

4. Obesity/Overweight and the role of working conditions in lower income workers- A qualitative, participatory investigation - Dr. Nicole Champagne (University of Massachusetts Lowell) will present findings from a qualitative research study (focus groups, interviews, and stakeholder meetings) which indicate a set of unique working conditions facing lower income workers that affect their weight status, leisure-time physical activity, and dietary patterns. This participatory research study was a collaborative effort involving UMass Lowell and two worker advocacy groups in Boston, Massachusetts.

5. Work and Obesity in Mexican working population from the service sector. Dr. Horacio Tovalin (the National Autonomous University of Mexico, Mexico City) will present results about obesity-related risk factors in different services sector occupations (firefighters, teachers, and health professionals) from a project on Burnout and cardiovascular risk performed in about 1,500 workers.

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PYSCHOSOCIAL OCCUPATIONAL RISK FACTORS FOR OBESITY IN MALE FIREFIGHTERS: RESULTS OF THE FORWARD STUDY SURVEY

BongKyoo Choi, ScD, University of California Irvine, CA; Peter Schnall, MD; Marnie Dobson, PhD; Leslie Israel, DO; Javier Garcia, MS; SangBaek Ko, MD; Dean Baker, MD, MPH

Background: Among 41 male-dominated occupations in the United States (US), firefighters and police officers have the third highest prevalence rate of obesity. However, few epidemiological studies have examined occupational and behavioral risk factors for obesity in male firefighters. As part of the on-going FORWARD study (Choi et al., 2011) that has examined the occupational and behavioral risk factors for obesity in firefighters, this study aims to investigate whether adverse work organizational conditions and unhealthy behaviors of firefighters are associated with obesity in the survey data of the FORWARD study.

Methods: So far, 284 male firefighters in a Southern California county have volunteered to participate in the survey of the FORWARD study (participation rate = 85%). The study participants were asked to fill out a firefighter specific work and health questionnaire (that was developed through focus groups with firefighters) when they visited a clinic for their wellness and fitness (WEFIT) exams from November 2010 to August 2012. From them, 245 male firefighters who worked at local fire stations and had valid study variables were selected for this analysis. As the key work organization risk factors, we examined the total number of calls on a typical work day, the total number of 24-hr work shifts in the past month, the numbers of two, three, and four consecutive 24-hr shifts in the past month, low decision authority (3 JCQ items), high psychological job demands (3 JCQ items), sedentary work (1 item), organizational culture (6 JCQ items for procedural justice, organizational support, and macro-level decision latitude), exposure to critical incidents (5 items), and workfamily conflict (3 items) in the survey data. As the key health behavior risk factors, we examined physical activity at work and during leisure time, fruit consumption, heavy eating since childhood and health behaviors of coworkers and supervisors (health climate). The adiposity of each of 282 firefighters was assessed at their Wellness and Fitness (WEFIT) exams in three ways with standard protocols by an experienced exercise physiologist: BMI; estimated body fat % based on 3-site skinfolds; and waist circumference. Age, education, marital status, and ethnicity were controlled for in multivariate linear regression analyses.

Results: The obesity prevalence was higher in the ranks of captains and battalion chiefs (n=73) than in the ranks of firefighters and engineers (n=172) in terms of all three measures (e.g., BMI-based obesity prevalence was 32.1% in the higher ranks while it was 16.6% in the lower ranks). Obesity prevalence varied by specific obesity measure. The obesity risk profiles among the firefighters differed by rank. In the ranks of captains and chiefs, frequent three consecutive 24-hr shifts (2 or more in the past month vs. none), sedentary work, and infrequent physical exercise at work and during leisure time were identified as most significant risk factors for obesity consistently with all of the three obesity measures. Interestingly, high daily calls (i.e., more than 7 calls vs. 5 to 7 calls) appeared to reduce the risk for obesity among firefighters (with BMI and waist circumference). In the ranks of firefighters and engineers (n=93), high numbers of total 24-hr shifts in the past (more than 15 24-hr shifts vs. 13 or less 24-hr shifts), emotional demands, exposure to critical incidents, infrequent physical exercise at work and during leisure time, low consumption of fruits, and heavy eating (since childhood) were associated with higher adiposity consistently with all three obesity measures.

