



A Review of Alcohol-Related Harms: A Recent Update

Abedin Iranpour¹, Nouzar Nakhaee²

Review Article

Abstract

In the early decades of the 20th century, discussions regarding alcohol were dominantly directed toward its therapeutic uses, but authorities now state that any level of alcohol consumption poses negative effects on health. Over recent months, increased attention has been devoted to disease burdens attributable to alcohol use worldwide. As more and more studies are conducted to illuminate the harmful effects of alcohol on different body systems, the mounting evidence generated requires documentation and publication. The current review was aimed at providing an overview of the recent literature on the adverse consequences of alcohol consumption.

Keywords: Alcohol abuse; Alcohol-related disorders; Humans; Health

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1- HIV/STI Surveillance Research Center, and WHO Collaborating Center for HIV Surveillance, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran

2- Neuroscience Research Center, Kerman University of Medical Sciences, Kerman, Iran

Correspondence to: Nouzar Nakhaee, Email: nakhaeen@gmail.com

Introduction

Alcohol is widely believed to be the only psychoactive substance with addictive potential “that is not controlled at the international level by legally binding regulatory frameworks” despite its profound implications for populations and public health.¹ The adverse effects of alcohol on health has been the subject of a rising number of studies in recent years,^{1,2} with such research asserting that even modest alcohol use contributes to over 60 acute and chronic health conditions.³ Studies have also shown that alcohol consumption is associated with more than 200 diseases, although its pathogenicity and lethality through chronic illnesses depend on the amount and quality of alcohol consumed and the patterns that underlie its intake.⁴

Some scholars suggested that drinking small amounts of alcohol helps prevent conditions such as diabetes, ischemic heart disease (IHD), dementia, and cognitive decline, but none of the seminal review studies reported a “safest level” of alcohol consumption.^{1,3} Another major concern about alcohol intake is that its health implications that occur through the mechanisms of other diseases, especially cancers, are likely to be underreported.⁵ Such consumption, for instance, is associated with 18% of suicides, 18% of interpersonal conflicts and violence, 27% of road accidents, 13% of epilepsy cases, 48% of liver cirrhosis cases, 26% of oral cancer cases, 20% of tuberculosis (TB) cases, 11% of colon cancer cases, 5% of breast cancer cases, and 7% of hypertension (HTN) and heart disease cases worldwide, as indicated by the World Health Organization (WHO).⁶ The WHO report notably reflected the use of the term “harmful use”.⁶ Even though experts believe that no level of alcohol consumption improves health.¹ In general, even moderate alcohol consumption considerably increases the overall risk of mortality, especially among young individuals.⁷

Epidemiology

The latest WHO report showed that in 2016, about 43% of the population over the age of 15 years (2.3 billion people) had consumed alcohol in the preceding 12 months.¹ The report also indicated that the lowest and highest alcohol consumption rates (2.9% and 59.9%, respectively) were found

among the populations belonging to the areas where the Regional Office for the Eastern Mediterranean (EMRO) and the Regional Office for Europe have jurisdiction, respectively. The total alcohol per capita consumption (APC) in 2016 was 6.4 liters, which does not reflect any change from the levels recorded in 2010. However, a decline and an increase in this level were observed in the European region and the Western Pacific and Southeast Asia, respectively. Nevertheless, the percentage of “current drinkers” all over the world in 2016 was generally 4.6% lower than that in 2000, mostly because of an increase in prevalence of former drinkers and much less due to increases in the proportion of people with no alcohol use in their lifetime.¹

Interestingly, 25.5% of the alcohol consumed globally is ingested illicitly or without proper supervision. The alcohol consumed in this manner includes homemade alcoholic drinks, medical and industrial alcohols that are misused as drinks, and other alcoholic beverages that are produced and sold illegally. This type of alcohol consumption occurs in EMRO countries and in the Region of the Americas (AMR) at rates of 70.2% and 1.1% out of the total, which are respectively the highest and lowest rates worldwide.¹ In 2016, the world’s average rate of heavy episodic drinking (HED) (defined as drinking 60 g or more of pure alcohol on at least a single occasion at least once per month) was 18.2%, and the highest and lowest rates were observed in European and EMRO countries with 26.4% and 0.5% of total consumption, respectively. HED is associated with alcohol poisoning and increased respiratory rate, heart rate, body temperature, and the gag reflex, which may lead to a coma and death.¹ Still in 2016, alcohol use was the most important risk factor for death in the age group of 15 to 49 years and the seventh leading risk factor for all deaths and disability-adjusted life years (DALYs). In the aforementioned age group, 5.3% of all deaths in the world (2.8 million deaths), 12.2% of all deaths among men, and 3.8% of all deaths among women, are related to alcohol consumption.³ These statistics render alcohol deadlier than afflictions such as diabetes, TB, and acquired immune deficiency syndrome (AIDS).¹

