Extended Abstract

Alcohol Consumption and Views on Alcohol Research and Control Policies in Turkey: A Qualitative Study[*]

Sümeyye Mercan[1]
Bezmialem Vakıf Üniversitesi

Öykü İzel Onaran[2]
Bezmialem Vakıf Üniversitesi

Ayça İlbak[3]
Bezmialem Vakıf Üniversitesi

Hakan Atasoy[4]
Bezmialem Vakıf Üniversitesi

Emine Şeyda Teloğlu[5]
Bezmialem Vakıf Üniversitesi

Perihan Torun[6]
Bezmialem Vakıf Üniversitesi

Osman Hayran[7]
Medipol Üniversitesi

Abstract

This study aims to determine the culture of alcohol consumption and elicit the views of drinkers, former drinkers, and non-drinkers on alcohol consumption, alcohol research, and alcohol control policies. The data were collected through semi-structured interviews and analysed using Thematic Framework analysis. Alcohol consumption was described as a means for socialising and relaxing by the drinkers, whereas unhappiness, anxiety and depression by the non-drinkers. The participants have argued that the responses in alcohol studies are unreliable due to social characteristics and that alcohol research should be conducted by institutions, not the state. Interviewers were suggested to have come across as objective, non-judgmental, and likeable with a reassuring attitude and to have used body language appropriately. The participants support a positive approach in control policies by increasing awareness, and prohibition is not believed achievable in practice or to be an effective alcohol control policy as it instead makes drinking attractive. Therefore, the recommendation is to target the whole population by increasing facilities with social activities and encouraging social life. In conclusion, the study has provided valuable hints for planning alcohol research and control policies, and it is especially useful for understanding the background of alcohol consumption culture in Turkey.

Keywords
Alcohol • Alcohol consumption culture • Alcohol research • Alcohol policies • Qualitative study

1 **Correspondence to:** Sümeyye Mercan, School of Medicine, Bezmialem Vakıf University, Fatih İstanbul 34093 Turkey. Email: smercan24@gmail.com

2 School of Medicine, Bezmialem Vakıf University, Fatih İstanbul 34093 Turkey. Email: oykuizel@hotmail.com

3 School of Medicine, Bezmialem Vakıf University, Fatih İstanbul 34093 Turkey. Email: ayca.ilbak@gmail.com

4 School of Medicine, Bezmialem Vakıf University, Fatih İstanbul 34093 Turkey. Email: atasoy.hakan@gmail.com

5 School of Medicine, Bezmialem Vakıf University, Fatih İstanbul 34093 Turkey. Email: e.teloglu@gmail.com

6 School of Medicine, Bezmialem Vakıf University, Fatih İstanbul 34093 Turkey. Email: ptorun@hotmail.com

7 School of Medicine, Medipol University, Beykoz, İstanbul 34810 Turkey. Email: ohayran@gmail.com

In Turkey, the average per capita annual alcohol consumption is estimated to be 1.4 liters of pure alcohol (World Health Organization [WHO], 2014); the figure is comparable to that of countries with much higher alcohol consumption if the calculation is confined only to drinkers. This discrepancy occurs due to the population of non-drinkers being included in calculating the average individual consumption and is a common issue for countries with a large group of non-drinkers. Population consumption of alcohol has been increasing in Turkey, but whether this is attributable to an increase in the number of new users, in the amount of individual consumption, or both is not known (Tütün & Alkol Piyasası Denetleme Kurumu [TAPDK], 2017). National health surveys conducted between 2010 and 2016 indicate 10.4% to 14.9% of the population 15 years of age and above to have consumed alcohol (Türkiye İstatistik Kurumu [TÜİK], 2016). If accurate, this percentage corresponds to on average of more than seven million drinkers, albeit with unknown drinking habits such as consumption frequency and amount. The prevalence of drinkers interpreted in combination with the total-population consumption figure indicates a population with a low prevalence but high amount of consumption of alcohol.

