



## Policy Analysis

## Alcohol policy in Iran: Policy content analysis

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## ABSTRACT

**Background:** Muslim majority countries (MMCs) typically have limited alcohol policy development due to Islamic prohibition of alcohol consumption. In response to recent increases in alcohol consumption and related harms, MMCs have introduced civil alcohol policies, ranging from total prohibition to European-style regulations. Using Iran as a case study, we describe how alcohol prohibition is translated into policy in the face of influences from globalisation.

**Methods:** We collected information from publicly available literature and policy documents, because of the sensitivity of the topic of alcohol in Iran. The search was conducted in English and Persian. We verified information through consultations with policy actors. We also reviewed newspapers over periods just before the 1979 Islamic revolution, and before and after the 2011 alcohol policy (2008–2010; 2014–2016) was introduced. We analysed policy content based on WHO policy recommendations and used the Walt & Gilson health framework to identify policy content, context, actors and process.

**Results:** Despite its broad approach of civil prohibition with concessions for the non-Muslim population, Iran has developed approaches to reduce the harmful impacts of alcohol and adopted nine of ten policy interventions recommended by WHO. Pricing policy was the only intervention not used. We identified contextual challenges, such as resources, stigma and cultural offence that influence policy development.

**Conclusion:** MMCs face challenges in creating civil alcohol policies. Iran has taken steps, including a national alcohol strategy, to reduce alcohol-related harms. The socio-cultural, governance and historical context have shaped Iran's adaptation of policy interventions recommended by WHO.

## Background

Harmful alcohol consumption causes the death of 3.3 million people each year world-wide and is responsible for 5.1% of the global burden of disease and injury (World Health Organization, 2014a). Alcohol policies have been introduced globally to reduce unsafe alcohol consumption. However, in Muslim Majority Countries (MMCs), because of Islamic alcohol prohibition, little attention has been given to alcohol policy development (Al-Ansari, Thow, Day, & Conigrave, 2016; Madureira-Lima & Galea, 2017).

In MMCs the overall prevalence of alcohol consumption is very low when compared to other countries (World Health Organization, 2014a). However, in many MMCs alcohol consumption and related harms have increased over the past 20 years (World Health Organization, 2011) and there is growing recognition of the need for a policy response (Al-

Ansari, Day, Thow, & Conigrave, 2016; Al-Ansari, Thow et al., 2016; Amin-Esmaili et al., 2017). In addition, the prevalence of heavy episodic drinking among drinkers may still be high in a MMC, for example a rate of 31.9% was reported in Indonesia (World Health Organization, 2014d) (compared to 13% among drinkers in Australia, a non-MMC) (World Health Organization, 2014c). There are various challenges facing MMCs in developing robust and culturally appropriate alcohol policies. These include globalisation, such as through media, tourism and economic pressure, leading to increased consumption (Al-Ansari, Thow et al., 2016). Further, the global alcohol industry sees developing countries (which most MMCs are) as important emerging markets (Bakke, 2007; Jernigan & Jernigan, 2000).

Limited global understanding of policy tools relevant for Islamic countries is an obstacle in facing these challenges. Despite an international perception that alcohol prohibition is the only policy approach in

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MMCs, many MMCs have implemented a broader range of civil alcohol policies (Al-Ansari, Thow et al., 2016). Overall, there are four broad approaches (Al-Ansari, Thow et al., 2016) ranging from total prohibition to European-style alcohol regulation. Under total prohibition, alcohol consumption, production and trade are banned for all. In contrast, prohibition with concessions allows non-Muslims to produce and consume alcohol. In a restrictive policy approach, alcohol is banned in some geographic locations but not in others; usually only non-Muslims can drink and in many countries a licence is required for a person to purchase alcohol. A regulation policy approach allows alcohol consumption for all and alcohol can be produced legally in the country, however there are regulatory laws in place such as age limit and taxes (Al-Ansari, Thow et al., 2016). Therefore, all approaches except the last, have integrated the Islamic prohibition of drinking into civil policy.

The Islamic Republic of Iran is one MMC with a civil alcohol policy of prohibition. Iran is the most populated Middle Eastern MMC, with a population of over 80 million (Amar, 2018) and 99.6% are Muslims (Statistical Centre of Iran, 2018). A broad overview of Iran's approach to alcohol policy has been described (Al-Ansari, Thow et al., 2016), however, there has not been any detailed analysis of policy instruments, their content and context. Indeed, we were unable to identify such an analysis in any MMC with a civil policy of alcohol prohibition (Al-Ansari, Thow et al., 2016; Ghandour et al., 2016). Before the Islamic revolution, Iran was a well-known producer of alcohol in the Middle East (Daneshgar, 2014) but post-revolution, alcohol production, trade and consumption were prohibited, other than for non-Muslim minority groups (Al-Ansari, Thow et al., 2016).

Illegal trade, diverted alcohol produced legally for medical purposes, and home-made alcoholic beverages are the suspected major source of alcohol for the Muslim majority in Iran (Sanaei-Zadeh, Zamani, & Shadnia, 2011). Alcohol is mostly traded in from neighbouring countries such as Turkey, Iraqi Kurdistan, Azerbaijan, Turkmenistan and Afghanistan. Home-made alcohol is also common in Iran, largely due to the cost of illicitly purchased or commercial alcohol. As a result, methanol poisoning is a public health issue in Iran (Hassanian-Moghaddam et al., 2015; Moghadami et al., 2015). For example, in 2013 694 people were affected by a methanol poisoning outbreak in Rafsanjan (Hassanian-Moghaddam et al., 2015).

Iran's population is relatively young with more than 50% aged under 40 years, and 15% aged between 15 and 25 years (Statistical Centre of Iran, 2018). Youth are more vulnerable to harmful alcohol consumption and the associated acute risks (World Health Organization, 2014a) and anecdotally, alcohol consumption is increasing among young people in Iran, especially at weddings and parties (Qudsonline, 2016). These factors support the concern that alcohol problems are increasing in the country (Hassanian-Moghaddam & Zamani, 2016).

Often MMCs are excluded from global studies on alcohol policy because of their civil alcohol prohibition or missing information on alcohol policies. One example of this was the exclusion of most MMCs from an international comparison of alcohol policy across 167 countries (Madureira-Lima & Galea, 2017). The aim of our study is to address the gap in global understanding of alcohol policy in MMCs by providing a detailed analysis of the content of policy instruments in Iran, and their context. Information regarding Iran's experience and approach can be used to support other MMCs to develop appropriate and effective alcohol policy, including through global support by actors such as the World Health Organization (WHO).

## Methodology

We conducted an analysis, focussed on content of alcohol-related policy across a range of sectors in Iran. This was underpinned by the Walt and Gilson health policy analysis framework (Walt & Gilson, 1994). Our research questions were: 1) How is alcohol governed in Iran? and 2) What framing and contextual considerations are evident in

Iran's alcohol-related policy approach?

