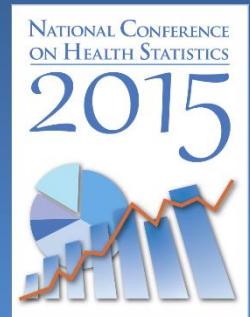


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BRIEF REPORT

Prevalence and trends in psychotropic medication use among US male veterans, 1999–2010[†]

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ABSTRACT

Purpose Prior studies of psychotropic medication use among US veterans are limited in their ability to generalize estimates to the full veteran population and make comparisons with non-veterans. This study estimated the prevalence of psychotropic medication use and trends over time among male US veterans, compared their use of psychotropic medications with non-veteran males, and examined differences among veteran subpopulations.

Methods The data for our analysis came from the National Health and Nutrition Examination Survey (1999–2010), a cross-sectional, nationally representative study of the civilian, non-institutionalized US population.

Results The percentage of male veterans who used any psychotropic medication increased from 10.4% in 1999–2002 to 14.3% in 2003–2006, then remained stable in 2007–2010 (14.0%). During the same time period, the percentage of non-veteran males who used psychotropic medications remained relatively stable (7.0%, 8.3%, and 9.2%, respectively). Veterans were more likely to use psychotropic medication, specifically antidepressants, than non-veterans. The percentage of non-Hispanic white veterans and veterans aged 60 years and over who used psychotropic medications increased between 1999–2002 and 2003–2006, but the percentages remained stable between 2003–2006 and 2007–2010. In 2003–2006 and 2007–2010, a higher percentage of non-Hispanic white veterans used psychotropic medications than non-Hispanic black veterans.

Conclusions This study found that the use of psychotropic medications and antidepressants was higher among male veterans than male non-veterans, and that prevalence of use increased between 1999–2002 and 2007–2010 for male veterans but remained relatively stable for non-veterans. There were significant variations in the use of psychotropic medications among veteran subpopulations. Copyright © 2015 John Wiley & Sons, Ltd.

National Health and Nutrition Examination Survey (NHANES), 1999–2010

- Cross-sectional, multistage probability sample
- Nationally representative of civilian and non-institutionalized U.S. population
 - No active duty
- Data from in-home interview and health examination
- Oversampling subgroups (e.g. low income, adolescents)



Survey Periods

- Data released in two year cycles
- Six 2-year cycles were combined into 3 time periods

<u>Response Rates</u>		
▪ 1999–2000	{	1999–2002 83%
▪ 2001–2002	}	
▪ 2003–2004	{	2003–2006 80%
▪ 2005–2006	}	
▪ 2007–2008	{	2007–2010 79%
▪ 2009–2010	}	

Questionnaire Items

- “Did you ever serve in the Armed Forces of the United States?”
- “Have you taken or used any medicines for which a doctor’s or dentist’s prescription is needed, in the past month?”
 - If yes, respondents were asked to give their prescription medication containers to the interviewer.
 - If container not available, information was verbally reported
 - From 1999–2010, over 80% of medication data was recorded directly from container