In order to reduce the negative health and social consequences of alcohol consumption to a minimum, governments are urged to encourage a healthy debate environment and develop certain measures oriented towards public health (World Health Organization [WHO], 2004). This necessitates the availability of reliable data on consumption details. Various alcohol consumption patterns have been identified (Bräker, 2016; Mäkela, 2006), and countries should describe their own patterns using research to enable the formulation of appropriate policies. Public views have also been suggested to be solicited before embarking on research regarding sensitive topics and formulating acceptable policies (Giles & Adams, 2015).

Alcohol consumption research in Turkey has mainly been performed on students and emergency attendees, with comparative and in-depth studies being scarce (Yargıç & Özdemiroğlu, 2010). Furthermore, national studies that measure consumption have not investigated the determinants of taking up drinking or harmful consumption (Sağlık Bakanlığı, 2014; Ünal, Ergör, Horasan, Kalaça & Sözmen, 2013). One important reason for the unavailability of such information is the perceived political and cultural sensitivity of the topic, which also inevitably affects the reliability of the data collected.

In this qualitative study the aim is to determine the culture of alcohol consumption and elicit the views of drinkers, former drinkers, and non-drinkers regarding alcohol consumption, alcohol research, and alcohol control policies. The study is planned to precede and inform the Turkish arm of the International Alcohol Policy Evaluation Study (IAC; Casswell et al., 2012).

Method

Qualitative methodology has been preferred for ascertaining in-depth information on the culture of alcohol consumption and views regarding conducting alcohol studies and alcohol control policies. Ethical clearance has been obtained from the Ethics Committee of Bezmialem Vakıf University.

Sample

The study sample has been selected using the Maximum Variation Method, a Purposive Sampling approach and non-probability sampling method. Individuals from universities, workplaces, premises that serve alcohol, and addiction-treatment centers were invited according to their status regarding alcohol consumption. The final sample size was determined when data saturation was reached at the end of interviews with 18 participants. The sample includes current drinkers ($n = 8$), lifetime abstainers ($n = 6$), and former drinkers ($n = 4$).

Data Collection

The semi-structured interview guides for each of the three groups have been drafted using the Alcohol Policy Interventions in Scotland and England (APISE; Gateway to Research Councils UK, 2015) survey questionnaire.

Interviews were conducted in İstanbul in 2015 by medical students who had received training regarding the aims and methodology of the study, interview process, and reliable data collection. Informed consent was obtained after the participants had been informed about the study. All interviews have been recorded and transcribed. Data has been analyzed using Thematic Framework Analysis.

The preferred sampling approach and use of direct quotes for supporting the findings have ensured the validity of the study. The data and the data collection processes were reviewed by a separate researcher to achieve reliability.

Findings

The participants are six females and 12 males between the ages of 21 and 62. Their educational levels are as follows: two primary school, three high-school, and eight university graduates, as well as five university students.

Alcohol Consumption and Views on the Culture of Consumption

The participants started drinking during high-school and university ages. The most commonly preferred drink for the current and former drinkers were wine, beer, and raki, and they consumed these in alcohol serving environments and/or friendly

circles. Frequency of consumption has been described as "every day" or "at an addictive level" by the majority and as "only on celebrations or when eating out," "twice weekly," "once or twice monthly," or "not on my mind unless I see it" by the remaining participants. For drinkers, alcohol is a means for socializing, relaxing, and coping with stress, while non-drinkers associate it with sinning and a cause of anxiety, unhappiness, and depression.

The reasons for drinking among drinkers and former drinkers are desperation as a result of social trauma, coping with stress, passing time, socializing, and enjoyment. Non-drinkers declare having a busy life with no room for drinking, perceiving drinking as a sin and alcohol as a harmful substance for family life and health. Regardless of their drinking status, participants associate others' drinking with escaping life problems, avoiding stress, being depressed, and finding solace in alcohol; they believe that non-drinkers find solutions to their problems through other means. Both drinking and non-drinking participants mention loneliness, desperation, lack of social support, ignorance, and having family or friends who drink as the main factors for taking up drinking alcohol. Regardless of their drinking status, the participants associate alcohol use at an early age with ignorance, feeling empty, imitating others, rebellion, and adolescence crisis. Furthermore, easy access to alcoholic drinks and pressure on children (especially for educational purposes from families and society) were thought to trigger alcohol consumption at an early age. Social support is perceived as the most important factor in deterring early alcohol use. Former drinkers emphasize the importance of social support while quitting.

