



Full length article

Prevalence, correlates, comorbidity, and age of onset of alcohol use disorders in adult males from five provinces in China



Michael R. Phillips^{a,b,c,*,1}, Hui G. Cheng^{a,d,1}, Xianyun Li^c, Jingxuan Zhang^e, Qichang Shi^f, Guangming Xu^g, Zhiqiang Song^h, Zhijie Dingⁱ, Shutao Pang^j

^a Shanghai Mental Health Center, Shanghai Jiao Tong University School of Medicine, 3210 Humin Road, Shanghai 201102, China

^b Departments of Psychiatry and Global Health, Emory University, 201 Dowman Drive, Atlanta, GA 30322, USA

^c Beijing Suicide Research and Prevention Center, WHO Collaborating Center for Research and Training in Suicide Prevention, Beijing Hui Long Guan Hospital, Beijing 100096, China

^d Department of Epidemiology and Biostatistics, Michigan State University, 909 Fee Rd. Room 601, East Lansing, MI 48843, USA

^e Shandong Mental Health Center, 49 Wen Hua Dong Road, Jinan, Shandong 250014, China

^f Tong De Hospital of Zhejiang Province, 234 Gucui Road, Hangzhou, Zhejiang 310012, China

^g Tianjin Mental Health Center, Liulin Road 13, Hexi district, Tianjin 300222, China

^h The 3rd People's Hospital of Qinghai Province, 41 Guoluo Road, Xining, Qinghai 810007, China

ⁱ Tianshui City Mental Hospital, Jingbiao Road 17, Tianshui, Gansu 741000, China

^j Qingdao Mental Health Centre, Nanjing Road 299, Qingdao, Shandong 266034, China

ARTICLE INFO

Article history:

Received 4 November 2016

Received in revised form

10 December 2016

Accepted 11 December 2016

Available online 17 February 2017

Keywords:

Alcohol use disorders

Epidemiological survey

Comorbid diagnoses

Demographic correlates

Age of onset

China

ABSTRACT

Background: This study integrates data from high-quality mental health surveys in five provinces in China to examine the prevalence, demographic correlates, age of onset, and comorbidity of alcohol use disorder (AUD).

Methods: The five cross-sectional surveys initially screened a representative sample of 74,752 community-living adults (94% response rate) from a sampling population including over 12% of China's adult population. Psychiatrists then administered a detailed diagnostic exam to an enriched sample of 21,015 respondents (95% response rate). The prevalence of AUD in females in China is below 0.5%, so we limited our analysis to 9619 males who completed the diagnostic interview.

Results: Using meta-analyses to summarize estimates across the five locations, the current (30-day) prevalence of AUD among adult Chinese males was 9.8% (95% CI = 5.7–16.9%), but there was wide cross-province variation. After adjusting for age and other demographic variables, the prevalence of AUD was significantly lower in single men than in married men (OR = 0.4, CI = 0.2–0.7), lower in men who were not currently working than in men who were currently working (OR = 0.7, CI = 0.5–0.96), and lower in men with comorbid mental disorders than in men without comorbid mental disorders (OR = 0.4, CI = 0.2–0.8). The risk of developing AUD peaked at 30 years of age.

Conclusions: Substantial differences in the demographic correlates and age of onset of AUD in men in China compared to those reported in other countries highlight the importance of understanding the country-specific and region-specific profile of AUD before developing intervention and prevention strategies.

© 2017 Elsevier B.V. All rights reserved.

1. Background

The growing importance of substance abuse and the harmful use of alcohol to global health has been recognized by the inclusion of a specific objective in the United Nation's Sustainable Development Goals for 2015–2030: (Goal 3.5) “Strengthen the prevention and

treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol” (United Nations General Assembly, 2015). This is a serious and growing problem for all countries, but it is only relatively recently that low- and middle-income countries in Asia have started to consider treatment and prevention strategies to slow the advancing epidemic of alcohol abuse. Given the urgency of the problem, their first impulse will be to adapt treatment and prevention methods developed in western high-income countries, but it is likely that cross-national differences in the ‘drinking culture’ will make the approaches employed in high-income countries inappropriate for low- and middle-income countries. Emerging evidence about the different demographic profile of drinking and

* Corresponding author at: Shanghai Mental Health Center 3210 Humin Road Shanghai 201108, China.

E-mail address: mphillipschina@outlook.com (M.R. Phillips).

¹ Co-first authors.

drinking-related problems in China and India compared to that in high-income countries (Cheng et al., 2016a, b; Gururaj et al., 2016) indicates that high-quality, country-specific research about alcohol use is an essential preliminary step to the development and assessment of national policies and programs.

In China, the 2013 Global Burden of Disease data indicate that alcohol use disorder (AUD) is the second largest contributor to disease burden among all mental and behavioral disorders (after unipolar depression) (Charlson et al., 2016). Previous studies report widely varying rates of current and lifetime AUD and alcohol dependence (Cheng et al., 2015; Hao et al., 2004; Lee et al., 2009; Phillips et al., 2009; Xiang et al., 2009). Studies that employ similar methods in different Chinese provinces suggest substantial inter-regional differences (Zhou et al., 2009); and studies that use the same methods at different times suggest an increasing trend of AUD prevalence (Hao et al., 2004; Zhang et al., 2008), presumably related to recent increases in alcohol consumption (Qian et al., 2015; WHO, 2015). Despite the large and growing magnitude of this public health problem, there has been little systematic research about AUD in China and no targeted policy initiatives to address the problem. Reports of major differences in the age profile, gender distribution, and social settings of alcohol use between China and western high-income countries (Cheng et al., 2010, 2015; Cochrane et al., 2003) highlight the importance of developing China-specific intervention strategies.

