

NAPCRG 52nd Annual Meeting — Abstracts of Completed Research 2024.

Submission Id: 7149

Title

Patterns of alcohol use and the association with cardiovascular disease in the Dhulikhel Municipality of Nepal

Priority 1 (Research Category)

Global Health

Presenters

Lindy Reynolds, BS, MSc, Neha Balapal, BS, Archana Shrestha, PhD, Dinesh Timalsena, MSc

Abstract

Context: Alcohol use is a growing health problem that is responsible for 5% of global deaths and disabilities every year. Heavy alcohol use is a known risk factor for cardiovascular disease (CVD) including hypertension (HTN), coronary artery disease, and ischemic heart disease. There is limited literature on the distribution of types of alcohol consumption and corresponding risk factors in Nepal.

Objective: To describe the patterns of alcohol use in the Dhulikhel population & identify associated risk factors to better understand the public health and CVD burden of alcohol use in this setting.

Study Design/Analysis: This was a secondary data analysis of the Dhulikhel Heart Study (DHS). Sociodemographic and health characteristics were compared between alcohol use categories. Adjusted logistic regression models were used to understand how demographic factors were associated with levels of alcohol use and how alcohol use was associated with HTN awareness and treatment.

Population/Setting: The DHS is a prospective cohort study started in 2013 focusing on CVD risk factors in a peri-urban town in Nepal. It includes 1,609 adult residents of Dhulikhel who have been enrolled over 2 waves of recruitment in 2014 and 2023.

Instrument: Alcohol use information was ascertained using a self designed survey questionnaire that was validated through pre-testing.

Outcome Measures: Alcohol use categories (never, former, low/moderate, heavy) were created based off NIH criteria. HTN was based on reported medical history & an average of 3 measurements. It was defined as a SBP \geq 140 and DBP \geq 90. HTN awareness and treatment were both self reported by participants.

Results: Categories of alcohol users were significantly different in terms of sex, age, ethnicity, education, types of alcohol consumed, blood pressure, tobacco use, GAD7 & PHQ9 scores, social support, & comorbidity. In the adjusted model, those in the lowest wealth quintile had 71% lower odds (OR:0.29) of being heavy alcohol users than those in the highest quintile. Current and former alcohol users had increased odds of hypertension after controlling for sex, age, ethnicity, tobacco use, & GAD7 score. No significant differences were observed in odds of HTN awareness and treatment between current users and never users in adjusted models.

Conclusions: Targeted HTN screening and awareness campaigns aimed at former & current alcohol users could reduce CVD-related morbidity & mortality in this population.

Downloaded from the Annals of Family Medicine website at www.AnnFamMed.org. Copyright © 2024 Annals of Family Medicine, Inc. For the private, noncommercial use of one individual user of the Web site. All other rights reserved. Contact copyrights@aafp.org for copyright questions and/or permission requests.