Demographic variables

□ Age

- 20–39 years
- 40–59 years
- 60+ years

□ Race/Hispanic origin

- non-Hispanic white
- non-Hispanic black

□ Gender

- Only males included

Objectives

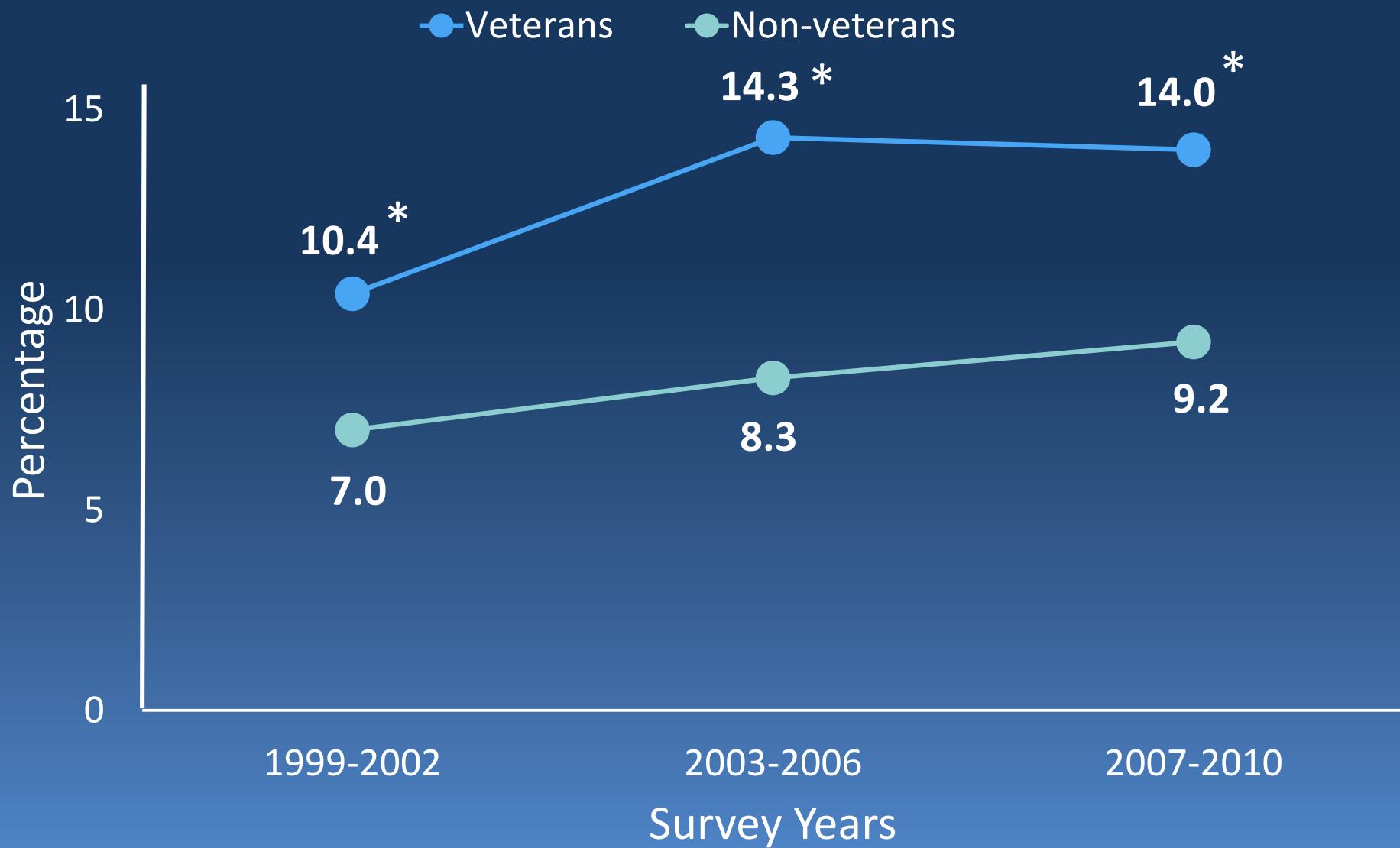
- Estimate the percent of male veterans who used psychotropic medications between 1999–2002 and 2007–2010;
 - Compare those estimates with male non-veterans
- Examine changes in veterans' use of psychotropic medications over time and among population subgroups;
- Examine variations in the use of psychotropic medications among subgroups within each time period.

Statistical Analysis

- Sample weights were used to generate estimates that were unadjusted and adjusted for race and Hispanic origin and age.
- Analyses were run in Stata 13.1