We collected information only from publicly available literature and policy documents, because of the sensitivity of the topic of alcohol in Iran. We identified relevant policy sectors based on the Global Alcohol Policy (World Health Organization, 2010). This was used to develop a matrix for data collection and extraction (Table 2). We identified relevant documents by searching the websites of official organisations, such as the Ministry of Health and Medical Education, and the Ministry of Justice. The key search terms used (translated into Persian) were “alcohol”, “alcoholic”, “alcohol consumption”, “intoxication” and all other possible derived words.

We searched the internet from inside (in Persian) and outside Iran (in Persian and English). Keywords used were alcohol, policy, poisoning; and Iran. In English language sites we also searched for the term ‘wine’, after discovering the Persian word for alcohol was sometimes translated into ‘wine’, and we also searched for ‘addiction’. We did not search for the term ‘addiction’ in Persian language sites, as results were swamped by articles on opioid dependence. Extra material was also obtained directly from Iranian academics or institutes.

We identified additional information on the policy context through a review of newspaper articles at three points in time. These time-points provided a snapshot of pertinent periods - before the 1979 Islamic revolution, a decade ago (2008–10; which was before the 2011 alcohol policies), and in the last three years (2014–16). Using these different time periods enabled an examination of changes in policy context over time. The key search terms used in newspaper searches were “alcohol”, “alcohol consumption”, “intoxication” and all other possible derived words (in Persian). The first author, who is fluent in Persian language, hand-searched two daily newspapers from before the 1979 Islamic revolution: *Ettelaat* (founded in 1926) and *Kayhan* (founded in 1943) (Shapour Ghaseemi, 2006). These focus on political, cultural, social and economic news. We also reviewed two months from *Ettelaat*, April–May 1978 (Persian calendar: Farvardeen–Ordebehesht, 1357), and the subsequent month, June 1978 (Persian calendar: Khordad, 1357) from *Kayhan*. We were constrained in the number of hard copy newspapers we could search, because of cost in this unfunded study. We also selected nine electronically available newspapers with different levels of conservativeness and political perspectives. Because of the large number of online newspaper issues, and sometimes the basic search facilities available, only certain months' issues were selected for review. As shown in Table 1, we examined the electronic newspapers for two sets of three-year periods, both before and after the 2011 introduction of new alcohol policies in Iran (2008–2010 and 2014–2016). The months reviewed are presented using the Persian calendar (with their translation into the Gregorian calendar).

We conducted seven consultations, including six with the key individuals directly or indirectly involved in alcohol policy development and implementation, to 1) verify that we had identified all relevant policy documents; 2) ensure that we had correctly interpreted the policy content; and to 3) gain additional understanding of the policy context. We identified these stakeholders through the WHO office in Tehran, and then through direct contact with the Department of Mental, Social Health and Drug Abuse at the Ministry of Health and Medical Education in Tehran. Those consulted included past and present senior government officials and policy makers (n = 2) health professionals (n = 2), and academics and researchers (n = 3). Some individuals have had more than one role but only their primary role is shown to protect interviewees' identity and uphold confidentiality. Six consultations were conducted face-to-face and one via phone. Consultations were focussed on publicly available information that formed part of the individuals' normal work role and responsibilities.

We analysed policy content using a matrix based on WHO policy recommendations. We also used the Walt & Gilson health policy analysis triangle (Walt & Gilson, 1994) as a framework for analysis. This identifies content, context, actors and process as key factors for understanding policy. The process of analysis included coding the policy



Table 1 (continued)

#	Newspaper website	Newspaper name	<sup>b</sup> Year	Months <sup>a</sup>
		Farvardin (Mar-Apr)		
		Ordibehesht (Apr-May)		
		Khordad (May-Jun)		
		Tir (Jun-Jul)		
		Mordad (Jul-Aug)		
		Shahrivar (Aug-Sep)		
		Mehr (Sep-Oct)		
		Aban (Oct-Nov)		
		Azar (Nov-Dec)		
		Dey (Dec-Jan)		
		<sup>a</sup> Bahman (Jan-Feb)		
		<sup>a</sup> Esfand (Feb-Mar)		
	Tasnim		2016	✓
			2015	✓
			2014	✓
			2010	✓
			2009	✓
			2008	✓
	الف		2016	✓
8	alef.ir	الف	2015	✓
		Alef	2014	✓
			2010	✓
			2009	✓
			2008	✓

✓ Indicates that the newspaper issues for that month were searched.  
 NA: Not applicable because for that month or year the newspaper either did not exist, or the online version did not exist or was not available.  
<sup>a</sup> Because of the large volume of online newspapers, and the relatively simple search facilities available, only certain months were selected for review. The searched months in the Persian calendar and their (abbreviated) equivalent in the Gregorian calendar.  
<sup>b</sup> The new alcohol policy was initiated in 2011. In this paper the years 2008–2010 are referred to as the pre- and 2014–2016 as post- this 2011 alcohol policy.

content and the contextual data from newspapers, augmented with insights from consultations, using the health policy analysis triangle. We synthesised findings, with a specific focus within each theme on how Iran is governing and operationalizing alcohol policy in a context of prohibition and a high level of sensitivity about the use of alcohol. Further details of the methodology can be found in Appendix A.

Findings and analysis

A. Policy content

WHO sets out ten policy areas, each comprising a variety of policy options and interventions. Countries can choose approaches that best suit their local circumstances. We identified only four policy documents through our internet search, and an additional 11 through consultations. The policy documents spanned Ministry of Health, Treatment and Medical Education; Legislative Assembly; Ministry of Education; government services; Department of Transport and Roads; Police; Ministry of Tourism; the Judiciary System; Ministry of Attorney General; and Ministry of Interior Affairs.

From the pre-1979 newspaper search we identified approximately 12 articles mentioning alcohol compared with 97 mentioning tobacco or other drugs. From the electronic newspaper search we identified approximately 80 articles from the pre alcohol policy period (2008–10) that mentioned alcohol compared with approximately 300 from the post-alcohol policy period (2014-16). Due to their basic search facilities, we were not able to quantify the change in ratio between alcohol and tobacco or drug articles in the electronic journals.

Table 2 highlights the main strategies initiated in Iran for each of the ten WHO recommended alcohol policy areas (World Health Organization, 2010). We also illustrate how such approaches have been adapted for the Iranian context.

I Leadership, awareness and commitment: Each of the seven WHO options for leadership, awareness and commitment has been included in some way in Iranian alcohol policy (Table 2). Iran's 'National Strategy for Primary Prevention of Addiction' (2010) (Hamied Serami, 2010) covers policies on any psychoactive substance, including alcohol. In 2011, a separate 'Comprehensive Program for Prevention, Treatment and Reduction of Alcohol-Related Poisoning 2011-2015' (Dmāry, 'ly nyk Frġām, & M'maryān, 2011) was developed. In addition, the Government of Iran has integrated, multi-sectoral approaches to alcohol policy development and has introduced a committee to monitor alcohol policies. Policy planning is coordinated across different tiers of government and integrated with other divisions' strategies (Dmāry et al., 2011). The Ministry of Health also provides guidelines for the Department of Education to support awareness raising, education and other preventive strategies (Dmāry et al., 2011). This includes an attempt to reduce stigma and discrimination.

