International Journal of Drug Policy 28 (2016) 10–33

Contents lists available at ScienceDirect

International Journal of Drug Policy

journal homepage: www.elsevier.com/locate/drugpo

Review

Alcohol consumption in the Arab region: What do we know, why does it matter, and what are the policy implications for youth harm reduction?

Lilian Ghandour [a], Ali Chalak [b], Aida El-Aily [a], Nasser Yassin [c], Rima Nakkash [d], Mitra Tauk [e], Noura El Salibi [a], Meghan Heffron [d], Rima Afifi [d,*]

[a] Department of Epidemiology and Population Health, Faculty of Health Sciences, American University of Beirut, Beirut 1107-2020, Lebanon
[b] Department of Agricultural Sciences, Faculty of Agricultural and Food Sciences, American University of Beirut, Beirut 1107-2020, Lebanon
[c] Department of Health Management and Policy, Faculty of Health Sciences, American University of Beirut, Beirut 1107-2020, Lebanon
[d] Department of Health Promotion and Community Health, Faculty of Health Sciences, American University of Beirut, Beirut 1107-2020, Lebanon
[e] Office of the Dean, Faculty of Health Sciences, American University of Beirut, Beirut 1107-2020, Lebanon

ARTICLE INFO

Article history:
Received 6 May 2015
Received in revised form 14 July 2015
Accepted 28 September 2015

Keywords:
Arab
Policy
Alcohol
Harm reduction

ABSTRACT

Alcohol is a recognized global risk factor for many diseases and injury types and a major contributor to disability and death. While cost-effective interventions do exist, many countries lack a comprehensive national alcohol harm reduction policy. The Arab world includes 22 diverse countries stretching from North Africa to Western Asia having varying dispositions with regards to alcohol sale and consumption. Epidemiological data is scattered and the picture on alcohol consumption remains blurry. This paper presents the findings of an extensive review conducted on all 22 Arab countries, specifically describing: (1) the density and methodology of alcohol-related peer-reviewed publications over the last two decades (1993–2013); (2) the epidemiology of alcohol consumption given all available data; and (3) the current status of policies in the region. Our search revealed a strikingly low number of alcohol-related peer-reviewed published studies – a total of 81 publications across 22 countries and two decades. Most studies are based on clinical or student samples. Where data is available, age of onset is low and drinking is frequent, in the absence of any available or enforced harm reduction policies. We submit that countries in the Arab region can be divided into four categories by alcohol ban and published data. One category includes countries where alcohol is not banned but data is absent, suggesting an ostrich-like response to a controversial behavior, or reflecting a weak research infrastructure and/or policy landscape. Evidence-informed recommendations and future directions for policy and research are discussed and tailored to countries' current stance on alcohol legislation and consumption. Given the particular vulnerability of youth to uptake of alcohol as well as the resulting short and long term consequences, the paper concludes by focusing on the implications of the findings for youth alcohol harm reduction.

Introduction

Despite global variations in the prevalence and patterns of alcohol consumption, alcohol remains a leading global risk factor for more than 60 diseases and injury types and a major contributor to disability and death (Rehm et al., 2009). Alcohol can be harmful not only to the drinker (e.g., ill-health, diminished or lost productivity), but also to the surrounding family (e.g., increased family dysfunction, domestic violence) and society (Moss, 2013).

Alcohol consumption, which was predominantly a male behavior, has witnessed a rapid increase in the female population that has resulted in narrowing of the gender gap (Rehm et al., 2009). Within the 'young' segment of the population, drinking has also become particularly concerning given recent increasing trends of binge-drinking, drinking until intoxication, and other harmful drinking practices (Fleischmann et al., 2011; Hibell et al., 2012; McAllister, 2003). In fact, about 34% of the alcohol-related burden of disease, injury and disability is among the 15–29 year age group as per the 2004 Global Burden of Disease Study (Rehm et al., 2009). Youth alcohol consumption has been linked to several negative

* Corresponding author at: Faculty of Health Sciences, American University of Beirut, P.O. Box 11-0236, Riad El-Solh, Beirut 1107 2020, Lebanon.
Tel.: +961 1 350 000; fax: +961 1 744470.
E-mail address: ra15@aub.edu.lb (R. Afifi).

http://dx.doi.org/10.1016/j.drugpo.2015.09.013
0955-3959/

consequences including an increased risk of traffic injuries and fatalities (Anderson, De Bruijn, Angus, Gordon, & Hastings, 2009), risky sexual practices (Chesson, Harrison, & Kassler, 2000; Dee, 2001), and an increased risk of developing problem drinking behaviors and alcohol/substance use disorders in adulthood (DeWit, Adlaf, Offord, & Ogborne, 2000; Grant & Dawson, 1998; Gruber, DiClemente, Anderson, & Lodico, 1996; Hawkins et al., 1997; Prescott & Kendler, 1999; Warner, White, & Johnson, 2007).