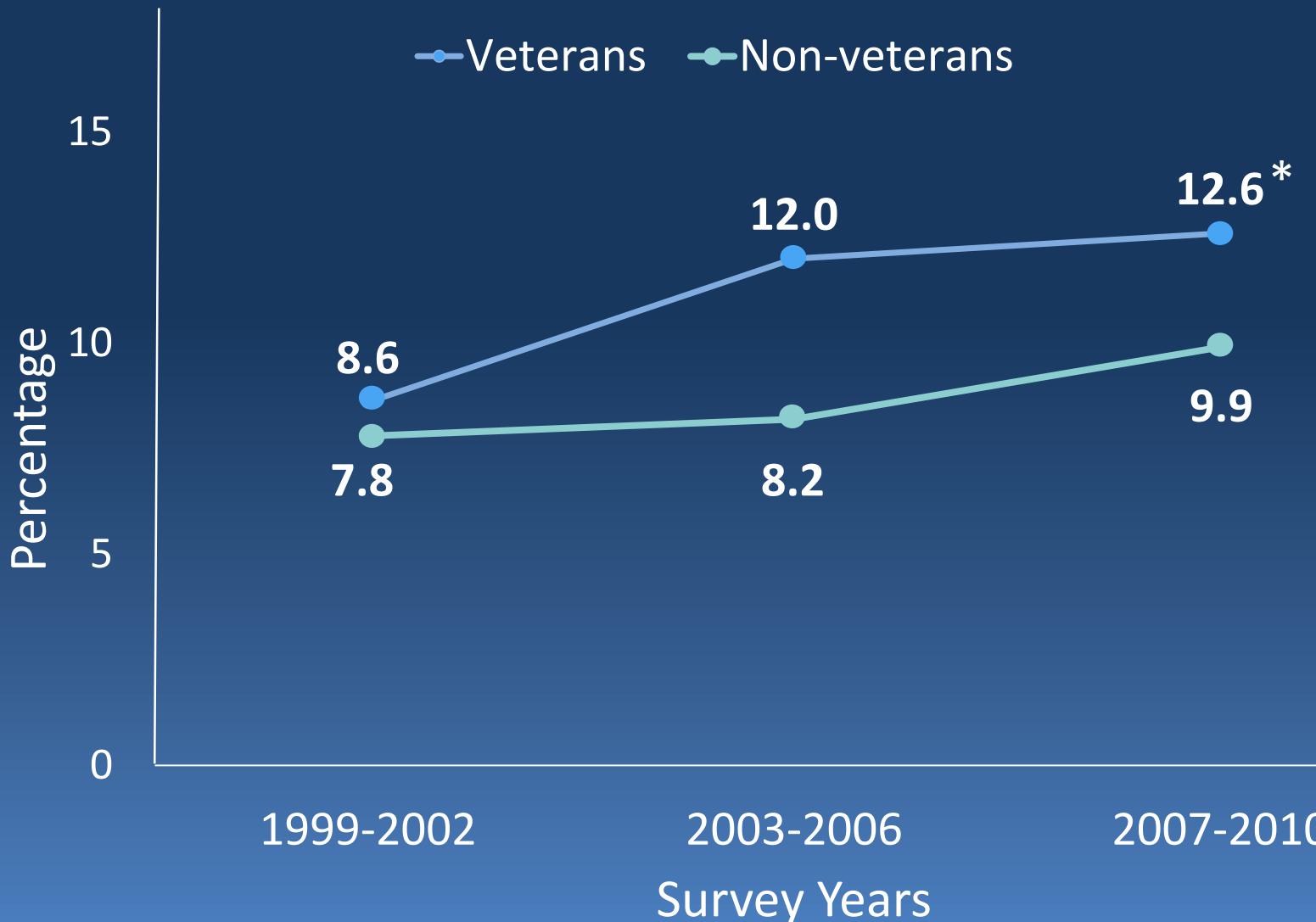
Results

Percentage Who Used Any Psychotropic Medication (Unadjusted Estimates)



* Indicates a significant difference between groups ($p<0.05$)