II Health services' response: All seven WHO intervention options in this area have been included in Iranian alcohol policy (Table 2). According to Iranian policies on prevention and treatment of alcohol-related issues, 150 alcohol treatment units have been integrated into existing drug treatment services around the country. Specialised treatment is provided on a broader base of screening, brief intervention, referral into treatment, and hospitalisation when needed. Special settings for alcohol withdrawal management and educational courses are also provided (Hashemian et al., 2017). Furthermore, our findings suggest that these services are designed to be delivered through culturally acceptable health and social facilities. The policy content review identified an initiative to increase use of services through providing phone lines for those seeking treatment (Hamshahri reporter, 2015) and we identified through the consultations, the presence of a live TV program that discusses alcohol issues in the community, specifically targeting youth. It seeks to answer questions on alcohol related issues and

**Table 2**  
Alcohol policy initiatives in Iran compared with the WHO suggested strategies.

Key alcohol policy areas suggested by WHO on national level (World Health Organization, 2010)	Key strategies initiated in Iran	Adaptation of these key strategies in Iran	Source of data
<b>1. Leadership, awareness and commitment</b>	'National Strategy for Primary Prevention of Addiction, 2010'	Addiction in this document refers to any consumption that could lead to addiction. Alcohol is part of all strategies related to addictive substances	(Hamied Serami, 2010)
	'Prevention, Supply Reduction, Treatment, Harm Reduction and Rehabilitation of Alcohol Use, 2013–2017'	Following the 'Comprehensive Program for Prevention, Treatment and Reduction of Alcohol-Related Poisoning 2011–2015' this policy has an alcohol-only focus	(Dmāry et al., 2011; Shariatirad et al., 2016)
	Monitoring and evaluation in place	'Supervisory Board of the Program' or country committee has been formed for the above alcohol-harm reduction program	(Dmāry et al., 2011)
	Multi-sectoral management of alcohol strategies between levels of government and other sectors	Multi-sectoral management is present e.g. through Ministry of Health and Education, the Law Enforcement Force of the Islamic Republic of Iran (NAJA) and the justice system	(Dmāry et al., 2011; Sarpoosh, 2018)
	Effort in creating accessible information and effective education and public awareness programmes and some prevention measures	For example, school-based alcohol awareness programs have been initiated; as have prevention measures e.g. breath testing, screening in primary health care	(Dmāry et al., 2011; Mental Health Social Health & Addiction Offices, 2012; United Nations Office on Drugs and Crime in Iran)
<b>2. Health services' response</b>	Raising awareness, avoiding stigmatization and discouraging discrimination	Government is working to involve media such as TV and newspapers to present alcohol consumption as a health issue, where treatment should be sought if needed.	Consultation; (Dmāry et al., 2011)
	Integrated multi-sectoral approach	Many sectors are involved in developing and implementing these strategies	(Dmāry et al., 2011)
	Development of alcohol treatment service models in Iran	Iran has established 150 pilot alcohol treatment units (integrated with drug treatment)	Consultation; (Noroozi et al., 2014; Shariatirad et al., 2016)
	Guidelines for training of Family Doctors and the Referral System [section 8, first chapter, 2010]	Iran is ntegrating prevention, treatment and reduction of alcohol-related harms in all programs of health services	(Dmāry et al., 2011)
	Increasing capacity of health and social welfare systems		(Ayatollah Khamenei, 2014)
<b>3. Community action</b>	Supporting initiatives for screening and brief interventions for alcohol consumption and for harmful drinking in primary health care	The Ministry of health has distributed age-specific packages for screening and brief interventions in primary health care	(Ministry of Health and Medical Education, 2019a,2019b,2019c,2019d)
	Improving capacity for prevention of, identification of, and interventions for individuals and families	The Ministry of Health has developed a specific flowchart for all relevant services on providing the necessary interventions	(Ministry of Health and Medical Education)
	Development and coordination of integrated / linked prevention, treatment and care strategies and services		(Ayatollah Khamenei, 2014)
	Provision of culturally sensitive health and social services as appropriate		(Dmāry et al., 2011)
	The eighth strategy of the overall policies on combating drugs issued by the Supreme Leadership Authority 2006 is aiming to encourage presence and involvement of individuals and families and to support community-based organisations in prevention and reduction of alcohol's harms and treatment of those with alcohol or drug dependence.	Mainly being implemented through "Basij" (The mobilisation), NGOs and "Community-focused groups"	(Ayatollah Khamenei, 2006)
<b>4. Drink-driving policies and countermeasures</b>	Introduction of an upper blood alcohol concentration level and enforcing it	Introducing and enforcing zero blood alcohol concentration limit for all drivers (limit of 20 g/100 ml on breathalyser)	(Mental Health Social Health & Addiction Offices, 2012)
	Drink-driving policies [section B, material 10, 2010]	Administrative suspension of driving licences, fine and referral to treatment when needed	(Dmāry et al., 2011)
	Promoting breath-testing	Breath-test is done after several screening stages, only when a driver is suspected to be under the influence of alcohol	(Mental Health Social Health & Addiction Offices, 2012)
	Promoting a detailed protocol for the road and traffic police	Each stage has a specific protocol that the officers have to follow and, in each situation, at least two officers have to be involved for their safety as well as for supervisory purposes	(Mental Health Social Health & Addiction Offices, 2012)
	Monitoring and evaluation on a national level		(Mental Health Social Health & Addiction Offices, 2012)

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Table 2 (continued)

