

Associations of military service history with heavy drinking and alcohol dependence in a general population sample of US men

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Supported by
NIAAA Grant P50AA05595
(Greenfield, PI)



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Presenter Disclosures

Katherine J. Karriker-Jaffe

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

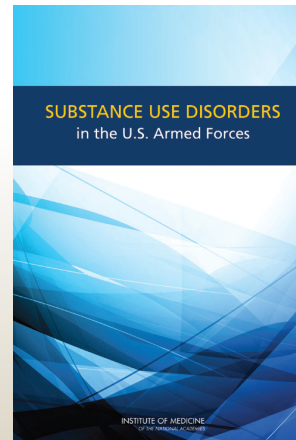
Thomas K. Greenfield

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SUDs in the Military


- Increased substance abuse disorders (SUDs) among veterans of the wars in Afghanistan and Iraq versus non-deployed service members
- Increased risk for SUDs over time for veterans of earlier conflicts
- 2012 Institute of Medicine report on SUDs in U.S. Armed Forces



Aims of Current Study



- Describe associations between military service and alcohol outcomes in a general population sample of men.
- Compare relationships of military service and alcohol outcomes for men at different stages of life.
- Assess contribution of heavy drinking to health status of veterans.







Methods

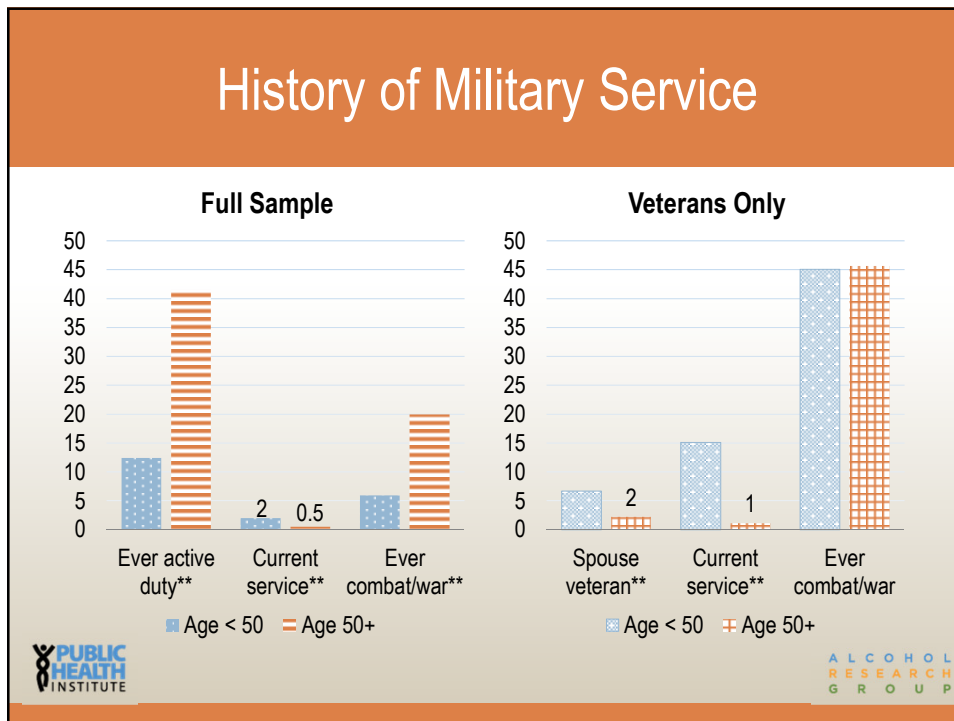
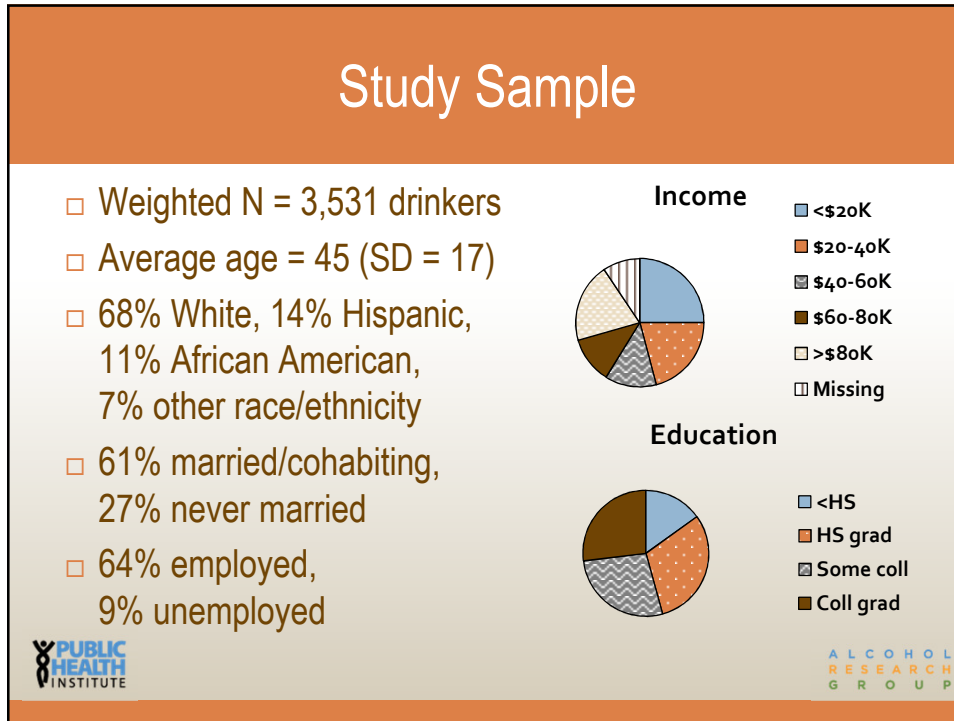
- Data from the 2010 National Alcohol Survey
 - Landline and cellular phone samples and ethnic oversamples
 - Response rate 52%, typical for RDD phone surveys
 - Limited to male respondents ($N = 3,071$)
- Analyses
 - Bivariate and multivariate logistic regression
 - Survey weights to adjust for sampling and non-response