Although populations belonging to the lower socioeconomic class consume alcohol to a smaller

extent than the individuals of high economic standing, they exhibit higher morbidity and mortality rates because of the adverse effects stemming from their combination of alcohol consumption with other hazardous behaviors and conditions, such as smoking, poor diet, and obesity; lower socioeconomic groups also have a greater occurrence of HED.⁸

Alcohol-related harms

To identify what the most harmful drug is in the world, British researchers recently conducted multi-criteria decision analysis to rank medications in this respect.⁹ They found that in the United Kingdom (UK), the reputation of being the most dangerous substance in terms of overall harm to users and others belonged to alcohol. In another study on substance abuse, a scale called margin of exposure (MOE) [the ratio of the no observed adverse effect level (NOAEL) of a substance to the normal dose of exposure] was used to rank control measures for substance abuse and health risk assessment.¹⁰ The researchers revealed that, on a population scale, alcohol was the only substance falling within the high-risk category.¹⁰ In what follows, the latest developments in research on alcohol-related harms are discussed.

Cancers

Since 1995, many studies have shown that consuming any amount of alcohol can increase the risk of cancer. These works, however, did not specify a threshold for the emergence of carcinogenic effects from alcohol and suggested that the best way to avoid carcinogenicity was to abstain from alcohol consumption.¹¹ Alcohol has been demonstrated as directly increasing the risk of gastrointestinal (GI) cancers and indirectly contributing to the alteration of deoxyribonucleic acid (DNA) strands and oncogenesis. It exerts synergistic effects with other carcinogenic chemical agents, thereby elevating the potency of these substances in causing cancer.¹¹ Alcohol also increases the risk of cancer by lowering blood levels of antioxidants such as vitamins A and E, zinc and iron, and some B vitamins including folic acid and thiamine. Finally, alcohol increases the risk of cancer progression by weakening the immune system.^{5,11,12}

Aside from biological evidence, numerous

epidemiological results pointed to the association between alcohol consumption and cancers of the throat, lung, esophagus, stomach, liver, rectum, and breast among women.¹³ As regards all these cancers, the probability of incidence is higher in female alcohol users than males,¹ with even modest alcohol intake elevating the likelihood of breast cancer contraction among the former. Sufficient epidemiological confirmation has also been derived as to the association between alcohol dosage and cancer risk (dose-response relationship) and the parallelity of increases in alcohol use and cancer risk. These studies found no difference in risk levels among different alcoholic beverages.¹³ Overall, the relative risk of developing all types of cancers increases with alcohol use.^{1,3} Certain studies indicated that alcohol consumption likewise raised the risk of cancer mortality by 5.8%.¹³ The good news is that stopping alcohol consumption reduces the possibility of contracting laryngeal and pharyngeal cancers.¹³

Liver diseases

Alcohol-induced liver diseases (ALDs) are currently the most common type of liver-related disorders in Europe. Patients suffering from ALD experience increased life expectancy when they abstain from alcohol use, as liver cirrhosis is directly related to alcohol consumption, even in modest amounts.¹⁴ The research also found that alcohol consumption alone (without food) and intake on a daily basis led to a two to threefold increase in the incidence probability of the aforementioned disease.¹⁴ In 2016, alcohol-induced liver cirrhosis caused 607000 deaths and 22.2 million DALYs worldwide.¹ On the whole, sufficient biological and epidemiological corroboration has been derived with respect to the negative effects of alcohol on liver health and its contribution to the development of liver diseases, such as hepatitis and cirrhosis.¹⁵ Ample proof has also been obtained on the relationship between high alcohol consumption and the increased incidence of liver disease.^{15,16}