Key alcohol policy areas suggested by WHO on national level (World Health Organization, 2010)	Key strategies initiated in Iran	Adaptation of these key strategies in Iran	Source of data	
5. Availability of alcohol		A specific monitoring and evaluation system is in place with frequent reporting to the local and national level.		
		Using the media to target drink driving in situations	(Ilina Reporter, 2016)	
		Ban with concessions	Alcohol consumption and trade is banned in the country for Muslim majority population. Only minority non-Muslims can consume alcohol, and produce and sell it to each other. But they cannot drink in public.	(Al-Ansari, Thow et al., 2016)
		According to Article 174, non-Muslim drinking is not considered a crime if alcohol is not consumed publicly	Only minority non-Muslims are allowed to produce and consume alcohol, but not in public	(Al-Ansari, Thow et al., 2016)
		Medical use alcohol is legally produced	This is ethanol e.g., for disinfecting purposes	(Hussien Mehrparvar, 2010)
		The third of the overall policies on combating drugs issued by the Supreme Leadership Authority 2006	Strengthening, equipping and developing units and information systems in order to control the country's borders and prevent entry of illicit substances (including alcohol) and their precursors; strengthening the structure of anti-drug specialist units in the police force and other related mechanisms	(Ayatollah Khamenei, 2006; Dmāry et al., 2011)
		Establishing, operating and enforcing an appropriate system to regulate production, wholesaling and serving of alcoholic beverages by the below measures	Total ban on alcohol production for Muslim majority population; gaining support to promote policies of decreased alcohol availability; increased fines for Muslim alcohol consumers and providers	(Dmāry et al., 2011)
		Establishing, operating and enforcing an appropriate system to regulate production, wholesaling and serving of alcoholic beverages by the measures below	Regulation setting out no on-premise or off-premise alcohol outlets for the Muslim population	Consultation; (World Health Organization, 2014e)
		Exemption for minorities	Only non-Muslim minorities are allowed to sell alcohol, and only to non-Muslims	Consultation
		Regulating retail sales in certain places	Only stores owned by non-Muslims and within their community can sell alcohol	
6. Marketing of alcoholic beverages		Age limit is not relevant for general population, and not in place for minorities who can consume alcohol	Any consumption by Muslims at any age is prohibited, and no age limit is set for minorities	(3danet.ir., 2016; World Health Organization, 2014e)
			Policies are in place regarding drinking in public places or at the functions of official public agencies for the entire population, including minorities	(World Health Organization, 2014e)
		Adopting policies to eliminate availability of illicit production, sale and distribution of alcoholic beverages as well as to regulate or control informally produced alcohol	Heavy policing is in place with fines, Hadd (Islamic punishments) and penitentiaries for offenders	(Iran Human Rights Documentation Center, 2013b)
		Special licensing system	The religion of citizens is recorded on their citizenship document, and so acts as a licence for minority non-Muslims to sell and purchase alcohol	Consultation; observation
			Marketing is banned even for non-Muslim stores; they are not allowed to display alcoholic beverages or advertise alcohol	(World Health Organization, 2014e)
	7. Pricing policies	This recommendation is not implemented in Iran	There are no pricing policies or allocated taxes for non-Muslims (who can sell alcohol)	Consultation
	8. Reducing the negative consequences of drinking and alcohol intoxication		Enforcing the zero alcohol consumption policies (zero tolerance)	
			Ban on any alcohol serving for majority and non-Muslims have no laws against serving to intoxication	(consultation; (World Health Organization, 2014e))
			No premises are allowed to sell alcohol except stores owned by non-Muslims	(consultation)
			Apart from alcohol being banned for Muslim majority, there is no consumer information about, or labelling of alcoholic beverages to advise of potential harms	
	Adoption of preventive strategies for dealing with threats and injuries caused by addictive substances (including alcohol)	The use of governmental and non-governmental services; and strengthening people's religious beliefs and cultural practices; arts, sports, education and	(Ayatollah Khamenei, 2006; Dmāry et al., 2011; Iran Human Rights Documentation Center, 2013b)	

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Table 2 (continued)

Key alcohol policy areas suggested by WHO on national level (World Health Organization, 2010)	Key strategies initiated in Iran	Adaptation of these key strategies in Iran	Source of data
9. Reducing the public health impact of illicit alcohol and informally produced alcohol	Production and distribution of alcohol is controlled	propaganda in the family environment, work, education and training, and cultural and public centres Any production and distribution of alcoholic beverages is banned except for the minority non-Muslims; Specific fines and punishments in place; gaining support to promote policies of decreased alcohol availability; and to increase fines for consumers and providers	(Dmāry et al., 2011)
	Regulating sales of informally produced alcohol A powerful regulation and implementation system Established systems to detect and trace illicit alcohol Ensuring necessary cooperation and exchange of relevant information on combating illicit alcohol among authorities at national and international levels Advising the public about toxins and other health-related issues from informal or illicit alcohol	Policing system  Policing in place	(Hamied Serami, 2010)  (consultation)  (consultation; (Hamied Serami, 2010))  (consultation; (Ayatollah Khamenei, 2014))
10. Monitoring and surveillance	Frameworks for monitoring and surveillance activities including periodic national surveys on alcohol consumption and alcohol-related harm	Use of different media such as newspapers, TV program and school-based awareness to advice on alcohol consumption and related health consequences Establishing effective frameworks for monitoring and surveillance activities including periodic national surveys on alcohol consumption and alcohol-related harm but no exchange and dissemination of information except among the policy makers Establishing an organisational entity responsible for collecting, collating, analysing and disseminating available data, including publishing national reports 'as above'	(consultation; (Mehr News Agency, 2014))  (consultation; (Dmāry et al., 2011))  (consultation; (Dmāry et al., 2011))
	Tracking a common set of indicators of harmful use of alcohol and of policy responses and interventions to prevent and reduce such use Developing evaluation mechanisms - early stages	Data collected to determine the impact of policy measures, interventions and programmes to reduce the harmful use of alcohol	(Dmāry et al., 2011)  (consultation; (Dmāry et al., 2011))

provides information about available services.

III *Community action*: WHO recommends a range of interventions relating to community action in relation to alcohol, including measures to highlight alcohol-related harms and promote solutions, and to assist with identified gaps and priorities (Table 2). Some of these have been implemented in Iran. The Iranian Government has developed a plan to involve the community and widen the capacity of community-based organisations such as “Basij” (The Mobilisation) and Non-Governmental Organisations (NGOs) (Hamied Serami, 2010). A goal for community-based organisations, encouraged by government, is to provide care and support for affected individuals and their families (Dmāry et al., 2011). Additionally, the Ministry of Health has introduced models of care for alcohol users that can be used by the individual, family and health services, and outlines ways to implement care in urban and rural areas (Dmāry et al., 2011). The ‘Social, Mental and Addiction Group’ is a working-group formed in the health system development plan. One of its outputs is to promote prevention, treatment and reduction of alcohol poisoning by the year 2025 (āyrānmnš, 2011).

IV *Drink-driving policies and countermeasures*: WHO has recommended nine interventions here (Table 2) and policies are in place in Iran to

address all to some extent. The highest BAC allowed when driving in Iran is 0 g/100 mL. However, when breath testing, an upper limit of 20 g/100 ml is implemented (Mental Health Social Health & Addiction Offices, 2012). This is to allow for i) the possibility of other medications, food or drinks affecting the BAC; and ii) any inaccuracy of the breathalyser. In regards to traffic and road policies, specific strategies are in place, with monitoring and evaluation, and frequent reporting to local and national road and traffic bodies (Mental Health Social Health & Addiction Offices, 2012).

V *Availability of alcohol*: The WHO recommended policy options to manage availability of alcohol includes regulating production and serving of alcohol and of illicit alcohol, restriction on service to intoxicated persons and a minimum drinking age (Table 2). The Iranian Government implements a total ban on alcohol consumption and production for Muslims of all ages (Qudsonline, 2016). The Government has provided an exception for non-Muslims, who are permitted to drink and produce alcohol, but are prohibited from consuming alcohol in public spaces or during public events (Fāṭimī, 2014; Hussien Mehrparvar, 2010). Alcohol can only be consumed in private homes or gatherings. Therefore, apart from prohibition for Muslims, the control of retail sale is only applied to

non-Muslim minorities, who can sell alcohol to other non-Muslims. Such sales usually occur privately (consultation). There are no specific laws on licensing of sellers or ID requirements for purchasers. In addition there are no policies to prevent sale to intoxicated persons and no minimum age for purchase and consumption of alcohol among non-Muslims (3danet.ir., 2016). Most alcohol sold by non-Muslims to non-Muslims is produced in Iran. There is no legal alcohol import to the country. The only permissible national production of alcohol is for medical, laboratory or industrial uses (Association of Iranian Alcohol Producers, 2018) and monitoring is in place to ensure this (e.g. production of alcohol for skin disinfection or as solvents). There are policies to eliminate the illegal production, sale and trade of beverage alcohol within the country and to eliminate its trafficking from neighbouring countries. The Iranian government has specific fines, jail and other punishments in place for related offences (Iran Human Rights Documentation Center, 2013a).