Drinking is viewed as an individual choice and is respected by non-drinkers as well as drinkers, provided that it is done in moderation or does not lead to risky situations. Alcohol use is believed to result in social harm, such as family conflicts, break-ups, and estrangement from one's social environment. Therefore, non-drinking is considered beneficial from financial, familial, and health perspectives. Non-drinkers are proud of their status, and former drinkers claim a personal victory. The non-drinker participants declare little or no intention to drink in the future, and drinkers have no intention of quitting alcohol altogether. Similarly, former drinkers assert their commitment to non-drinking. The participants claim the reasons for consumption, the habit, and choice of beverage to be determined by socioeconomic status.

Only the participants who drink brought up the benefits of alcohol benefits in the discussion, and these benefits are achieved through relaxation and fun. On the other hand, harmful effects known to participants, whether a drinker or not, have been mentioned as cirrhosis and other liver diseases, intoxication, and accidents. Preventable loss of lives as a consequence of drunk driving has also been mentioned. One of the participants who drink does not believe alcohol use to lead to addiction.

Views on Research on Alcohol Use

Research on alcohol consumption has been embraced by the study participants for its role in identifying issues and creating solutions for alcohol use in the population. The participants emphasize that research on alcohol needs to be conducted by a recognized institution, but not by the state. They believe that collecting accurate information on alcohol use in Turkish society is unlikely, as individuals will not be willing to disclose such information. In order to collect accurate information on alcohol use, interviewers are suggested to come across as objective, non-judgmental, likeable with a reassuring attitude, and to use body language appropriately. Moreover, informing participants sufficiently and choosing an environment that ensures privacy and confidentiality have been put forward as necessary. Former drinkers assert that reliable information can be collected from individuals who have quit drinking.

Views on Alcohol Control Policies

Formulating alcohol policies have been proposed as necessary for increasing awareness on alcohol use and its harms, and this should be done through education. Warning against the harms of alcohol has been suggested through the use of billboards, public announcements, and television programs. The participants have not deemed current public announcements to be appropriate, as they contain extreme examples, are uninformative, and moreover portray a negative image of drinkers, which is thought to lead drinkers to hide their drinking status. Education at the workplace and education from family doctors are among the suggestions for increasing awareness.

Prohibition is not believed to be an effective alcohol control policy, as it instead makes drinking more attractive; also denying access to alcohol is unachievable in practice. Instead of bans, a positive approach is preferred. Targeting youths at risk of taking up drinking in particular, as well as the entire population, alongside an increase in facilities for social activities and encouragement of social life have been recommended. A few participants support the idea of restrictions on alcohol's availability and pertinent regulations. Opposing views have been put forward on restricting its general availability; however, agreement has been reached on restrictions for children. Increasing the price of alcohol as a control measure was both supported and opposed, one group claiming that, one way or another, availability would not be a problem.

Participants have also proposed providing support to those who want to quit and increasing the number of treatment centers.

Discussion

In this study, alcohol-consumption culture and views on alcohol research and alcohol policies have been investigated using qualitative research methods. Data from semi-structured interviews with 18 adults have been presented in the article.

