

## **EXPLORING OCCUPATIONAL AND HEALTH BEHAVIORAL FACTORS IN OBESITY AND HEALTH AMONG URBAN BUS OPERATORS: A QUALITATIVE STUDY.**

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### **Statement of the problem**

About 4 million motor vehicle operators, including 0.7 million bus drivers are among the heaviest occupational groups with the greatest rates of obesity in the United States (Caban, Lee et al. 2005). Little is known about occupational and behavioral risk factors for obesity among bus drivers, particularly minority (African-American and Hispanic) urban bus drivers. Bus drivers (n=4,772) in the Los Angeles have a very high percentage (86%) of African American and Hispanic drivers, whose risk of obesity and cardiovascular mortality is high compared to other ethnic groups. There is emerging evidence that several adverse psychosocial working conditions can increase the risk for obesity among working populations (Choi, Schnall et al. 2010; Nyberg, Heikkila et al. 2012; Pandalai, Schulte et al. 2013; Solovieva, Lallukka et al. 2013). To date, little is known about any ethnic and gender differences between work, health behaviors, and obesity in occupations such as bus drivers, which is essential for establishing more culturally sensitive and effective strategies to prevent obesity and reduce health disparity among workers with a diverse background of race, ethnicity, and gender.

### **Procedures and Analysis**

Similarly to the mixed-methods, participatory research design we implemented in the FORWARD study (Choi, SCHNALL et al. 2011; Dobson, Choi et al. 2013), we continue to develop and expand the ongoing collaboration between UC Irvine researchers, the Los Angeles County Metropolitan Transit Authority (LACMTA) and SMART-UTU Locals to form a Research Advisory Committee. This project has been funded by the Southern California NIOSH Education and Research Center (ERC) Pilot Project Research Training Program during 2014-2015 (PI: Dr. BongKyoo Choi). We are in the process of conducting (and will have conducted) six focus groups (in total, up to 60 operators) at division offices or the LACMTA headquarters and individual interviews with 6 key informants in management, the union, and the wellness program to identify and prioritize the specific working conditions and health-related behaviors associated with obesity among LACMTA bus drivers. A final aim is to collaborate with drivers during focus groups to develop and refine an operator-specific work and health questionnaire based on existing surveys that will be culturally sensitive to the diversity of Los Angeles bus drivers and which will be further tested and used in future studies. Focus groups and interviews will be audio-recorded, transcribed and analyzed by an expert (first author) in qualitative research methods, using grounded theory methodology; a heuristic, inductive approach in qualitative methodology which provides a road-map for organizing most frequently discussed ideas into thematic content (Corbin and Strauss 1990; Strauss and Corbin 1990).

**Results:** Previous research has shown that bus drivers are exposed to adverse psychosocial working conditions, e.g., shift work [split-shift, a work shift is divided into two time zones (morning and afternoon) with an in-between non-work time], long work hours (up to 15 hours per day among Los Angeles operators); prolonged sedentary work, time pressure, low decision authority, and poor social relationships with coworkers, supervisors, and customers). Additional stressful working conditions identified by bus drivers include: violence from passengers; threat-avoidance vigilance; traffic and road conditions; work and family conflict; mechanical problems with the buses; poor safety climate and labor-management relationship (Carrere, Evans et al. 1991; Evans and Carrere 1991; Evans 1994; Evans, Johansson et al. 1999; Tse, Flin et al. 2006)

LACMTA in partnership with SMART-UTU has developed a joint labor-management Wellness Program to foster health and safety among the operators and other employees. We have been working closely with the Wellness Director and “Wellness Ambassadors,” employees who work with their peers and are paid for their time to administer a weekly “Wellness Wednesday” at any one of 21 Divisions throughout Los Angeles. In addition, Wellness Ambassadors coordinate Health Fairs, participate in annual baseball tournaments, Fun Run’s and walks.

In interviews and focus groups operators are asked to discuss stressful aspects of their work environment, and how these occupational factors may contribute to weight gain and obesity. We will also ask operators to

comment on what aspects of their work tasks and the organization are “working” to benefit their overall health, and what could be done better or improved. Results from these interviews and focus groups (see methods section above) will be presented at the conference in May 2015.