- VI *Marketing of alcoholic beverages*: WHO has recommended three interventions for the marketing of alcoholic beverages (Table 2). These include diverse regulation on marketing techniques, restrictions on marketing and type of product. Alcohol marketing is banned in Iran, including in non-Muslim owned stores, where alcohol cannot be displayed or advertised (consultation; (Ayatollah Khamenei, 2006)).
- VII *Pricing policies*: The WHO articulates pricing policies through creating systems for alcohol taxation and for enforcing them, prohibiting or controlling below-cost sales and unlimited volume sale (Table 2). For the Muslim majority population in Iran, this recommended policy area is redundant due to prohibition. However, for non-Muslim minorities there is no taxation or pricing regulation (consultation).
- VIII *Reducing the negative consequences of drinking and alcohol intoxication*: The WHO recommends six interventions in this area (Table 2). These include regulating the setting in which alcohol is served to minimise violence and inappropriate behaviours (3danet.ir., 2016). This recommendation is largely redundant for the majority population, for whom alcohol consumption is prohibited. However, for non-Muslim minorities, there are no laws prohibiting the sale or service of alcohol to intoxicated persons.
- IX *Reducing the public health impact of illicit alcohol and informally produced alcohol*: WHO uses indicators, such as the presence of relevant regulations, to measure countries' approaches to reducing the public health impact of illicit and informally produced alcohol. In Iran, this is addressed through prohibition of alcohol for the Muslim majority, where any alcohol consumption is seen as dangerous for health and carrying a risk of future consequences (consultation). Thus, alcohol has a similar status to illicit drugs (Table 2). Production and distribution of alcohol within the Muslim majority population are strictly controlled by enforcing prohibition, especially for home-produced alcohol. Law enforcement and other relevant authorities collaborate and exchange information to combat illegal alcohol. Moreover, there are public alerts on the hazards associated with its production. For non-Muslim minorities who can legally produce alcohol, there is no regulation on production. Consultations suggest that the government largely "trusts" the minorities' skills in alcohol production.
- X *Monitoring and surveillance*: There is an agency solely responsible for gathering, comparing and analysing available data on alcohol use, harm or production and publishing national reports (Table 2). These data are for internal government use and exchange and dissemination of information to outsiders is not allowed.

## B. Actors

The government of Iran has identified internal and external stakeholders with respect to alcohol policy. The Ministry of Health is

considered an internal body while other organisations such as the State Welfare Organisation of Iran are considered close external bodies (Dmāry et al., 2011). The latter is the key governmental funding institute that supports through public funds disadvantaged people or individuals with disabilities. One of its subdivisions is the Centre for the Prevention and Treatment of Addiction (The State Welfare Organisation of Iran, 2012). Each plays a different role in alcohol policy. The main interest of The Ministry of Health, for instance, is in harm minimisation. We identified a range of actors relevant to alcohol policy, including policy developers and decision makers, ministries and organisations. The stakeholders [8] are divided into seven areas based on their involvement, as described below:

*Policy developers and decision makers*: Policies in the Iranian system are required to be culturally and religiously appropriate and to pass rigorous approval processes through governmental bodies such as the Commission of Public Health, Treatment and Social Health of the Islamic Parliamentary Council. There are several bodies involved in policy development and decision making. This starts with the highest bodies, such as the Base of Representativeness of the Supreme Leader; and the Expediency Discernment Council of the System (Persian: Majma' Ta'xis Ma'slahat Nezām). It also includes those who are directly involved in health, such as the Commission of Public Health, Treatment and Social Health of the Islamic Parliament Council; the Senior Council of Food, Health and Safety; and the Policy Making Council of the Ministry of Health.

Seven actors are responsible for decision making with respect to alcohol. The Ministry of Health is the lead actor in alcohol policy. It has a collaborating research institution which conducts surveys and collects other data, which are used to inform policy development. Through the responsible committee, the Ministry of Health identifies problems and associated policy gaps, assesses the situation and makes recommendations to the upper decision-making bodies. The Ministry of Health is directly involved in the development of policies for treatment and prevention. For example, the Ministry of Health and the Ministry of Interior developed 'Prevention, supply reduction, treatment, harm reduction, and rehabilitation of alcohol use, 2013 – 2017' (Shariati-rad et al., 2016). The Ministry of Health is also involved in implementation by providing health services and coordinating alcohol strategies between different levels of government (Dmāry et al., 2011).

The Ministry of Health, Treatment and Medical Education (Mazandaran University of Medical Sciences, 2015) each have specified centres focussing on different aspects of alcohol policy. One of the priorities of the Ministry of Health is to direct programs which aim to minimise the consumption of alcohol, particularly among youth. This includes collaboration with Law Enforcement to measure driver safety and identify drivers affected by alcohol consumption (Mental Health Social Health & Addiction Offices, 2012).

The Ministry of Health's Mental Health office has merged mental health services with primary healthcare, to improve mental, social, addiction-related and alcohol-related health (Mazandaran University of Medical Sciences, 2015).

*Implementing and enforcement bodies*: A total of 18 bodies were identified as having roles in implementation and enforcement in relation to alcohol. The most active was the police force: The Law Enforcement Force of the Islamic Republic of Iran (NAJA). NAJA has several divisions nationally, each with different roles. For example, the Traffic Police of NAJA is responsible for policing drink-driving, and for road and traffic issues; while the Anti-Narcotics Police, combat the illegal drug use and sale including alcohol, and refer people engaged in illegal alcohol-related activities (e.g. Muslim drinkers, producers or retailers) to the criminal justice system (Sarpoosh, 2018).

The Border Guard Command is responsible for preventing alcohol being smuggled in from neighbouring countries and has direct engagement with other government institutes for the legal (criminal) system such as Judiciary, Prevention Office and Prisons Organisation

(Sarpoosh, 2018).

**Community and religious actors:** Religious seminaries across the country, the Islamic Propaganda Organisation, and Ministry of Culture and Islamic Guidance are other influential stakeholders. For example, the Ministry of Health obtained a Fatwa from two scholars to decriminalise treatment-seeking by people with alcohol-related issues (consultation; (Shariatirad et al., 2016)). A Fatwa is an answer to a question given by an Islamic scholar with “recognized authority”, from a point or view of the Islamic law. In addition, according to their direct involvement with community-based, school-based and national events and various types of lecturing on a daily or weekly basis, scholars play a significant role in raising awareness and providing advice and guidance to prevent alcohol consumption and to reduce its consequences.

**International agencies:** Some international or global agencies, such as United Nations International Children’s Emergency Fund (UNICEF), the United Nations Office on Drugs and Crime (UNODC) and the WHO representative in Iran (from their Eastern Mediterranean Region’s Office) are identified in policy documents as stakeholders in alcohol policy making in Iran.

Iranian policy documents articulate a role for international agencies in advising on policy development through assistance with data analysis and in conducting alcohol-related health awareness campaigns. UNODC has recently, for example, published a series of posters in Persian aiming to raise awareness among young people of the physical and psychological effects of drugs and alcohol. More than 8000 copies of these posters were distributed to schools and universities across the country (UNODC Islamic Republic of Iran, 2017).