A literature review by Ülger, Acar, and Torun (2015) highlighted that alcohol consumption has been questioned in various studies on those 18 years of age or younger, although without the details of their drinking. Similarly, another review emphasized the lack of sufficient publications and data on alcohol use in the adult population (Torun et al., 2015). Existing studies on alcohol use in Turkey have found the age of starting drinking to range from 15 to 20 (Akvardar, Aslan, Ekici, Öğün, & Şimşek, 2001; Bakır et al., 2003; Buğdaycı, Şaşmaz, Aytaç, & Çamdeviren, 2003; Işık, Çöl & Dalgıç, 1994; Tanrıkulu, Çarman, Palancı, Çetin & Karaca, 2009; Yılmaz, İbiş, & Sevindi, 2007; Yiğit & Khorshid, 2006), and the most frequent reasons for taking it up are peer pressure, social environment, envying others, curiosity, coping with problems, and having fun (Mayda et al., 2009; Mayda et al., 2010; Pirinçci & Erdem, 2004; TUİK, 2012; Yılmaz et al., 2007). The reasons for drinking have been reported as having fun, socializing and adjusting, enjoyment, nothing else to do, drinking environment, having friends who drink, coping with problems, stress, and anxiety (Altındağ et al., 2005; Bal & Metin, 2004; Çakmak & Ayvaşık, 2007; Özen, Arı, Gören, Palancı, & Sır, 2005; Pirinçci & Erdem, 2004; Ulukoca, Gökgöz, & Karakoç, 2013). The frequency of drinking has been shown to range from once in a lifetime (Şaşmaz et al., 2006), only in parties (Genişol et al., 2003), and once a month (Buğdaycı et al., 2003; Çakmak & Ayvaşık 2007) to once weekly (Ulukoca et al., 2013; Kılıç & Çetinkaya, 2012). Beer, followed by raki and wine, have been seen as the most commonly consumed alcoholic beverages in Turkey (Buğdaycı et al., 2003; Çakmak & Ayvaşık, 2007; Yiğit & Khorshid, 2006), and consumption mainly occurs in friendly circles and parties (Buğdaycı et al., 2003; Genişol et al., 2003).

Various alcohol consumption patterns have been described across countries. In Europe, the drinking culture shows similar characteristics to that of Turkey, with early age drinking (Currie, Hurrelmann, Settertobulte, Smith, & Todd, 2000) and reasons for drinking such as socializing, having friends who drink (Kloep et al., 2001), and for relaxation and coping with stress (Honess, Seymour, & Webster, 2000). Beer is found as the most frequently consumed alcoholic drink in the whole region, followed by wine and other beverages (WHO, 2014). However, in contrast to Turkey, one in five of those 15 years or older in the European population experiences heavy episodic drinking at least once a week, and this is across Europe in all age groups (World Health Organization Europe [WHO/Europe], 2014). In Turkey, the proportion of drinkers is much smaller compared to that of non-drinkers, but drinking habits are diverse and range from once in a lifetime to an addictive level, which deserves attention from the perspective of health risks. Alcohol control policies should take these characteristics into consideration, along with the observed increase in the consumption per capita in recent years.

This study has not investigated the quantitative aspects of drinking to enable comparisons at the level of consumption; however, participants have been allowed to

provide insight into the drinking culture using their own expressions, which would have been limited or impossible using a quantitative design. Some of the policy-related findings are the importance of social support in both preventing taking up alcohol and treating addiction, the perceived association among different drinking profiles with socio-economic status, identifying family and society pressures, as well as easy access to alcohol, as factors facilitating early age drinking, and unawareness of some of the harmful effects of alcohol, including addiction. Moreover, drinkers have no intention of quitting, and non-drinkers socialize through other means. Regarding prevention policies, increasing public awareness, preventing children's access to alcohol, increasing social activity opportunities, and promoting socialization have been favored. Conflicting views on price and prohibition policies have been asserted. The participants stress the importance of using the workplace and family physicians for educating about alcohol use. However, all these approaches should be tested and evaluated before implementation.