**Practical implications:** The ultimate goal of this participatory qualitative study is to utilize the data in collaboration with our partners to design and conduct effective and sustainable worksite obesity intervention studies that lower the risk for obesity and cardiovascular disease in urban bus drivers.

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**Paper 2** Working Together and Highly Involved: A Recipe for Counterproductive Work Behavior Following Exposure to Incivility?

- ▲ Jennifer L. Welbourne, PhD, University of Texas–Pan American, Edinburg, TX; Ana M. Sariol, MBA

**Paper 3** The Relevance of Media Characteristics for Targets' Experience of Workplace Aggression

- ▲ Dianne P. Ford, PhD, Memorial University of Newfoundland, St. John's, NL, Canada

**Paper 4** "I Was Afraid It Would Be Me Next": Boundaries and Constraints to Bystander Intervention in Organisational Settings

- ▲ Annabelle M. Neall, BPsych (Hons), University of South Australia, Adelaide, Australia; Michelle R. Tuckey, PhD; Phil S. Kavanagh, PhD

**Occupational Health and Psychosocial Needs of Often Forgotten Populations: Bus Drivers, Immigrants, Refugees, and Sex Workers (Paper Panel Session)**

*Augusta E*

Chair: Marnie Dobson, PhD, University of California at Irvine, Irvine, CA

**Paper 1** Survey of Mental Health and Needs for Chinese Migrant Workers

- ▲ Weimin Dang, MMS, Peking University Health Science Center, Beijing, China; Xin Yu, MD; Hong Ma, MBBS; Xun Wang, MMS; Tianhang Zhou, MBBS; Zijun Wu, MBBS; Shuwen Wang, MBBS; Xiaozhen Lv, PhD; Jinpeng Zhou, MMS; Qiyuan Zhang, MBBS; Ning Ma, MD; Chuan Shi, PHD; Min Shen, MBBS; Wenting Feng, MBBS; Siheng Li; Haiou Yang, PhD; Yucun Shen, MD

**Paper 2** Promoting Psychosocial Health of Female Commercial Sex Workers: Exit Interviews With Peer Educators in Kathmandu, Nepal

- ▲ Lauren M. Menger, MS, Colorado State University, Fort Collins, CO; Helen Santoro; Emily Holcomb; Kristen Anna; Michelle R. Kaufman, PhD; Menuka Thapa, MA; Gwenith G. Fisher, PhD; Ashika Sharma; Lorann Stallones, PhD

**Paper 3** Exploring Occupational and Health Behavioral Factors in Obesity and Health Among Urban Bus Operators: A Qualitative Study

- ▲ Marnie Dobson, PhD, University of California at Irvine, Irvine, CA; BongKyoo Choi, ScD; Peter L. Schnall, MD; Javier Garcia, MS; YoungJu Seo, MA

**Paper 4** Unemployment in Iraqi Refugees: The Interaction of Pre and Post-Displacement Trauma

- ▲ A. Michelle Wright, MA, Wayne State University School of Medicine, Detroit, MI; Abir Aldhalimi, MA; Judith Arnetz, PhD; Hikmet Jamil, PhD; Mark Lumley, PhD; Nnamdi Pole, PhD; Bengt Arnetz, PhD

**Work as a Resource (Paper Panel Session)**

*Augusta F*

Chair: Mina Westman, PhD, Tel-Aviv University, Israel

**Paper 1** Intimate Partner Violence and Work: An Empowerment Process Through Work in Middle-Class Women

- ▲ Smita Kumar, PhD candidate, George Washington University, Washington, DC; Andrea Casey, EdD

**Paper 2** Enhancing Return to Work From Family Leave in Peer Group: A Randomized Controlled Trial

- ▲ Salla Toppinen-Tanner, PhD, Finnish Institute of Occupational Health, Helsinki, Finland; Jukka Vuori, Professor

**Paper 3** A Proposed Model of Work, Life and Disability Management

- ▲ LaWanda H. Cook, PhD, Cornell University, Ithaca, NY; Valerie Malzer, MPA; Ishbel McWha, PhD; Beth Livingston, PhD; David Filiberto, PhD; William Erickson, MS

**Paper 4** Assessing Nigerian Female Health Workers When Job Stress and Tenure Impact on Work-to-Family Conflict

- ▲ Ejike A. Okonkwo, PhD, Enugu State University of Science and Technology, Enugu, Nigeria

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