To this end, evidence-based and cost-effective alcohol control and harm reduction policies have been identified worldwide and when implemented effectively, have resulted in reduced alcohol-related harms. In particular, a set of core effective policies have been advocated by the World Health Organization (WHO) (Casswell & Thamarangsi, 2009), targeting four main areas of prevention and control: (1) decreasing availability of alcohol through the use of minimum legal drinking age, reduced density of alcohol purchasing venues, and restricting where alcohol is sold through state monopolies and licensing; (2) increasing taxation on and prices of alcohol beverages particularly the prices of the cheapest drinks on the market; (3) regulating alcohol advertising and marketing through the restriction of point of purchase promotions, branding and sponsorship and limiting exposure to outdoor advertising, including advertisements in magazines and newspapers as well as TV and other broadcast media; and (4) enforcing drink-driving regulations including legal concentrations of blood alcohol content, and sobriety checkpoints, conducting random breath testing and imposing mandatory seatbelt legislation. The effectiveness of these core policy components has been documented in several recent population studies (Anderson, Chisholm, & Fuhr, 2009; Anderson, De Bruijn, et al., 2009; Campbell et al., 2009; Livingston et al., 2007; Nelson, 2003; Ponicki, Gruenewald, & LaScala, 2007; Wagenaar, Salois, & Komro, 2009; Wagenaar & Toomey, 2002). In a comparative analysis of alcohol control policies in 30 countries, Brand and colleagues have also found a clear inverse relationship between policy strength and alcohol consumption (Brand, Saisana, Rynn, Pennoni, & Lowenfels, 2007).

Despite this evidence, countries worldwide have varied in the extent to which they have implemented and enforced alcohol-related policies. In fact, most countries do not regard alcohol drinking among youth as a high national health priority (WHO, 2014). This is true for most of the Arab world, including 22 diverse countries stretching from North Africa to Western Asia (Mandil, 2009). While they are all members of the League of Arab States, these countries have varying histories and cultures, and are currently at various levels of their economic and political development. They also have varying dispositions with regards to alcohol sale and consumption. While alcohol is legal in most countries, it is prohibited in some including Libya, Saudi Arabia, Somalia, Sudan and Yemen. Even in Arab countries where drinking may not be officially prohibited, alcohol use may still be socially tabooed and therefore under-reported. Reporting bias, specifically under-reporting, has in fact been suggested as one of the possible reasons why alcohol is not a leading risk factor in the Arab world; as per the Global Burden of Disease (GBD) results, alcohol ranks 14 out of 24 risk factors in the Arab world, when it is the third leading risk factor worldwide (IHME, 2014). This could also be due to the fact that alcohol consumption may in fact be lower specifically in Arab Islamic countries (AbuMadini, Rahim, Al-Zahrani, & Al-Johi, 2008).

The overarching purpose of this paper is therefore to help draw a clearer picture of the alcohol use situation in the Arab world, and assess the need for evidence-informed alcohol control policies in each country. To this end, the paper aims to gather and synthesize the available evidence on alcohol consumption in the Arab world, as well as map the existing alcohol-related policies. Though our focus is mainly alcohol harm reduction among youth, we first expand the lens to understand the overall scope of research on alcohol in the region as this provides the backdrop against which the environment for policy change can be clarified.

Understanding the alcohol-related epidemiological evidence and policy landscape in the Arab world is particularly important in light of the fact that market research statistics have recently highlighted a spike in alcohol consumption between 2001 and 2011 (even in countries where alcohol is banned) with liquor sales rising by 72%, when the global average rise was at 30% (Serjeantson, 2012). Such data are useful, especially that research has shown a high correlation between higher per capita sales of alcohol and higher rates of self-reported consumption and harmful drinking patterns (Smith, Remington, Williamson, & Anda, 1990), as well as a strong ecological relationship between alcohol sales estimates and alcohol-related mortality (Robinson, Shipton, Walsh, Whyte, & McCartney, 2015).

Compounding these data, the alcohol industry reports a "jolly outlook for the region" and has begun to use innovative marketing strategies such as introducing non-alcohol alternatives to enhance 'brand recall' among its consumers, particularly the young (The Economist, 2012). In Saudi Arabia, for instance, low/non-alcoholic beer is in strong demand among the large and growing number of young people, who are the primary target for beer consumption (Euromonitor International, 2014). In fact, the "rising population of youngsters" in the region has been implicated in the alcohol industry's revised strategy and positive outlook (The Economist, 2012).

In this realm, the present paper specifically aims to: (1) describe the density and methodology of peer-reviewed *publications* specific to alcohol drinking prevalence, patterns and related harms in the Arab region over the last two decades (1993–2013); (2) describe the prevalence and patterns of *alcohol consumption* and its related harms, particularly among youth, given the available and published epidemiological evidence within the Arab region; and (3) map current *policies* in the region. Evidence-informed recommendations and future directions for policy and research are discussed and tailored to countries' current stance on alcohol legislation and consumption.

Methods

In an effort to assess the density and methodology of available evidence on the prevalence, patterns and harms of alcohol use in the Arab world (aim 1) and summarize the findings of the available published literature (aim 2), a thorough review of all published alcohol-relevant articles was conducted using major search engines including Medline (Ovid), PubMed, PsycINFO and Index Medicus for the Eastern Mediterranean Region (IMEMR). The search was conducted with the help of the university head medical librarian. It was restricted to the period between Jan 1 1993 and Dec 31 2014. Several mesh terms were included: "substance-related disorders", "alcohol-related disorders", "alcoholics", "alcohol drinking" in addition to various keywords including: booze, alcohol, drunk, alcohol intoxication, drug use, drug abuse, among others. These were truncated, exploded and adjusted to achieve optimal results (Appendix 1). A total of 2443 records were screened for titles/abstracts (after removing duplicates across search engines), and a total of 139 records were included for full-text screening. Articles were retained if: (1) the primary or one of the main objectives of the published article was surveying alcohol use epidemiology (prevalence, patterns, and risk factors/consequences); and (2) data on alcohol was presented separately from other substance use. Articles whose abstract was not retrievable were excluded; also excluded were review articles, studies that assessed alcohol prevalence in a specific comorbid conditions (diabetes, HIV, cancer, ...), or assessed alcohol prevalence as a