The most dramatic reductions in the negative consequences of alcohol consumption in the history have been as a result of social and religious movements; however, involving the state in its control could be perceived as an attempt at manipulation or assimilation (Room, 1997). Therefore, creating awareness of the importance of social support within communities can be targeted as a policy. The effectiveness of educational approaches has been extensively reported in the school-based literature from the US (Room, 2015). However, evidence is available for the short term benefits of education for consumer health, but not for long term benefits (Babor et al., 2010). Media use has been demonstrated to change levels of knowledge and awareness, but its impact on attitudes and behavior has not been well established (Babor et al., 2010). Therefore, its use could be limited to obtaining and maintaining public support and for putting alcohol on the agenda (Caswell et al., 1989). As stated by the participants, the content and methods of educational media messages should be selected diligently to prevent adverse impacts such as portraying a negative image of drinkers. Although promoting alternative activities that are alcohol-free is justified, the problem with non-alcoholic drinks as an alternative to alcoholic beverages is that they can still be mixed with alcohol. Sports activities have similar problem in that they can be combined with drinking (Room, 2015). Some studies suggest that the type of activity determines the outcome related to drinking; for example, sports, music, occupational, and extra-curricular activity programs have been found associated with increased drinking in drinkers. Activities performed in isolation, such as hobbies, academic preparation, and religious activities, have been found associated with reduced drinking (Swisher & Hu, 1983). Prohibition results in reduced consumption of alcohol and the frequency of alcohol-related cirrhosis and mental health problems (Moore & Gerstein, 1981); however, it also leads to the creation of illegal markets and associated activities (Room, 2015), which this study's participants also highlighted. Extensive literature on the effectiveness of setting a minimum age for alcohol access to reduce alcohol-related harms is available. Increasing prices impacts the drinking habits of both heavy and light

drinkers. Strong evidence on the effectiveness of restricting points of sale and sale times on alcohol-consumption patterns and on the prevalence of alcohol-related problems is available (Babor et al., 2010). The participants also pointed out that insufficient support exists for quitting alcohol and recommended increasing the number of treatment centers. Turkey has 35 inpatient facilities for adults and five for children, as well as a further 28 outpatient facilities in some cities for serving addiction problems in the communities. (Sağlık Bakanlığı, 2016). The Ministry has distributed these centers without using any explicit demographic criteria (Resmi Gazete, 2013). This necessitates a regular evaluation of the situation at the ground level.

Evidence-based policies require support from good quality studies. The participants of this study embraced the research, and the findings provide some hints for the first time about how to design such studies. These studies are suggested to be conducted outside the state control and in environments that ensure privacy and confidentiality so that reliable data can be collected. Some expectations such as ensuring confidentiality and obtaining written consent should be met within the context of ethics regulations (World Medical Association, 2013), though effective ways of convincing research participants regarding implementation should also be studied. Collecting data by medical student interviewers was received positively. Another valuable finding is the possible contribution of former drinkers in the research. The determinants of the change in their drinking behavior within the existing culture can be studied qualitatively, perhaps using a behavior-change model such as the Transtheoretical Model (Prochaska, DiClemente, & Norcross, 1992) for informing local policies.

Conclusion and Recommendations

The present study provides valuable hints for planning alcohol research and alcohol control policies. A similar approach can be adopted before embarking on research or formulating policies for other sensitive issues to ensure public acceptability. Having qualitative techniques adopted was especially useful in order to understand the background of the drinking culture. The findings are consistent with the current literature and also provide additional information. However, generalizing the findings to a wider population may not be possible.

Kaynakça/References

Akvardar, Y., Aslan, B., Ekici, B., Öğün, E. & Şimşek, T. (2001). Dokuz Eylül Üniversitesi Tıp Fakültesi dönem II öğrencilerinde sigara, alkol, madde kullanımı [Cigarette, alcohol and substance use among Dokuz Eylül Medical School year II students]. *Journal of Dependence*, *2*(2), 49–52.

Altındağ, A., Yanık, M., Yengil, E. & Karazeybek, A. H. (2005). Şanlıurfa'da üniversite öğrencilerinde madde kullanımı [Substance use among Şanlıurfa University students]. *Journal of Dependence*, *6*(2), 60–64.

Babor, T. (2010). *Alcohol: No ordinary commodity: Research and public policy*. Oxford: Oxford University Press.