Almost none of the individuals with AUD in China receive treatment (Phillips et al., 2009), so population-based studies are needed to assess the relationship between key demographic characteristics and AUD – information that is essential to identify the high-risk groups that should be prioritized in intervention efforts. However, there are only a few regional studies that report such estimates, and their results have been inconsistent (Cheng et al., 2015), partially due to the small sample size and poor quality of some of the studies. Unlike studies of AUD in other countries, there is very little information available in China about the comorbidity of AUD with other mental disorders; the only study we located (Xiang et al., 2009) was limited to residents of metropolitan Beijing. Age of onset is another important characteristic of AUD directly relevant for the development of prevention programs that has been extensively studied in other countries but rarely reported in Chinese studies.

Our group previously reported results of a large general psychiatric epidemiology study that pooled results of representative samples from four provinces in China (Phillips et al., 2009). The current paper combines data from these four provinces with new data from a survey in Tianjin to (a) estimate associations between a variety of potentially important demographic characteristics and the current prevalence of AUD, (b) assess the association between AUD and other mental disorders, and (c) describe the hazard (i.e., probability) of developing AUD at different ages. We employ *meta*-analyses to summarize the five site-specific estimates while accounting for heterogeneity across sites – a methodological improvement over the sample pooling method used in previous reports.

Several unique advantages of these surveys make them well-suited for achieving these aims: (a) well-defined source populations (household-dwelling adults living in five geographically and economically diverse provinces in China that account for over 12% of the Chinese adult population), (b) a standard survey protocol, (c) use of well-validated diagnostic tools administered by trained psychiatrists, (d) a large sample size (74,752 individuals were screened and 21,015 completed the diagnostic interview), and (e) a high response rate (94% and 95% for the screening and diagnostic interviews, respectively). Alcohol use disorder is essentially a male phenomenon in China (the prevalence in adult females is below 0.5%), so we limited our analysis to males (Cheng et al., 2015; Hao et al., 2004; Phillips et al., 2009).

2. Methods

2.1. Sample

Data used in this analysis come from five surveys: province-wide surveys in Zhejiang, Shandong, and Qinghai, a survey in the largest prefecture of Gansu Province (Tianshui Prefecture), and a municipality-wide survey in Tianjin – one of the large Chinese municipalities which are administrative equivalent to provinces. All surveys followed the same protocol. Multi-stage stratified sampling yielded representative samples of non-institutionalized adults (18 and older): after stratifying prefectures (sub-provincial administrative regions) by socioeconomic characteristics, the probability proportional to size method was used to select primary sampling units (i.e., neighborhoods in urban areas and villages in rural areas), simple random sampling was then used to select households in the neighborhoods and villages, and one adult was randomly sampled from each selected household to participate in the survey. The Zhejiang survey was conducted in 2001; the Tianjin survey was conducted in 2011 and 2012; and the other three surveys were conducted in 2005. A total of 74,752 of the 79,177 (94%) selected individuals participated in the surveys. All participants provided informed consent and the surveys were approved by local institutional review boards. A detailed description of the sampling strategy is provided in previous publications (Phillips et al., 2009; Yin et al., 2016).

2.2. Assessment

A two-stage interview procedure was employed to determine the prevalence of DSM-IV mental disorders. First, an expanded version of the 12-item General Health Questionnaire was used to classify respondents into high, moderate, or low risk groups for having a mental disorder. Then trained psychiatrists administered the Chinese version of the Structured Clinical Interview for DSM-IV-TR Axis I disorders (SCID) to all high-risk individuals and a random sample of those with moderate and low risk of a mental disorder (First et al., 2002; Phillips and Li, 2011). This approach yielded 22,140 individuals, among whom 21,015 (95%) completed the interview. Both the General Health Questionnaire and SCID have been validated in the Chinese population (Yang et al., 2003; Zhou et al., 1997). Non-AUD mental disorders considered included mood disorders, anxiety disorders, drug use disorders, psychotic disorders, somatoform disorders, mental retardation, and dementia. The latter two categories were not assessed in Zhejiang province. More details about the assessment of mental disorders are available elsewhere (Phillips et al., 2009; Yin et al., 2016).

The diagnosis of AUD includes two subcategories – alcohol dependence and nondependent alcohol abuse (hereafter referred to as ‘alcohol abuse’). Based on the DSM-IV hierarchical rule, alcohol dependence was prioritized over alcohol abuse: individuals who experienced at least one socially maladaptive drinking behavior (as defined in DSM-IV) are diagnosed as having alcohol abuse *unless* they also concurrently meet the criteria for alcohol dependence, in which case the single diagnosis of alcohol dependence is used. Both current and lifetime diagnoses were determined: current alcohol abuse is diagnosed if any of the maladaptive behaviors occurred in the 30 days prior to the interview and current alcohol dependence is diagnosed if three or more clinical features of dependence occurred within the year prior to the interview. We obtained information about the age of onset of the first clinical feature of alcohol dependence for all individuals with a current or lifetime diagnosis of alcohol dependence. However, due to the sequencing of questions for the SCID, we were only able to obtain the age of onset of the first maladaptive drinking behavior for persons with current or lifetime alcohol abuse in individuals who did not have current alcohol

Download English Version:

<https://daneshyari.com/en/article/5120166>

Download Persian Version:

<https://daneshyari.com/article/5120166>

[Daneshyari.com](https://daneshyari.com)