**Researchers:** The Iranian policy documents present researchers as influential stakeholders in developing best practice for prevention and treatment of alcohol-related harms. In the last decade in Iran, research and the number of published research articles on alcohol have significantly increased (Ehsani, Azami, Najafi, & Soheili, 2017). The Ministry of Health has allocated addiction prevention and treatment specialists in all the research centres and universities under its subdivisions. In 2009, the Ministry of Health measured the status of alcohol consumption, alcohol-related issues and other relevant data to support alcohol policy development.

Despite the sensitivities surrounding alcohol, a conference on alcohol poisoning and treatment was held in Iran in 2015, where many nationwide alcohol-related studies were presented and published (consultation).

**Industry:** Industry actors have very little role in Iran’s alcohol policy as only pharmaceutical companies and non-Muslims produce alcohol legally.

### C. Policy context

We identified several contextual issues that have shaped Iran’s implementation of the WHO best practice policy interventions. These relate to socio-cultural, governance and historical policy context in the country.

#### Policy processes:

**Agenda setting:** The process of alcohol policy development has taken place in several stages. In 2006, the general policies of fighting against substance misuse were informed by the supreme leader, Ayatollah Sayed Ali Khamenei (Ayatollah Khamenei, 2006). Alcohol was considered as part of substance misuse in the country and included in a fight against the planting, production, import, export, storage and distribution of all substances related to illegal drugs.

In 2010, the Ministry of Health’s Office of Mental, Social and Addiction launched a national advocacy campaign on alcohol and in the same year, the Office estimated the size of the alcohol-using population. In the years preceding 2011, high levels of alcohol poisoning had been identified, despite prohibition and the government recognises this problem (Dmāry et al., 2011) and acknowledges that the harmful use of alcohol can be prevented if effective action is taken.

The general policy direction was then set in the over-arching policies on “Health” and “Comprehensive Health” in the 20-year vision

plan of the ‘Fifth National Development Plan’ in 2014 (Ayatollah Khamenei, 2014). Some of these general policies aim to improve mental health, specifically among students, and to prevent harms from drugs, psychedelics and alcohol. According to a senior government official, under the eleventh government (2013–2017) health became a higher priority and this has resulted in the allocation of a larger health budget for treatment nationally (Social Security Organization, 2018).

**Policy formulation/ decision making:** It appears that the Government of Iran chose the alcohol policy approach of prohibition as a way of balancing contextual and religious factors, together with their increasing awareness of the existence of alcohol-related health harms. Our consultations revealed that prior to 2010, national data indicated that alcohol was a health problem. The policy developed in 2011 enabled the Ministry of Health to progress toward alcohol treatment – and is consistent with the WHO recommendations of health services’ response to alcohol (Noroozi et al., 2014; World Health Organization, 2010). In response, the Ministry of Health and relevant health professionals developed a proposal for alcohol-specific policies. At the time they were unsure if the government would consider such steps. However, once officials were made aware of the issue and the necessity of responding, they approved the policies and encouraged any further necessary steps.

**Implementation:** The Iranian government attempts to achieve a balance in implementation between criminalising alcohol consumption and encouraging treatment seeking. According to consultation, whether alcohol consumption is treated as a criminal act is dependent upon whether a person under the influence of alcohol is caught by the police. Individuals who present to a health facility for treatment are not reported to the police but are managed as patients (consultations; (Shariatirad et al., 2016)).

**Evaluation:** The Ministry of Health and Medical Education has formed a ‘Supervisory Board’ which is part of a national committee to establish alcohol harm reduction programs. This will help to issue biennial recommendations on policies and so to discuss and reach agreement with the Ministry of Health policy-making council (Dmāry et al., 2011). All interventions, including board formation, must be initiated in the first five years of a program, then every five years suggested interventions are evaluated and revised by this committee.

#### Stigma and cultural offense

Stigma and cultural offence are the main contextual challenges in developing and implementing alcohol policies in MMCs. This stigma applies to both the drinker and their family. However, in recent years, the Iranian government has shifted toward dealing with alcohol consumption as a health issue, as reflected in the ‘Comprehensive Program for Prevention, Treatment and Reduction of Alcohol-Related Poisoning 2011-2015’ (Dmāry et al., 2011) and people are encouraged to seek treatment when needed. Therefore, each sector has designed protocols and methods to overcome such sensitivity in implementing alcohol policies.

In relation to driver breath testing, it is considered culturally offensive to stop drivers randomly for alcohol breath testing. Therefore, mobile units named ‘Patrol drivers health controls’ are called if a driver is stopped due to a possible traffic infringement and is suspected of being under the influence of alcohol or drugs. Breath testing is only conducted following several steps in a specific protocol. If the driver’s blood-alcohol concentration is high, their drivers’ license will be suspended for six-months and the driver will be reported to judiciary officials (Dmāry et al., 2011; Mental Health Social Health & Addiction Offices, 2012).

Alcohol treatment is integrated with drug treatment because the sensitivity toward alcohol is far greater than toward other illicit drugs in Iran (Noroozi et al., 2014; Rezaee & Ekhtiari, 2014). Nevertheless, implementation of treatment remains challenging. For example, even though notices in newspapers encourage people needing treatment to use phone lines to seek help, the use of posters to advocate for alcohol treatment remains culturally unacceptable (consultation).

## Resources

A factor influencing alcohol policy development is the shortage of resources for implementation. This is another reason why alcohol treatment was integrated into drug treatment facilities.

Another significant issue is the economic barrier to policy implementation. For example, producers of medical or industrial alcohol are encouraged to add a bitter liquid to products to reduce consumption but this is not economically viable for all producers (Mehr News Agency, 2014). Instead, warnings and prevention initiatives have been implemented to prevent alcohol intoxication and poisoning due to the consumption of medicinal alcohol and methanol (wood alcohol).

### Framing and understanding the problem

On examination of the newspapers, we found that alcohol was reported differently in the three historical stages: pre-revolution, and pre and post the 2011 alcohol policy development.

*Pre-revolution:* Prior to 1979, Iran was a well-known producer (Daneshgar, 2014) of alcohol in the Middle East. Therefore, in comparison to the post Islamic revolution period, we hypothesised that there would be more alcohol advertising or alcohol-related news articles. However, on the contrary, alcohol was mentioned rarely and never advertised. There were no data reporting alcohol consumption or the negative consequences of alcohol, except one article on drunks who destroyed a café (Kayhan-reporter, 1971); and one on the increased price of alcohol (Ettela'at-reporter, 1978d). On issues related to motor accidents, alcohol consumption was not reported or considered as a possible risk factor (Ettela'at-reporter, 1978a), even though some of the months reviewed were during the holiday periods.

Pre-revolution period, other substances were more commonly mentioned, for example, cigarettes, including several articles highlighting their negative health impacts, the prohibition of smoking while driving (Ettela'at-reporter, 1978b) and some advocating a national smoking ban (Ettela'at-reporter, 1978c).