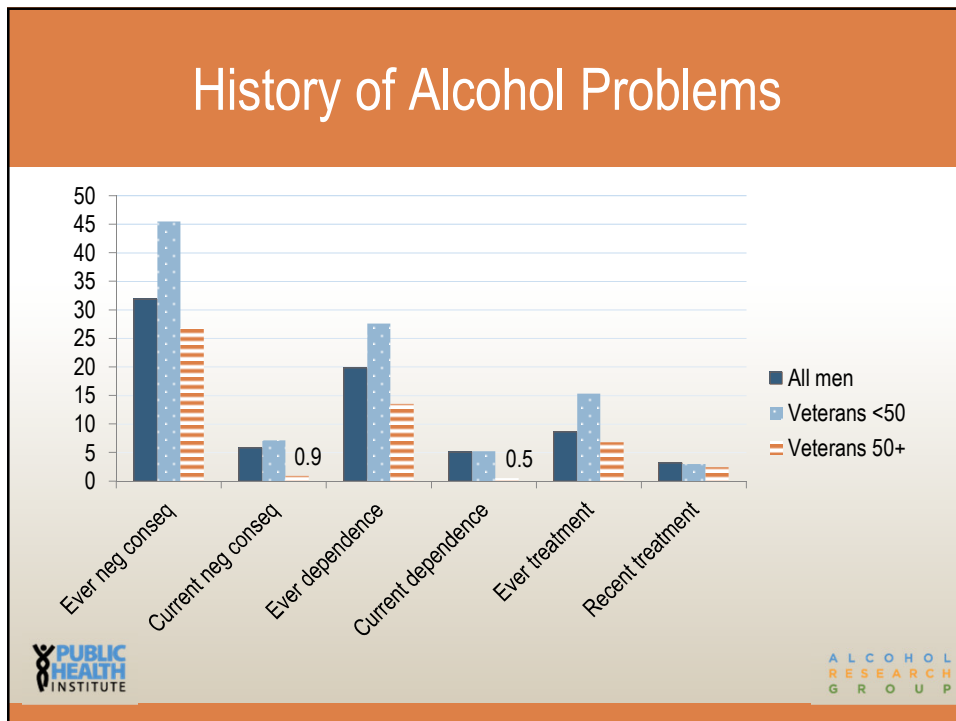
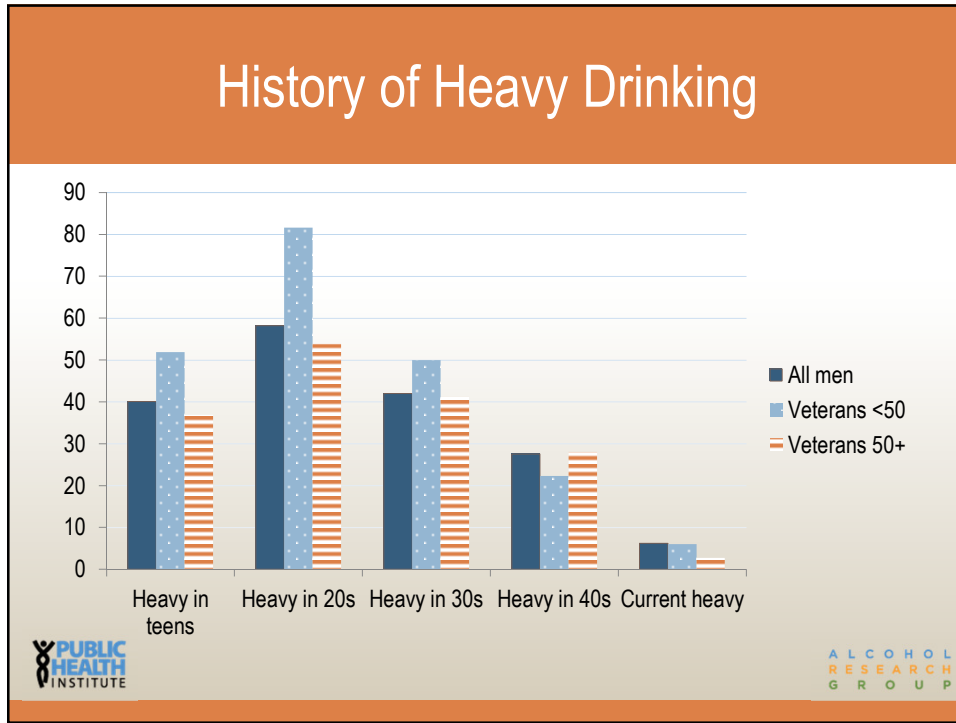