Discussions: This study suggests that not only unhealthy health behaviors (exercise and eating), but also adverse work organizational factors (particularly, shift work schedule) may increase the risk for obesity among firefighters. In addition, this study indicates that the obesity risk profiles among firefighters may differ by the rank of firefighters so strategies for addressing obesity need to be rank-specific. These preliminary findings will be further checked and tested at the end of the FORWARD survey in November 2012. In addition, these findings will be presented and discussed at the research advisory committee (that was developed by the joint effort between the research team and the firefighter representatives at the beginning of the FORWARD study) and through focus groups with firefighters for taking actions to prevent obesity among this group of firefighters.

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OCCUPATIONAL AND HEALTH BEHAVIORAL CAUSES OF OBESITY IN FIREFIGHTERS: A QUALITATIVE STUDY

Marnie Dobson, PhD, University of California Irvine, CA; BongKyoo Choi, ScD; Peter Schnall, MD; Erin Wigger, BA; Javier Garcia, MS; Leslie Israel, DO; Dean Baker, MD, MPH

Background

Obesity is a national health crisis in the United States (U.S.) [1] and is a significant risk factor for first responders such as firefighters where sudden cardiac death is consistently the number one cause of line-of-duty deaths [2-4]. Firefighters rank third in obesity prevalence among 41 U.S. male occupations [5, 6]. A handful of studies have examined firefighter health behaviors related to obesity [7-11]. Missing from these studies, however, is a growing research literature which shows a relationship between obesity and working conditions including sedentary work [12-14], shift work [15-17], long work hours [18, 19], and psychosocial stressors [12, 20-24]. The FORWARD study (Firefighter Obesity Research: Workplace Assessment to Reduce Disease) is guided by a theoretical model that links adverse working conditions to obesity in firefighters both directly and indirectly through health behaviors [6]. This presentation highlights findings from qualitative research with firefighters in the ongoing FORWARD study.*

Methods

Qualitative research methods provide rich, descriptive data and tend to ask “what” or “why” questions whereas quantitative methods ask questions related to “how often” or “how many.” Qualitative research is being used increasingly in occupational health and is often part of participatory research approaches [25-31]. The FORWARD project incorporated a mixed-methods approach including qualitative methods in conjunction with a cross-sectional epidemiological survey and field study. The qualitative methods included 1) focus group discussions of firefighter perspectives on causes of obesity within the fire service (Phase I), 2) focus group workshops to develop a firefighter-specific work and health questionnaire (Phase I), 3) open-ended questions within the survey about firefighter working conditions (Phase II), 4) after completion of the survey (in November 2012) focus groups will be reconvened and study results will be presented for dialogue with firefighters and their organizations over the design and implementation of future programs for reducing obesity (Phase III).

The fire authority in this study includes 62 fire stations covering 22 cities and unincorporated parts of a diverse, suburban county in Southern California. Structural fires are rare; 1.6% of calls in 2010. Firefighters work a required ten or eleven 24 hour shifts but most work an additional 2 to 3 shifts per month. We conducted four focus groups (90-120 minutes) in Jan-Feb 2011 (Phase I) with 20 firefighters of every rank. Focus group discussions were transcribed and analyzed for common “themes” using grounded theory methodology. During focus group workshops, firefighters also reviewed 13 psychosocial work stressor domains and their items in terms of relevance to their work experiences, clarity of wording, and missing domains or items. In Phase II, we also analyzed, using Nvivo, open-ended questions from the survey (n=279) about the “best” and “most difficult” aspects of the firefighter’s job.

FRIDAY, MAY 17 (continued)

- Paper 4** The Influence of Work Characteristics on Return to Work Among Long-Term Sick-Listed Employees With Depression
- Dr. Jenny Huijs, TNO, Hoofddorp, The Netherlands; Dr. Lando Koppes; Prof. Toon Taris; Prof. Roland Blonk

Fresh Perspectives on Workplace Aggression (Symposium)

Palos Verdes

Chairs: Jenna C. Shapiro, BS, and Vicki J. Magley, PhD, University of Connecticut, Storrs, CT