Bakır, B., Özer, M., Tümerdem, N., Kır, T., Kılıç, S. & Hasde, M. (2003). İstanbul ve Ankara'daki bir grup askerin alkol kullanım sıklığı ve bunu etkileyen faktörler [Alcohol use among a group of conscripts in İstanbul and Ankara]. *Gulhane Medical Journal*, *45*(3), 221–227.

Bal, N. & Metin, Ö. (2004). Mersin'de ergenler arasında sigara, alkol ve yasadışı madde kullanım oranlarının yaygınlığı: ortaokul, lise ve üniversite öğrencilerinin karşılaştırılması [Frequency of cigarette, alcohol and illegal substance use among adolescents in Mersin: a comparison of secondary, high school and university students]. *A Journal of Psychiatry, Neurology and Behavioral Sciences, 42*(2), 77–81.

Bräker, A. B., & Soellner, R. (2016). Alcohol drinking cultures of European adolescents. *European Journal of Public Health*, *26*(4), 581–586.

Buğdaycı, R., Şaşmaz, T., Aytaç, N. & Çamdeviren, H. (2003). Mersin, Adana ve Hatay illerinde beden eğitimi ve spor yüksekokulu öğrencilerinde alkol içme prevalansı ve etkileyen faktörler [Alcohol consumption prevalence and determinants among physical education and sports students in Mersin, Adana and Hatay]. *Türkiye Klinikleri Journal of Medical Sciences*, *23*(3), 208–212.

Casswell, S., Meier, P., MacKintosh, A. M., Brown, A., Hastings, G., Thamarangsi, T., ... You, R. Q. (2012). The International Alcohol Control (IAC) Study-evaluating the impact of alcohol policies. *Alcoholism: Clinical and Experimental Research*, *36*(8), 1462–1467. https://doi.org/10.1111/j.1530-0277.2012.01738.x

Currie, C., Hurrelmann, K., Settertobulte, W., Smith, R., & Todd, J. (Eds.). (2000). *Health and health behaviour among young people*. Copenhagen: World Health Organization Regional Office for Europe.

Çakmak, S. S. & Ayvaşık, H. B. (2007). Üniversite öğrencilerinde alkol kullanma nedenleri ile kaygı duyarlılığı arasındaki ilişki [Association between reasons for alcohol use and anxiety sensitivity among university students]. *Türk Psikoloji Dergisi*, *22*(60), 91–107.

Gateway to Research-Research Councils UK. (2015). *Alcohol Policy Interventions in Scotland and England: APISE*. Retrieved from http://gtr.ukri.org/projects?ref=MR%2FJ000523%2F1

Genişol, E., Yargıç, İ., Saka, Ö., Sivri, F., Güleryüz, Ş. & Işıl, G. (2003). Tıp öğrencilerinin alkol kullanımı ile ilgili önyargı ve tutumları [Prejudice and attitudes towards alcohol use in medical students]. *Journal of Dependence*, *4*, 53–56.

Giles, E. L., & Adams, G. M. (2015). Capturing Public Opinion on Public Health Topics: A comparison of experiences from a systematic review, focus group study, and analysis of online, user-generated content. *Frontiers in Public Health*, *3*, 200.

Honess, T., Seymour, L., & Webster, R. (2000). *The social contexts of underage drinking*. Home Office, Communications and Development Unit, Research, Development and Statistics Directorate.

Işık, A., Çöl, M. & Dalgıç, N. (1994). Park Sağlık Ocağı bölgesinde alkolizm prevalansı [Alcoholism prevalence in Park Health Centre catchment area]. *Ankara Üniversitesi Tıp Fakültesi Mecmuası*, *47*(3), 505–518.

Kılıç, M. & Çetinkaya, F. (2012). Yozgat il merkezinde çalışan sağlık çalışanlarında kronik hastalıklar açısından önde gelen riskli durum ve davranışların prevalansı [Prevalence of most common risk factors for chronic diseases among health care staff in Yozgat city centre]. *Türkiye Klinikleri Journal of Medical Sciences*, *32*(5), 1343–1353.