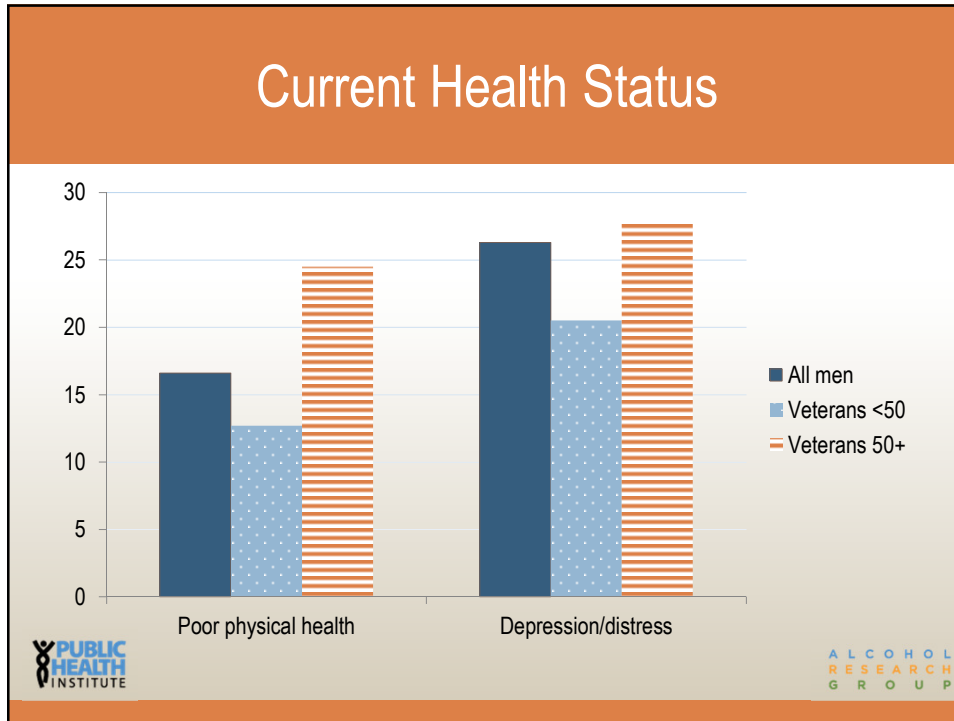
Alcohol Outcomes

- History of heavy drinking
 - Drank 5+ drinks at least monthly
 - Asked of teens, 20s, 30s and 40s
- Current heavy drinking
 - Drinks 5+ drinks at least weekly
- Sought help/treatment for alcohol problem (ever, 12m)
- 2+ negative consequences of drinking (ever, 12m)
 - 15 items on work, legal, interpersonal and health problems
- 3+ DSM-IV dependence symptoms (ever, 12m)









Regression Models: History of Heavy Drinking

| | Heavy in teens | Heavy in 20s | Heavy in 30s | Heavy in 40s |
|------------------------|----------------------------|----------------------------|---------------------------|---------------------------|
| Men Age < 50 | OR (95% CI) | OR (95% CI) | OR (95% CI) | OR (95% CI) |
| Military Service | 1.52** (1.16, 1.96) | 2.96** (2.11, 4.15) | 1.46* (1.05, 2.00) | 0.62* (0.38, 0.99) |
| | AOR (95% CI) | AOR (95% CI) | AOR (95% CI) | AOR (95% CI) |
| Military Service | 1.20 (0.90, 1.61) | 2.44** (1.72, 3.46) | 1.41* (1.01, 1.98) | 0.68 (0.40, 1.14) |
| Men Age 50+ | OR (95% CI) | OR (95% CI) | OR (95% CI) | OR (95% CI) |
| Military Service | 0.90 (0.71, 1.15) | 0.97 (0.77, 1.23) | 0.94 (0.74, 1.19) | 1.10 (0.85, 1.42) |
| | AOR (95% CI) | AOR (95% CI) | AOR (95% CI) | AOR (95% CI) |
| Military Service | 1.22 (0.92, 1.63) | 1.37* (1.03, 1.83) | 1.15 (0.87, 1.53) | 1.07 (0.79, 1.45) |

AOR = Adjusted Odds Ratio, model controls for age, race/ethnicity, marital status, children in household, education, employment, income. * $p < .05$. ** $p < .01$

Logos: PUBLIC HEALTH INSTITUTE and ALCOHOL RESEARCH GROUP

Regression Models: Current Outcomes

| | Current Heavy | Dependence | Poor Health | Depression |
|------------------------|---------------------------|---------------------------|-------------------|--------------------------|
| Men Age < 50 | OR (95% CI) | OR (95% CI) | OR (95% CI) | OR (95% CI) |
| Military Service | 0.60 (0.33,1.11) | 0.78 (0.44, 1.39) | 1.14 (0.77, 1.68) | 0.66* (0.42,1.05) |
| | AOR (95% CI) | AOR (95% CI) | AOR (95% CI) | AOR (95% CI) |
| Military Service | 0.65 (0.35,1.22) | 0.79 (0.43, 1.47) | 0.96 (0.63, 1.48) | 0.67 (0.41, 1.11) |
| Men Age 50+ | OR (95% CI) | OR (95% CI) | OR (95% CI) | OR (95% CI) |
| Military Service | 1.21 (0.61, 2.41) | 0.29* (0.08, 1.07) | 1.23 (0.96, 1.65) | 1.23 (0.91, 1.66) |
| | AOR (95% CI) | AOR (95% CI) | AOR (95% CI) | AOR (95% CI) |
| Military Service | 2.15* (0.96, 4.83) | 0.71 (0.17, 3.04) | 1.12 (0.80, 1.58) | 1.24 (0.86, 1.79) |