Percentage Who Used Any Psychotropic Medication (Adjusted Estimates)**

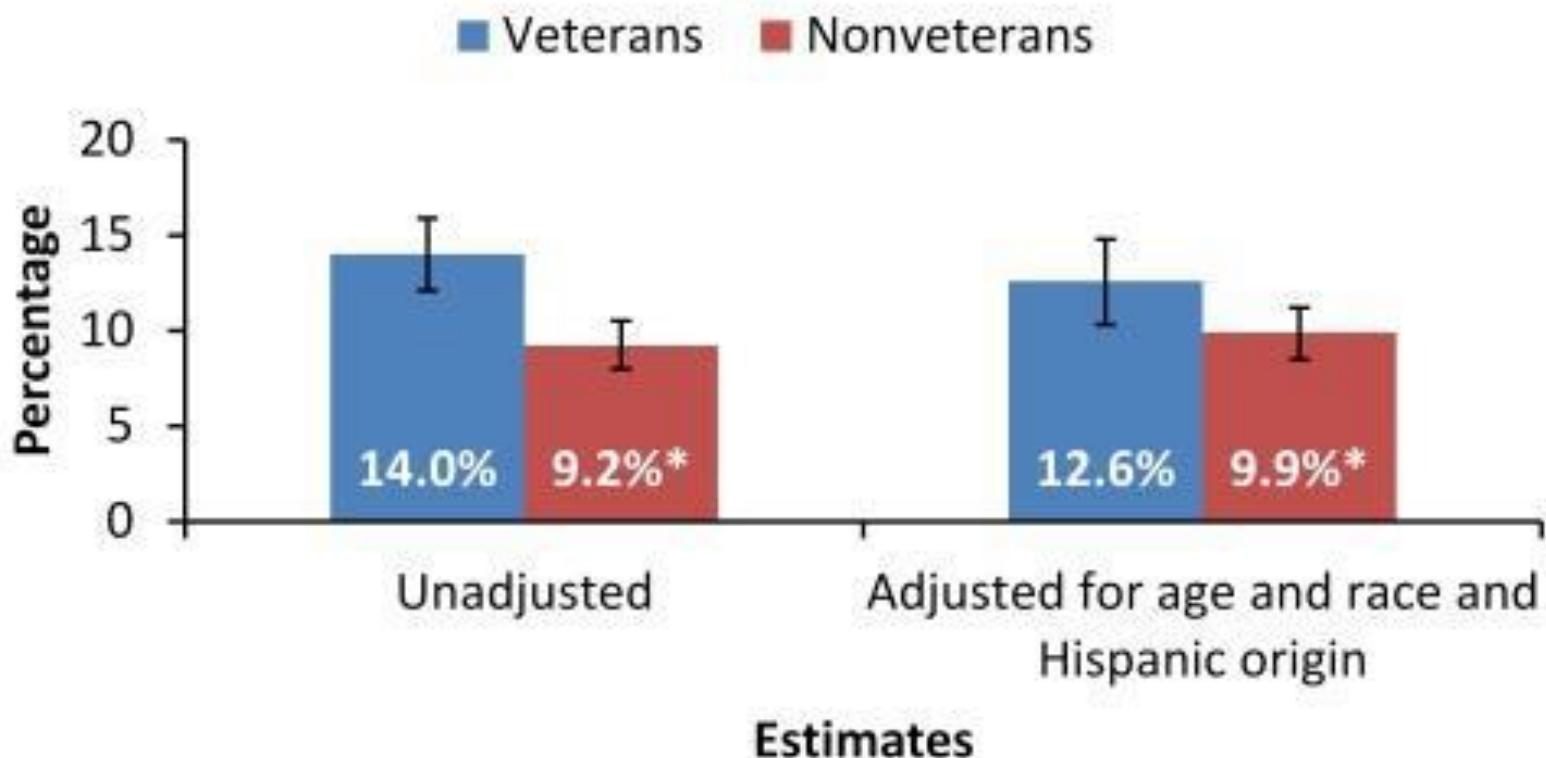


* Indicates a significant difference between groups ($p<0.05$)

