PII-37: Personal and Work-Related Factors Contributing to Back Pain in Firefighters

Author List:
Presenting Author: Mantana Damrongsak
Additional Author: Rebecca Grizzle

Presenting Author: Mantana Damrongsak
Address: 99 Paholyothin Rd., Klong Luang
Pathumthani 12121
Thailand
Ph: 66-81-846-1650
Fax:
Email: mantana_d@yahoo.com
Institution: Thammasat University

Additional Author: Rebecca Grizzle
Address: 7703 Floyd Curl Drive
San Antonio, Texas 78229
United States
Ph: 830-388-0275
Fax:
Email: fourgrizzlies@yahoo.com
Institution: University of Texas Health Science Center at San Antonio

Presentation Preference: Research Abstract

Abstract Categories:
Research Interest Groups (RIGs): Community/Public Health

Abstract:
Introduction: In many industrialized countries, occupational back pain is a critical health and safety problem among workers whose job tasks involve forceful movement and lifting. Firefighters perform these activities under hazardous work conditions and are subsequently at high risk for back injury which leads to early retirement. Most research has examined factors influencing back problems among healthcare occupations, but few studies have investigated personal and work-related predictors of back pain in firefighters. The purpose of this research was to ascertain the factors that most contribute to back pain in firefighters from set of the variables including demographic factors (age, history of back pain, BMI, and waist circumference), occupational stress, job satisfaction, perceived supervisor social support, and physical fitness. Relationships among selected work-related factors were also assessed.

Method(s): This study employed a non-experimental, correlational design. A convenience sample of 298 male firefighters completed the Job Stress Survey, Job Satisfaction Survey, and
the Content of Communication Scale instruments. Physical fitness level was measured as the composite of cardiorespiratory, flexibility, strength, and endurance performance. Multiple logistic regression and correlational procedures were utilized.

**Results:** Almost one-third (30.2%) of firefighters reported current back pain. Occupational stress, age, history of back pain, and BMI predicted the variability in back pain among firefighters (pseudo R² = 0.35). No improvement in prediction was found by adding perceived supervisor support, job satisfaction, or physical fitness. An inverse correlation was found between occupational stress and job satisfaction (r = -0.67) and there was a positive relationship between occupational stress and perceived supervisor support (r = 0.19).

**Discussion & Conclusions:** Findings support personal and work-related factors that predict back pain, and the relationships of factors to occupational stress. Further studies should investigate relationships among back pain and perceived supervisor support, occupational stress, and job satisfaction in other workers who provide important services, such as nurses and police officers.

**Abstract History:**
This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

**Financial Disclosure:**
No, I (or a member of my immediate family) have not received something of value* from or own stock (or stock options) in a commercial company or institution related directly or indirectly to the subject of my presentation.

**FDA Disclosure:**
I will not be describing any pharmaceutical and/or medical device.

**Non-Exclusive License:**

**Submitted by:**
mantana_d@yahoo.com