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Corresponding Author - Anna Mnatsakanova, M.S.

Institution/Organization: CDC/NIOSH, Morgantown, WV

Primary area: Research

Primary discipline: Other - Statistician

Primary affiliation: Government Agency

E-mail address: fma8@cdc.gov

Mailing address: 1095 Willowdale Road, Morgantown, WV 26505

Phone numbers: (304)285-5854 (office), (304)285-6112 (fax)

Presenting Author - Ja Kook Gu, M.S.

Institution/Organization: CDC/NIOSH, Morgantown, WV

Primary area: Research

Primary discipline: Other - Statistician

Primary affiliation: Government Agency

E-mail address: gum4@cdc.gov

Mailing address: 1095 Willowdale Road, Morgantown, WV 26505

Phone numbers: (304)285-5793 (office), (304)285-6112 (fax)

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Coauthor(s): Erin C McCanlies, Ph.D., Government Agency, Email: eim4@cdc.gov
Tara A Hartley, M.P.A., M.P.H., Government Agency, Email: tow9@cdc.gov
Michael E Andrew, Ph.D., Government Agency, Email: mta6@cdc.gov
John M Violanti, Ph.D., University, Email: violanti@buffalo.edu
Cecil M Burchfiel, Ph.D., Government Agency, Email: Zar5@cdc.gov

Lifestyle Characteristics of Police Officers from a Northeast Urban Police Department

Police officers are at an increased risk for cardiovascular disease (CVD) and certain types of cancer. Lifestyle characteristics, such as poor diet, short sleep duration, and reduced physical activity, are associated with these diseases. The objective of this study was to determine the prevalence and mean levels of lifestyle characteristics for a sample of northeast urban police officers overall and by age and sex.

METHODS

In 1999, 115 officers were randomly selected to participate in a cross-sectional study. Complete data were available for all 115 officers. Descriptive statistics were used to characterize lifestyle factors such as physical activity, diet, smoking status, alcohol intake and hours of sleep overall and by age and sex. These data were obtained either through self-report or interviewer-administered questionnaires. Age was divided into tertiles (< 35 years old, 36-42 years old, > 43 years old). Data on duration, intensity, and type (work, sport, household) of physical activity for the past seven days were collected. A physical activity score (PA score) was calculated by multiplying the intensity score (1=low, 2=hard, 3=very hard) by duration. Nutrient data were collected using a standard food frequency questionnaire. Diet groups (healthy vs. poor) were derived in the following manner: dietary cholesterol: low (< 200 mg) = 1, moderate (200 – 299 mg) = 2, high (= 300 mg) = 3; percent fat: low (<28) = 1, moderate (28 – 35) = 2, high (> 35) = 3; fiber: high (= 25 g) = 1, low (< 25 g) = 2. The scores for each nutrient were summed and officers were divided into two groups (3 – 6 = healthy, 7 – 8 = poor). Smoking status was defined as current, former, or never. Alcohol intake was classified as the number of drinks per week. Sleep quantity was based on the reported hours of sleep for the past week (Sunday through Saturday night). Frequencies and percentages were calculated for categorical variables and differences within those groups were evaluated using Chi-square tests or Fisher's exact test when necessary. Means and standard deviations were calculated for continuous variables and differences between group means were evaluated using ANOVA.

RESULTS

Over half of the officers were less than 40 years of age, Caucasian (71%), and male (61%). Most had at least a high school diploma (81%) and were married (65%). Forty-eight percent of the officers were never smokers, 33% former, and 19% current. The officers overall reported consuming relatively little alcohol: 47% consumed less than one alcoholic beverage per week and 43% less than one alcoholic beverage per day. The mean (+ SD) physical activity score for the officers was 10.4 + 12.9 and the officers reported getting an average of 6.4 + 1.3 hours of sleep per night (range = 2 to 9.5 hours).

Compared to male officers, female officers were somewhat more likely to be current smokers (24.4% vs. 15.7%), or former smokers (40.0% vs. 28.6%). Female officers also tended to eat a healthier diet (73.3% vs. 57.1%) and consume less alcohol than their male counterparts (2.2 + 3.2 vs. 3.4 + 4.1 drinks/week). However, none of these differences were statistically significant. Female officers also reported slightly less sleep than the male officers, though this difference was not significant (5.98 + 1.89 vs. 6.16 + 1.5).

When lifestyle characteristics were evaluated by age group, the youngest officers (< 35

years) were least likely to be current smokers or former smokers (14.3% and 17.1%, respectively) followed closely by the officers aged 36-42 years old (19.1% and 35.7%, respectively), with highest smoking prevalence occurring in officers > 43 years old (23.7% current and 44.7% former) (p=0.01). A relatively high proportion of the officers, regardless of their age, tended to eat a healthy diet and consume very little alcohol. Officers > 43 years old had the lowest mean PA score compared to officers < 35 years old and 36-42 years old (7.2 + 8.8 vs. 13.12 + 21.9 and 13.55 + 16, respectively; p=NS). Sleep duration did not vary significantly with age; few of the officers reported getting more than 7 hours of sleep per night.

CONCLUSIONS

Herein we have described the lifestyle characteristics of a sample of police officers. Overall, 71% the officers were participating in at least moderate levels of physical activity and 64% were classified as having a healthy diet. Despite this however, there is still an increased risk of CVD among the police. On average, most officers reported getting fewer than seven hours of sleep. Because short sleep duration has been shown to be associated with CVD and other chronic diseases, further examination of lifestyle factors in combination with other potential risk factors (i.e. stress and trauma) unique to this occupational population would be of interest.