** Adjusted for age and race/Hispanic origin

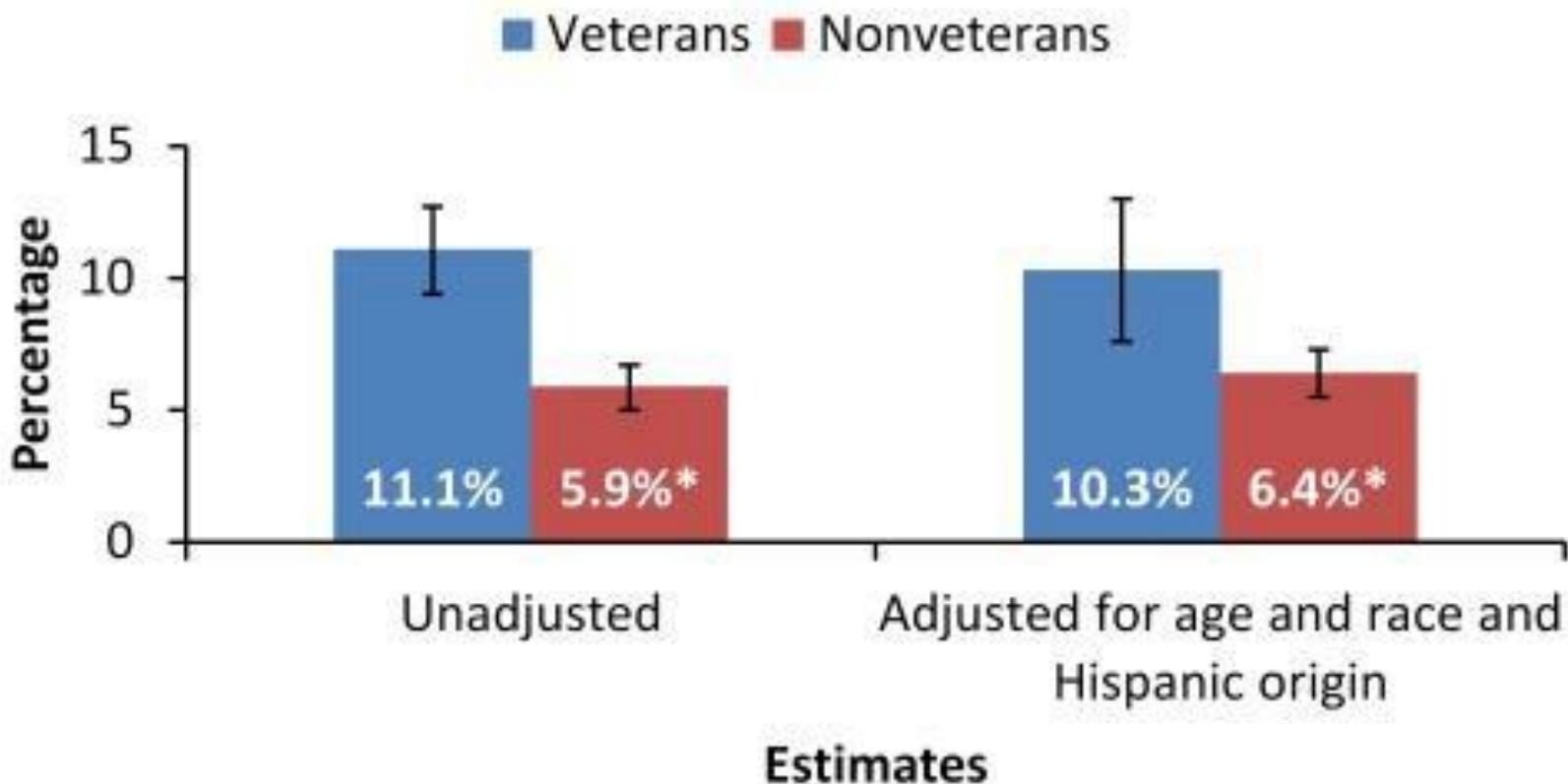
Use of Psychotropic Medication among Men, 2007-2010