AOR = Adjusted Odds Ratio, model controls for age, race/ethnicity, marital status, children in household, education, employment, income. + p < .10. * p < .05. ** p < .01



Heavy Drinking in 30s & Health Outcomes

| | Poor Health | Depression |
|----------------------|--------------------------|--------------|
| Men < 50 | AOR (95% CI) | AOR (95% CI) |
| Military Service | 1.92* (1.02,3.64) | |
| Heavy in 30s | 1.16(0.81,1.66) | |
| Military * Heavy 30s | 0.37* (0.14,0.93) | |

AOR = Adjusted Odds Ratio, model controls for age, race/ethnicity, marital status, children in household, education, employment, income.
* p < .05. ** p < .01



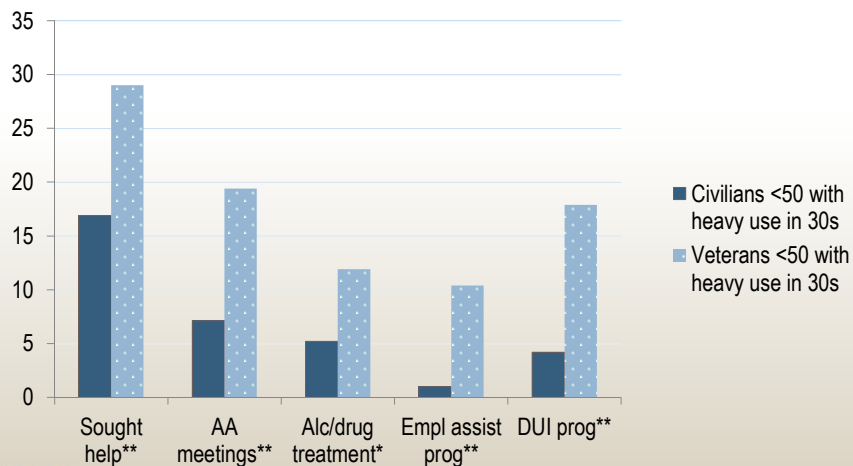
Heavy Drinking in 30s & Health Outcomes

| | Poor Health | Depression |
|----------------------|--------------------------|--------------------------|
| Men < 50 | AOR (95% CI) | AOR (95% CI) |
| Military Service | 1.92* (1.02,3.64) | 1.26(0.59,2.67) |
| Heavy in 30s | 1.16(0.81,1.66) | 1.75**(1.17,2.61) |
| Military * Heavy 30s | 0.37* (0.14,0.93) | 0.28* (0.09,0.84) |

AOR = Adjusted Odds Ratio, model controls for age, race/ethnicity, marital status, children in household, education, employment, income.
* p < .05. ** p < .01



Heavy Drinking in 30s & Health Service Use



Caveats...

- Limitations
 - Do not know details of military service (dates, branch, deployments)
 - Do not know details of alcohol and/or drug treatment (dates)
 - Self-report data and possible recall bias
- Strengths
 - Large, nationally-representative sample of U.S. men
 - Well-validated alcohol measures



Conclusions

- Younger veterans (under age 50) report a longer history of heavy drinking than their civilian counterparts
 - Also report more lifetime alcohol problems
- This history of heavy alcohol use is not associated with poor current health outcomes, however
 - Younger, persistently heavy-drinking veterans are significantly more likely to access treatment services than their civilian counterparts



Conclusions (cont.)

- Younger veterans without alcohol or drug problems may benefit from targeted mental health services and additional outreach to improve their mental and physical health
- Furthermore, service outreach to heavy drinkers who are not in the military also may help improve young men's mental health
- For older veterans, attention to heavy drinking also may be warranted to prevent long-term health consequences



Questions?

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