- Paper 1** Coping With Abusive Supervision: Long Term Effects on Employee Attitudes and Intention
- Ismael Diaz, MS, Texas A&M University, College Station, TX; Kathi N. Miner, PhD; Mindy E. Bergman, PhD

- Paper 2** Linking Experienced Incivility to Instigated Incivility for Staff Members and Managers
- Arla Day, PhD, Saint Mary's University, Halifax, NS, Canada; Michael P. Leiter, PhD

- Paper 3** Workplace Aggression Normalization: A Scale Development Piece
- Jenna C. Shapiro, BS, University of Connecticut, Storrs, CT; Zandra Zweber, MA; Anna Young, BA; Vicki J. Magley, PhD

- Paper 4** Testing a Model of Civility Training Effectiveness
- Benjamin M. Walsh, PhD, University of Illinois Springfield, IL; Vicki J. Magley, PhD

Discussant: Julian Barling, PhD, Queens University School of Business, Kingston, ON, Canada

Psychosocial Working Conditions and Obesity Research in High-Risk Occupations and Populations (Symposium)

San Fernando

Chair: BongKyoo Choi, ScD, University of California Irvine, CA

- Paper 1** Psychosocial Occupational Risk Factors for Obesity in Male Firefighters: Results of the Forward Study Survey
- BongKyoo Choi, ScD, University of California Irvine, CA; Peter Schnall, MD; Marnie Dobson, PhD; Leslie Israel, DO; Javier Garcia, MS; SangBaek Ko, MD; Dean Baker, MD, MPH

- Paper 2** Occupational and Health Behavioral Causes of Obesity in Firefighters: A Qualitative Study
- Marnie Dobson, PhD, University of California Irvine, CA; BongKyoo Choi, ScD; Peter Schnall, MD; Erin Wigger, BA; Javier Garcia, MS; Leslie Israel, DO; Dean Baker, MD, MPH

- Paper 3** Physical Activity and Nutrition in Firefighters
- HyoungRyoul Kim, MD, The Catholic University of Korea, Seoul, South Korea; BongKyoo Choi, ScD; Peter Schnall, MD; Marnie Dobson, PhD; Leslie Israel, DO; Pietro Galassetti, MD; Javier Garcia, MS; Dean Baker, MD, MPH

- Paper 4** Obesity/Overweight and the Role of Working Conditions in Lower Income Workers: A Qualitative, Participatory Investigation
- Nicole Champagne, EdD, University of Massachusetts Lowell, MA; Suzanne Nobrega, MS; Marcy Goldstein-Gelb, BA; Mirna Montano, BA; Isabel López, BA; Jonny Arevalo, BA; Suezanne Bruce, BA; Laura Punnett, ScD

- Paper 5** Work and Obesity in Mexican Working Population From Different Occupations
- Horacio Tovalin Ahumada, DrPH, National Autonomous University of Mexico, Mexico City, México; Marlene Rodríguez Martínez, MSc

The Impact of Emotional Intelligence and Emotional Labor on Worker Wellbeing (Paper Panel Session)

San Bernardino

Chair: Jo Linder-Crow, PhD, California Psychological Association, Sacramento, CA

- Paper 1** The Impact of Personality, Trait Emotional Intelligence and Emotional Labour on Burnout Among Human Resource Professionals in Malaysia
- Angeli Santos, PhD, University of Nottingham Malaysia Campus, Semenyih, Selangor, Malaysia; Gwi Terk Chern, BSc

- Paper 2** “Emotionally Intelligent Labor”: A Multilevel Study About the Multifaceted Role of Emotional Intelligence in the Emotional Labor Process



- Sonja Scherer, Intermediate Diploma, Goethe-University Frankfurt, Frankfurt am Main, Hessen, Germany; Dr. Dieter Zapf; Sabine Machowski

- Paper 3** Effects of Emotional Intelligence and Ways of Coping on Work–Family Conflict: Evidence From the Hospitality Industry
- Sarlaksha Ganesh, PhD, Indian Institute of Technology (Madras), India; Mangadu P. Ganesh, PhD

Working Outside the Boundaries of Traditional Time and Place (Paper Panel Session)

San Pedro

Chair: Arturo Juarez-Garcia, PhD, Universidad Autonoma del Estado del Morales, Mexico



Finalist for Best Student Research Award