Percentage who used a prescribed psychotropic medication



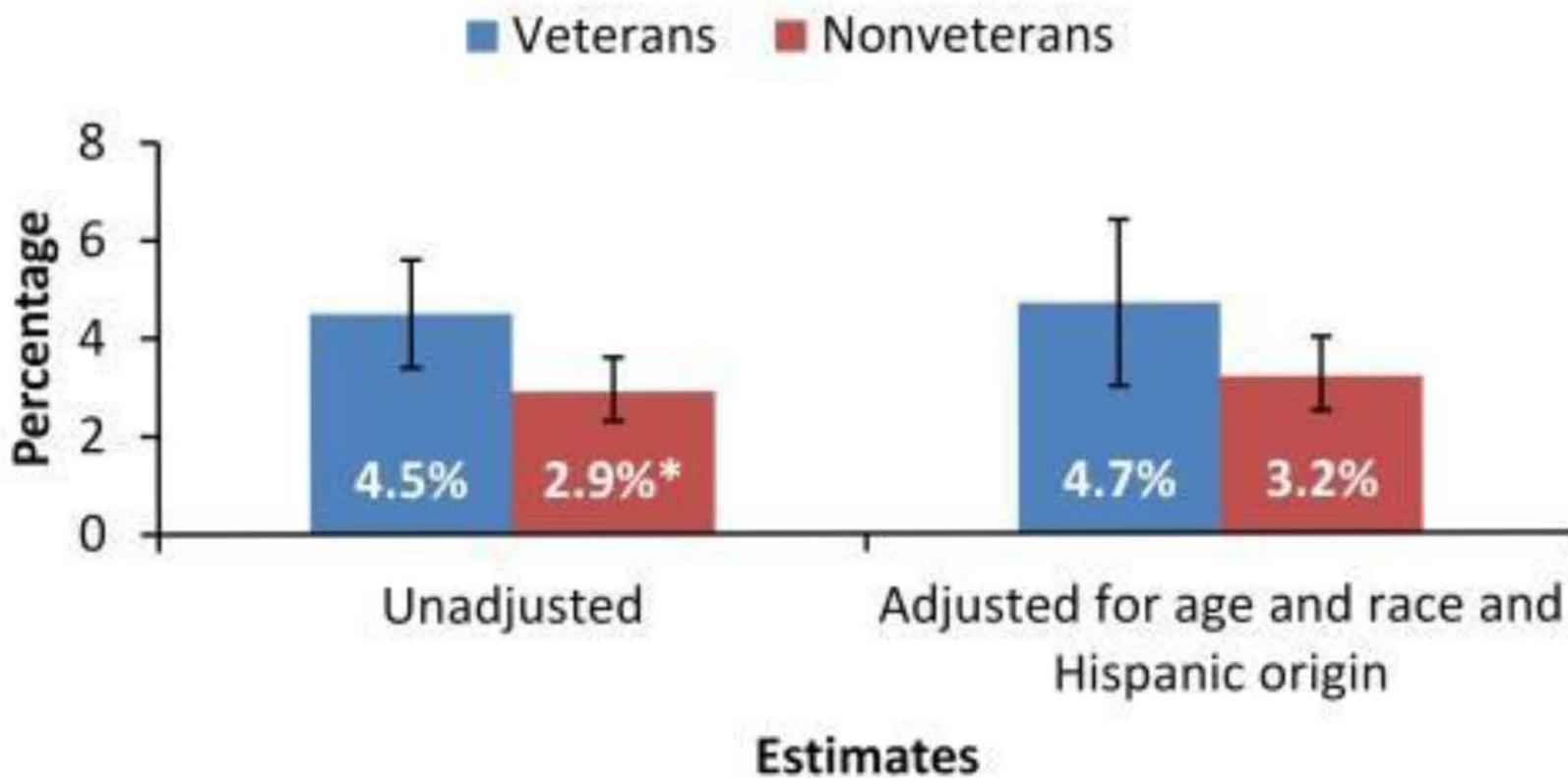
Use of Antidepressant Medication among Men, 2007-2010

Percentage who used a prescribed antidepressant medication



Use of Two or More Psychotropics among Men, 2007-2010

Percentage who used two or more prescribed psychotropic medications



Limitations

- **NHANES excludes homeless, currently incarcerated and people living on military bases**
- **A single, self-reported question assessed presence in the U.S. Armed Forces**
 - As of 2011, four service questions were added
 - Have you ever served on active duty in the U.S. Armed Forces, military Reserves, or National Guard?
 - Did you ever serve in a foreign country during a time of armed conflict or on a humanitarian or peace-keeping mission?
 - When did you serve on active duty in the U.S. Armed Forces?
 - Did you serve in the Persian Gulf during Operation Desert Shield or Operation Desert Storm between August 1990 and April 1991?

Conclusion

- Psychotropic medication use among veterans increased from 1999–2010 from 10.4% to 14.0%.
- In 2007–2010, 14.0% of veterans used a psychotropic medication and 11.1% used an antidepressant.
- Veterans were more likely to use a psychotropic medication and antidepressants than nonveterans
- During 2007–2010, an estimated 2.8 million male veterans used at least one psychotropic medication in the past 30 days.

Disclaimer

The findings and conclusions in this report are those of the author and do not necessarily represent the official position of the Centers for Disease Control and Prevention.