Prior tobacco use is a consistent injury risk factor among U.S. Army soldiers during basic training, but less is known about injury risk and tobacco use among soldiers beyond basic training. Purpose: To describe cigarette use and injury risk among soldiers during an infantry training. Methods: Of the 1,393 Soldiers surveyed, 46% (n=578) of men and 32% (n=47) of women reported smoking on 16 or more days per month, 17% smoked greater than 20 cigarettes per day, and 45% reported smoking tobacco use in addition to cigarette use (Table 2). Among female smokers, 85% were less than 30 years of age, 24% had started smoking at 14 years of age or less, 28% between the ages of 14 and 19, 15% had smoked 10 or more years, 10% had smoked 21 or more years, 17% had smoked for 10 years or more, and 75% had smoked for 10 years or more.

Over a six month period, 47% of men and 65% of women in this unit received medical treatment one or more times for injury. Among men, 51% of smokers compared to 43% of non-smokers sustained any injury during the six months (chi square p=0.040) (Table 3). Among women, 60% of smokers compared to 56% of non-smokers sustained any injury during the six month period (Table 3). Female soldiers were at 1.3 times greater risk of injury compared to non-smokers (95%CI: 1.2-1.3), and were 1.5 times greater risk of injury (95%CI: 1.2-2.0) compared to men of normal weight (BMI=15-24.9). Men who were obese (BMI≥25) were 2.32 times greater risk of injury (95%CI: 1.5-3.5) compared to men of normal weight (BMI=15-24.9). There were insufficient data on female smokers (n=47) for multivariable analysis of injury risk.

Discussion

This analysis provides a recent look at cigarette use in the U.S. Army in an operational, or non-training, environment. The prevalence of cigarette smoking was high among both men (46%) and women (22%), much higher than the prevalence of cigarette smoking among men and women age 25-44 in the U.S. general population (24.5% and 19.7%, respectively) (MMWR, 2011). These rates are also higher than those reported for the U.S. Army overall. The 2008 DoD Health-Related Behaviors Found that 36% of male soldiers age 26-35 and 20% of female soldiers age 26-35 were current smokers (Bray et al., 2009). The higher prevalence of smoking in the current study may be attributed to the soldiers recently returning from deployment. Prior studies of military populations suggest that tobacco use is associated with deployment (Smitz et al., 2012).