Kloep, M., Hendry, L. B., Ingebrigtsen, J. E., Glendinning, A., & Espnes, G. A. (2001). Young people in drinking' societies? Norwegian, Scottish and Swedish adolescents' perceptions of alcohol use. *Health Education Research*, *16*(3), 279–291. https://doi.org/10.1093/her/16.3.279

Mäkelä P., Gmel G., Grittner U., Kuendig H., Kuntsche S., Bloomfield K., & Room, R. (2006). Drinking patterns and their gender differences in Europe. *Alcohol and Alcoholism Supplement*. *41*(1), 8–18.

Mayda, A. S., Gerçek, Ç. G., Gümüş, G., Demir, S., Deniz, M., Sürücü, Z. P., ... Taner, H. (2010). Düzce Üniversitesi Orman Fakültesi öğrencilerinde sigara, alkol ve madde kullanımı sıklığı ve kullanmaya başlama nedenleri [Prevalence and determinants of smoking, alcohol use and drug use among Düzce University School of Forestry students]. *Duzce Medical Journal*, *12*(3), 7–14.

Mayda, A. S., Gerçek, Ç. G., Güneş, C., Hüseyinoğlu, A., Güler, M. B. & Yıldırım, A. (2009). Tıp fakültesi öğrencilerinde depresif belirti sıklığının demografik özellikler, sigara, alkol, madde kullanımı, baskın el ve şiddete maruz kalma ile ilişkisi [Association between frequency of depressive symptoms and demographic characteristics smoking, alcohol and drug use, dominant hand and exposure to violence]. *TÜBAV Bilim Dergisi*, *2*(4), 476–483.

Moore, M., & Gerstein, D. (Eds.). (1981). *Alcohol and public policy: Beyond the shadow of prohibition*. Report of the Panel on Alternative Policies Affecting the Prevention of Alcohol Abuse and Alcoholism, National Research Council. Washington, DC: National Academy Press.

Özen, Ş., Arı, M., Gören, S., Palancı, Y. & Sır, A. (2005). Tıp fakültesi birinci ve altıncı sınıf öğrencilerinde sigara ve alkol kullanım sıklığı [Prevalence of smoking and alcohol use of first and sixth year medical students]. *Anadolu Psikiyatri Dergisi*, *6*, 92–98.

Pirinçci, E. & Erdem, R. (2004). Fırat Üniversitesi Sağlık Hizmetleri Meslek Yüksekokulu öğrencilerinin alkol kullanma alışkanlıkları [Alcohol consumption habits of Fırat University School of Health Services students]. *Atatürk Üniversitesi Tıp Dergisi*, *36*(4), 71–76.

Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist*, *47*(9), 1102–1114. http://dx.doi.org/10.1037/0003-066X.47.9.1102

Resmi Gazete. (2013, 29 Aralık). *Madde bağımlılığı tedavi merkezleri yönetmeliği* [Substance use treatment centre directive]. http://www.mevzuat.gov.tr/Metin.Aspx?MevzuatKod=7.5.19185&MevzuatIliski=0&sourceXmlSearch=bağımlılı adresinden edinilmiştir.

Room, R. (1997). Voluntary organizations and the state in the prevention of alcohol problems. *Drugs and Society*, *11*, 11–23. http://dx.doi.org/10.1300/J023v11n01_03

Room, R. (2015). Alcohol. In R. Detels, M. Gulliford Q. A. Karim, & C. C. Tan (Eds.), *Oxford textbook of public health* (pp. 1249–1257). Oxford, UK: Oxford University Press.

Sağlık Bakanlığı. (2014). *Türkiye beslenme ve sağlık araştırması 2010* [Nutrition and health survey, Turkey]. Retrieved from http://www.sagem.gov.tr/TBSA_Beslenme_Yayini.pdf

Sağlık Bakanlığı. (2016). *AMATEM merkezleri* [AMATEM centres]. Retrieved from http://www.hasta.saglik.gov.tr/TR,5121/amatem-merkezleri.html

Swisher, J. D., & Hu, T. (1983). Alternatives to drug abuse: Some are and some are not. *Research Monograph Series*, *47*, 141–153.

