

**EPIDEMIOLOGY OF MUSCULOSKELETAL DISORDERS
AMONG DENTISTS IN HANOI, VIETNAM**



**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF PRIMARY HEALTH CARE MANAGEMENT
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2009**

COPYRIGHT OF MAHIDOL UNIVERSITY

Copyright by Mahidol University

EPIDEMIOLOGY OF MUSCULOSKELETAL DISORDER AMONG DENTISTS IN HANOI, VIETNAM**MA QUANG DUNG 5137895 ADPM / M****M.P.H.M.****THESIS ADVISORY COMMITTEE: NONGLAK PANCHARUNITI, D.D.S., M.P.H.,
Dr.P.H., JEFFREY M. ROSEMAN, M.D., Ph.D., M.P.H.****ABSTRACT**

Musculoskeletal disorders (MSDs) are the most important occupational health issues in dentistry. The objective of the study was to estimate the prevalence of MSDs and explored the related factors among dentists in Hanoi, Viet Nam.

Study design was cross-sectional. Self-administered questionnaires were sent to 400 dentists working in Hanoi, Vietnam. Chi-square and multiple logistic regression analyses were used.

Three-hundred-thirty-six questionnaires (84%) were completed; 61.6% of them were from males, 38.4% from females with mean age = 34.0 year old (SD = 8.4). Most were general dentists (78.3%). Almost 84% reported having experienced one or more musculoskeletal symptoms during the past 12 months and 34.8% of them reported having them in the last 7 days. The most prevalent locations in the previous 12 month were neck (58.0%), shoulder (57.1%) and lower back (46.7%). The right shoulder and arm joints were many times more likely to be involved than the left. The most commonly physician-diagnosed MSDs were neck pain (17.9%), back pain (16.1%), and tendonitis (10.1%). None of the socio-demographic factors including years in dentistry were significantly associated with having an MSD. Among the work-related factors:- working more than 8 hour/ day, more than 5 days a week, more than 60 minutes without a break, and only sitting when doing dental work were all significantly associated with MSDs. Among the social factors, having little or no help if they were sick or support from their colleagues were significant factors. For multivariate logistic regression analysis, those significantly associated with MSDs in bi-variate analyses remained significantly independently associated with having MSDs except having help available when sick.

The study showed that MSDs were major occupational health issues for dentists in Hanoi, Vietnam. Possibilities for preventions of future MSDs are recommended.

**KEY WORDS: EPIDEMIOLOGY / MUSCULOSKELETAL DISORDERS /
POSTURE / POSITION / STRESS / DENTISTS/ VIETNAM**

117 pages.