Therefore, although alcohol was consumed in Iran before the revolution, there was little or no information on its health-related consequences and on the national policy position on alcohol in the newspapers we reviewed. At that time, it seems that the main factor dissuading alcohol consumption in Iran was the Islamic prohibition on alcohol consumption.

*Pre- 2011 alcohol policy development (2008–10):* Alcohol was reported significantly more in newspapers than pre-revolution. It was also more present in current newspapers than in those 8–10 years ago. The influence of the new alcohol policy vision of the country is recognised by the number and content of alcohol-related articles. Previously, alcohol was mainly mentioned in criminal reports and illegal smuggling seizure news. There was little or no evidence of awareness about the unhealthy use of alcohol and no reporting on any relationship between alcohol and health. There were not even religious messages discouraging alcohol consumption. In the period prior to alcohol-advocacy in Iran (e.g. pre-2011), alcohol consumption and trade were mentioned mainly in a criminal context. Many articles were reported on cross-border illegal trade, the amount of alcohol seized and the punishments assigned (Hamshahri reporter, 2008). Apart from the legal consequences and fines, there was no sign of alcohol policy recommendations or announcements. In addition, policy makers were not interviewed about alcohol nor did they provide any warnings on alcohol harms. The only discouragement of consumption was religious and cultural.

*Post-alcohol policy (2014–16):* After the establishment of alcohol-advocacy and awareness policies (2011), alcohol was more regularly discussed in the newspapers and alcohol was noted as a public health issue. Many articles referenced the WHO and discussed cancers associated with unhealthy consumption (71006 Reporter, 2014; Representation of University of Isfahan, 2016). Alcohol poisoning was discussed, including the dangers of incorrectly-made and illegal home-made alcohol and the consumption of medicinal alcohol.

Many policy makers are actively present in the news articles and

share their concerns openly (3danet.ir., 2016). Some publicly propose solutions and encourage improved preventive strategies (Mehr News Agency, 2014). Many cross-sectoral discussions are published openly in some newspapers (Ettela'at-reporter, 2014; 71539 Reporter, 2016).

## Discussion

To our knowledge this is the first alcohol policy analysis for an MMC or for a country with current civil alcohol prohibition. It was evident that Iran has covered most of the WHO alcohol policy recommendations though these have been enacted in a way that considers the unique context of a MMC in regards to alcohol.

Despite 30 years of alcohol prohibition in Iran, in recent years the country has taken considerable additional steps to develop alcohol policy. The involvement of a variety of stakeholders in policy development and decision making is indicative of a multi-sectoral alcohol governance system, where many relevant issues have been considered. In addition to identifying harms associated with alcohol consumption and working toward better alcohol management and prevention approaches in Iran, Islamic prohibition of alcohol remains the focal point that policies are designed to suit.

The recent policy vision has been to present alcohol as a public health issue although findings suggest that there is blurring between treating alcohol as health issue and as a criminal act. This is similar to the responses to illicit drugs in Western countries such as Australia, where harm minimisation and treatment approaches as well as legal responses are applied. Furthermore, like attitudes to illicit drugs in Western countries, our findings suggest that any alcohol consumption in Iran is seen as hazardous, increasing the risk of intoxication, addiction, and even poisoning and death (particularly if methanol is consumed).

It is legal for non-Muslims to consume and produce alcohol in the country, and this appears mainly to be home-made alcohol, increasing the risk of accidental methanol poisoning. Furthermore, we found no regulatory policies on alcohol availability and consumption among minority non-Muslims, which may place them at a higher risk of alcohol-related harms.

The newly developed health service response to alcohol is in its pilot stage and it is not clear from the analysis whether geographic distribution of these services matches potential need, and accounts for different distributions of non-Muslim minorities who legally consume alcohol and other populations who consume it illegally. Also, the high stigma around alcohol consumption, particularly among majority Muslims, poses challenges for implementing alcohol screening in primary care, and in estimating the prevalence and patterns of alcohol consumption through surveys.

Iran has a relatively advanced infrastructure for research on addictions. This includes national and international addiction conferences, such as the Annual International Congress on Addiction Science (UNODC, 2015). In addition, there are several national centres for addiction research that are usually integrated into universities (Tehran University of Medical Sciences, 2012; UNODC, 2016). Iran has implemented a range of prevention and harm reduction measures for illicit drugs, including alcohol. Several MMCs face barriers to understanding alcohol issues, ranging from the core concept of Islamic prohibition to weak research infrastructure (Ghandour et al., 2016), instability, war (Lubell & Derejko, 2013; Marshall, 2017) and limited resources (Carina Ferreira-Borges, Davison Munodawafa, & Alislad, 2010). Most MMCs are developing countries, with little experience in alcohol and addiction research. Therefore, understanding the alcohol policy of Iran as a MMC, and how effective these policies are in the Iranian context, is valuable. As Iran has tried to tackle the challenge of alcohol harm prevention and treatment, it provides a unique example for other MMCs and for developing countries.

Many of the evidence-based policies recommended by WHO have been examined in developed countries rather than in developing

countries, such as MMCs (World Health Organization, 2010). Furthermore, MMCs have often been excluded from the global alcohol policy conversation, based on the assumption that all MMCs have civil alcohol prohibition as their only alcohol policy. For example, it has been reported in WHO databases (World Health Organization, 2016) that Iran has a total ban on alcohol and so a written national alcohol policy document is not applicable. In contrast, our findings show that Iran has a detailed national policy on alcohol and thus the WHO databases need revising. The error may have resulted from the lack of policies on taxation or pricing of alcohol in Iran for non-Muslims, who are allowed to drink alcohol.

Moreover, to understand approaches to overcome stigma in MMCs, it is important to explore the adaptations that Iran has made when implementing global policy recommendations. For example, Iran's approach to breath testing, which is only conducted after behavioural screening for intoxication, provides a strategy to overcome stigma. While it may result in under-detection of drink driving, it is a significant improvement on the absence of any breath testing that is often the case in other MMCs (Ghandour et al., 2016).

In contrast to MMCs such as Oman, United Arab Emirates and Kuwait, there are no legal imports of globally known alcohol brands to the country. In Iran, the main channel of entry for the international alcohol industry is through illegal import and smuggling. Therefore, policies on taxes and pricing, which are the most effective at alcohol control globally (Anderson, Chisholm, & Fuhr, 2009; Babor, 2010; Wagenaar, Salois, & Komro, 2009), are not applicable for the Iranian Muslim majority population. Consequently, the main strategy to control the alcohol industry is carried out by the Border Guard Command. Home-made alcohol is legal for the non-Muslim minorities, but there is a lack of policies to govern sale of alcohol by and to non-Muslims. Accordingly, additional monitoring and a licensing system to allow only skilled people to produce alcohol might be beneficial.

Internationally, prohibition of alcohol as a policy approach is often framed as a failure, or a policy that will have unintended consequences – usually with reference to the USA's experience of alcohol prohibition between 1920 and 1933 (Hall, 2010). However, the experience and impact of alcohol prohibition in MMCs is likely to be quite different and should be acknowledged in global recommendations regarding alcohol policy. The main difference is that the civil policy approach of prohibition spread as Islam expanded and became a social and cultural norm in MMCs. In Islam, drinking alcohol is considered an evil deed. Therefore, alcohol refusal rates have been high in these countries, reflected by relatively low rates of alcohol consumption and related morbidity and mortality. Applying prohibition in MMCs then is less challenging than applying it in a country like the USA.

