS HEALTH PROGRAM (PST-ZN):

RSI has been the most prevalent diagnosis in PST-ZN since 1992. Out of 1,609 confirmed occupational diagnoses

in 1994, 1,047 (65.07%) were RSI. Among them, 893 cases (85.4%) were females, with a mean age of 35.5 years. Bank clerks were the most affected with 31.8%, steel workers second with 26.7% and other services made up 14.4%. Mean employment time was 7.20 years, and mean time in the position was 7.33 years.

In a sample of 654 patients with an initial evaluation between 1989 and 1993, 58.3% had a positive history of exposure to repetitive movements in a previous job. Pain was present in 53.8%. Painful sites most commonly reported were: wrists (20%), cervical region (11.5%), and hands (11%). The most common clinical diagnoses were: tendinitis, synovitis and upper limbs tenosynovitis (40%).

Conclusion:

In all centers, the analysis has demonstrated that RSI has been the first diagnosis and that it shows similar gender and age distributions. The professional categories vary among centers, but the steel workers and bank clerks were consistently the most affected in all centers. These findings indicate the demand for the immediate establishment of a prevention program of new RSI cases and of a rehabilitation program for RSI patients with a special emphasis on the secondary and tertiary sectors.

The PST-ZN clinical findings call for the training of skilled professionals for the care of upper limb chronic pain patients in workers health centers as well as in the non-private health care system as a whole.