Şaşmaz, T., Buğdaycı, R., Toros, F., Kurt, A. Ö., Tezcan, H., Öner, S. & Çamdeviren, H. (2006). Ergenlerde alkol içme prevalansı ve olası risk faktörleri: Okul tabanlı, kesitsel bir çalışma. *TAF Preventive Medicine Bulletin*, *5*(2), 94–104.

Tanrıkulu, A. Ç., Çarman, K. B., Palancı, Y., Çetin, D. & Karaca, M. (2009). Kars il merkezinde çeşitli üniversite öğrencileri arasında sigara kullanım sıklığı ve risk faktörleri. *Türk Toraks Dergisi*, *11*, 101–106.

Torun, P. (2015, October). *Towards a research informed alcohol control policy: Turkey's body of evidence on alcohol consumption.* Paper presented at Global Alcohol Policy Conference 2015-Momentum for change: Research and advocacy reducing alcohol harm, Edinburgh, Scotland.

Türkiye İstatistik Kurumu. (2013). *Sağlık Araştırması 2012* [Health Survey, 2012]. Retrieved from www.tuik.gov.tr/IcerikGetir.do?istab_id=223

Türkiye İstatistik Kurumu. (2017). *Sağlık Araştırması 2016* [Health Survey, 2016]. Retrieved from http://www.turkstat.gov.tr/PreIstatistikTablo.do?istab_id=2396

Tütün ve Alkol Piyasası Denetleme Kurumu. (2017). *Piyasa İstatistikleri: 2004-2016 yılları* [Market statistics]. Retrieved from http://www.tapdk.gov.tr/tr/piyasa-duzenlemeleri/alkollu-ickiler-piyasasi/kamuoyuna-yonelik-bilgiler.aspx

Ulukoca, N., Gökgöz, Ş. & Karakoç, A. (2013). Kırklareli Üniversitesi öğrencileri arasında sigara, alkol ve madde kullanım sıklığı. *Fırat Tıp Dergisi*, *18*(4), 230–234.

Ülger, Z., Acar, C. & Torun, P. (2015). Türkiye'de okullarda alkol kullanımı konusunda yapılan araştırmalar yeterli mi?. *Addicta: The Turkish Journal on Addictions*, *2*, 85–112.

Ünal, B., Ergör, G., Horasan, G. D., Kalaça, S. & Sözmen, K. (2013). *Türkiye kronik hastalıklar ve risk faktörleri sıklığı çalışması*. Ankara: Sağlık Bakanlığı.

World Health Organization. (2004). *Global status report on alcohol 2004 Report*. Retrieved from http://www.who.int/substance_abuse/publications/global_status_report_2004_overview.pdf

World Health Organization. (2014). *Global status report on alcohol and health-2014 Report.* Retrieved from http://apps.who.int/iris/bitstream/10665/112736/1/9789240692763_eng.pdf

World Medical Association. (2013). *Helsinki Declaration.* Retrieved from https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/

Yargıç, İ. & Özdemiroğlu, F. (2010). Türkiye'de Yapılan Alkol İle İlgili Epidemiyolojik Çalışmaların Düşündürdükleri ve Sonuçları. *Türkiye Klinikleri Journal of Psychiatry Special Topics*, *3*(3), 20–29.

Yılmaz, G., İbiş, S. & Sevindi, T. (2007). Gazi Üniversitesi Beden Eğitimi ve Spor Yüksek Okulu öğrencilerinin sigara ve alkol kullanımının değerlendirilmesi. *Journal of Dependence*, *8*(2), 85–90.

Yiğit, Ş. & Khorshid, L. (2006). Ege Üniversitesi Fen Fakültesi öğrencilerinde alkol kullanımı ve bağımlılığı. *Journal of Dependence*, *7*(1), 24–30.