This cultural or religious rejection of alcohol is reflected by our findings from the review of newspapers before the revolution. It shows that despite alcohol being legally permitted and consumed at parties, gatherings and by many minority and traditional groups, it was largely stigmatised due to the Islamic ban (Anderson, 2014; Matthee, 2014). This concept is illustrated in other MMCs such as Turkey where alcohol prohibition is not implemented in secular law, however, alcohol remains stigmatised and the consumption rate is far lower than in non-MMCs (World Health Organization, 2014b).

## Limitations

Cultural sensitivity is a barrier to openly discussing alcohol in MMCs and it is likely to lead to under-reporting of consumption and related harms, including deaths from alcohol poisoning (Hassanian-Moghaddam et al., 2015). In addition, many studies have identified the potential effects of its illegal status and its social offensiveness on the reliability of research findings and the feasibility of conducting further research on alcohol in Iran (Ziaei et al., 2017). Accordingly, methodologies for this project had to be tailored to respect local sensitivities, and to make use of a range of data sources. However, it is possible that

there were other relevant documents which were not available to us as not all the reports on alcohol use and harms are publicly shared. Moreover, while we were able to comment on the existence of policy documents, we were not always able to establish the extent to which policies had been implemented. The newspapers reviewed may have been limited by availability (especially the pre-revolution period) so some articles about alcohol may have been missed. Similarly, limiting the search for the content analysis to electronic papers from recent years may have resulted in unknown biases. Only an approximate number of the newspaper articles retrieved was recorded as the study did not set out to perform quantitative analysis. Further research is warranted on the newspaper content as a method by which to analyse changing attitudes to alcohol in Iran and in MMCs.

## Conclusion

Although Iran prohibits alcohol consumption and trade among its Muslim majority population, it has a range of well-developed alcohol policies. Some have been in place for many years, such as those that restrict the availability of alcohol and monitor the borders to prevent illegal trade of alcohol. Other policies have been developed and implemented more recently. The latest are policies that focus on health service response such as screening, prevention and treatment for alcohol-related health issues.

By comparing Iran's alcohol policy to WHO global recommendations, we can see that Iran has adopted nine of ten recommended policy areas in one way or another. It is vital to understand the alcohol policy environment in MMCs to help identify relevant evidence-based recommendations, which are also contextually appropriate.

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## Appendix A. Detailed Methodology

We conducted a policy analysis, focussed on the content of alcohol-related policy across sectors in Iran. Because alcohol is a sensitive topic in Iran we focussed on publicly available literature and policy documents, and we verified information through consultations with policy actors. We also identified additional information on the policy context through a comprehensive review of newspaper articles from just before the 1979 revolution to recent years. Our research questions were: 1) How is alcohol governed in Iran? and 2) What framing and contextual considerations are evident in Iran's alcohol-related policy approach? We analysed policy content data using a matrix based on WHO policy recommendations. We also used the Walt & Gilson health policy analysis triangle (Walt & Gilson, 1994) as a framework for analysis; this identifies content, context, actors and process as key factors for understanding policy.

### Reviewing the relevant policy documents

We identified relevant policy sectors based on the WHO Global Alcohol Policy (World Health Organization, 2010), which was used to develop a matrix for data collection and extraction (Table 2). We identified relevant policy documents by searching the key words

websites of official organisations', such as the Ministry of Health and the Ministry of Justice. The key words were "alcohol", "alcoholic", "alcohol consumption", "intoxication" in Persian language and all other possible derived words. Relevant data were extracted to the matrix.

### Newspapers

There were three purposes in reviewing newspapers: 1) To understand the social context of alcohol and how alcohol was presented in newspapers before the revolution. 2) To understand the current situation of alcohol in the country, how it is reported and from which perspective, i.e. religious, economic, political, health, criminal, justice. 3) To observe if and how the language in newspapers has changed regarding alcohol. This focussed on the language and context of alcohol before and after the date in which a separate alcohol national policy was developed. The number of editions and months examined was determined according to practical constraints, such as time available for direct access to hardcopy newspapers.

a

a *Reviewing hardcopy newspapers*: We reviewed the hardcopy of two daily newspapers from before the 1979 Islamic revolution. The newspapers were chosen based on their importance and their national coverage. *Ettelaat*, founded in 1926, had a high circulation during the Mohammad Reza Shah era (before 1979). *Kayhan* was founded in 1943 and had a circulation of more than one-million copies before the Islamic Revolution (Shapour Ghasemi, 2006). Both newspapers focus on political, cultural, social and economic news. We reviewed two months from *Ettelaat*, April–May 1978 (Farvardeen- Ordebehesht, 1357), and the subsequent month, June 1978 (Khordad, 1357) from *Kayhan* newspaper. This was done by hand-searching every issue for the key words of "alcohol", "alcohol consumption", "intoxication" and all other possible derived words in Persian language. Also, other articles with different headings but relevant context were read. For example, articles about accidents and road and traffic injuries.

b *Reviewing electronic newspapers*: In recent years many newspapers in Iran have become available electronically. We selected various newspapers that target different audiences and with different levels of conservativeness (Table 1). The key words were "alcohol", "alcohol consumption", "intoxication" and all other possible derived words in Persian language.

### Literature

We looked for reports and scientific literature related to alcohol policy in Iran. Also, we searched the Web from inside (Persian) and outside (Persian and English) Iran. This was done through obtaining extra material directly from academics or institutes. The key words were alcohol policy, addiction, wine, alcohol, poisoning and Iran.

### Consultation

We conducted consultations to 1) verify that we had identified all relevant policy documents; 2) ensure that we had correctly interpreted the policy content; and to 3) gain additional understanding of the policy context. We identified relevant stakeholders to participate in consultations through the WHO office in Tehran, and then direct contact to the Department of Mental, Social Health and Drug Abuse at the Ministry of Health and Medical Education in Tehran. Through this we were able to obtain an overview of Iranian alcohol policy and the concerns of the Ministry of Health. Also, we were introduced to key people who were involved in alcohol policy development and implementation. Furthermore, we could obtain hard and soft copies of the publicly available alcohol policy documents.

We conducted seven consultations six of which were with the key

individuals directly or indirectly involved in alcohol policy development and implementation, either directly or indirectly; some individuals have had more than one role from different hospitals, universities and research institutes. These included: past and present senior government officials and policy makers (n=2) health professionals (n=2), and academics and researchers (n=3). In addition, one health policy researcher and academic outside the addiction field was consulted. We have not provided further information on roles or identity to protect their confidentiality, as alcohol can be a very sensitive topic in Iran. Six consultations were conducted face-to-face and one via the phone. The consultation questions asked about relevant policies and interpreting the alcohol policy, and legal documents and their context. The questions were tailored to the consultants' profession and interest. Consultations were strictly focussed on publicly available information that form part of the participants' normal work and responsibilities, and focused on the ten key alcohol policy options recommended by WHO at the national level.

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