

Title: MUSCULOSKELETAL DISORDERS IN HUNGARIAN CONSTRUCTION APPRENTICES

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Introduction: Workers in the construction industry throughout the world have a very high incidence rate of occupational injuries and illnesses as compared to workers in other job classifications. However, it is unknown how early in a construction worker's career that occupational musculoskeletal disorders (MSDs) begin to appear. The primary purpose of this project was to determine the prevalence of occupational MSDs in construction apprentices from Hungary. **Methods:** One hundred ninety-one apprentices from plumbing and sheet metal apprenticeship schools participated in the study. Data collection consisted of a self-administered symptom survey (similar to the standardized Nordic Questionnaire) and a job factors survey. Additionally, hand symptoms and electrophysiologic studies of the median nerve at the wrist were assessed to determine the prevalence of carpal tunnel syndrome. **Results:** The participation rate among the apprentices was 98%. The average age of the apprentices was 17 years (range 15 to 21). The average number of years in the trade (classroom or on the job training) was 2.9 years. The highest 12-month period prevalence of self-reported occupationally related MSD symptoms were in the low back (30% indicating "yes"), wrist / hands (18% indicating "yes"), and shoulders (12% indicating "yes"). Nearly 40% of the apprentices that indicated the presence of back pain were prevented from working at least one-day in the previous 12 months as a result. Though 18% of the apprentices indicated that they had had occupationally related hand / wrist symptoms, none of the apprentices met the case definition of carpal tunnel syndrome. The three job factors with the highest percentage of apprentices indicating that they contributed to work-related symptoms were "continuing to work injured or hurt," "working in the same position for long periods," and "bending or twisting the back in an awkward way." **Conclusions:** It appears that occupational MSDs begin early in a construction workers career. Carpal tunnel syndrome, however, is not a condition that is prevalent among construction apprentices in Hungary. Comparison of this data with data from other countries should be performed to identify international differences in the prevalence of MSDs and ergonomically efficient work methods and practices.