Kidney diseases

Research showed that moderate to high amounts of alcohol not only directly increases the risk of elevated albuminuria and the incidence of chronic kidney disease (CKD), but also causes kidney

damage indirectly by increasing blood pressure.¹⁷

Cardiovascular disorders

In general, alcohol consumption increases the chance of mortality from hypertensive heart diseases (HHDs) by 7%.⁶ Specifically, a positive relationship was found between alcohol consumption and IHD, atrial fibrillation (AF), congestive heart failure (CHF), stroke, HHD, and cardiomyopathy—an association that strengthens with increasing alcohol use. High levels of alcohol consumption weaken the cardiac muscle, thereby leading to a condition called alcoholic cardiomyopathy (ACM), which was responsible for 25997 deaths worldwide in 2015. ACM is caused specifically by ethanol in alcohol and acetaldehyde (the first metabolite of alcohol in the body), both of which were confirmed as implicated in cardiomyopathy.^{18,19} Alcohol also poses synergistic effects with other toxins and micronutrient deficiencies in the development or intensification of the aforementioned condition.¹⁹

Evidence showed a direct association between alcohol use and systolic and diastolic HTN—a relationship that is three times stronger in women who consume substantial amounts of alcohol than in men who ingest the same levels.^{20,21} This relationship has also been observed in modest drinkers, indicating that low alcohol consumption contributes to HTN. In a cohort study in North America on 8334 individuals aged 45 to 64 years, a positive linear relationship was observed between alcohol consumption even in small amounts and increased blood pressure over a six-year period.²² The DALY due to alcohol-related cardiovascular diseases (CVDs) has been estimated at 2%.¹ Some cross-sectional studies have reported that modest alcohol use could protect a person against CVDs, but more recent longitudinal researches and systematic reviews contradicted this claim, illustrating how even low to moderate alcohol use is a risk factor for the previously-mentioned illnesses.^{18,23}

Respiratory diseases

Alcohol consumption is a major risk factor for community-acquired pneumonia (CAP), as demonstrated in a study wherein the daily ingestion of 10 to 20 g of alcohol elevated the risk of CAP by 8%.²⁴ Alcohol consumption, especially in large amounts, likewise poses a considerable

threat of TB development and failure in treating this condition.²⁵ In a meta-analysis of case-control and cohort studies, 22.3% of TB cases and 2.23% of TB deaths were related to alcohol consumption.²⁶

Mental health

Alcohol is a depressant that influences our moods, thoughts, feelings, and actions by affecting our neurotransmitters. Although alcohol intake can lead to temporary stress relief and relaxation, its long-term consumption increases the incidence of major mental disorders, including severe depression and anxiety disorders.²⁷

Suicide

Statistics showed that countries with high alcohol usage among their populations also exhibit high suicide rates. A positive correlation was discovered between alcohol consumption and psychological disorders that adversely affect mental health, causing depression, cognitive impairment, dysphoria (disinhibition), irritability, and impaired judgment.^{27,28} These conditions result in two to three times increase in the risk of suicidal thoughts, suicide attempts, and completed suicide among alcohol users relative to the normal population.^{27,28} A study also reported increases of up to 7 and 37 times in the risk of suicide immediately after alcohol consumption and after heavy drinking, respectively.¹

Violence

Across the world, alcohol is a crucial risk factor for intentionally inflicted and unintentionally acquired injuries. Previous studies focused on the role of alcohol in interpersonal street violence (often among men), but recent research has also investigated its implication in domestic violence, including sexual violence. According to a 2016 WHO report, interpersonal violence induced by alcohol consumption causes 90000 deaths every year.¹ Intake of alcohol is known to reduce inhibition and stimulate aggressive behaviors in men.¹

In addition to harming drinkers in a variety of ways, including causing physical injuries, alcohol consumption also harms people around those who consume the substance. These dangers are often referred to as externalities. High alcohol consumption in a population is generally positively correlated with increased violence. A study in the United States (US), for instance,

revealed that 40% of victims of violence reported perpetrators being under the influence of alcohol, albeit the police confirmed this claim for only 21% of the cases.²⁹ In a study conducted in 14 countries, 50% of violence victims stated that they had consumed alcohol in the six hours before the incidents; among these victims, 49% attributed the cause of violence and injury to alcohol.²⁹ Several studies also reported a strong relationship between homicide and alcohol, especially when used in excess. As determined in a meta-analysis, 48% of victims and perpetrators had consumed alcohol before violent incidents, and 37% of offenders and 33% to 35% of victims had consumed alcohol to the point of intoxication.^{1,29}

Alcohol consumption is positively correlated with intentional harms, such as self-harm and interpersonal violence, as well as unintentional harms such as road accidents, poisoning, falling, fires, exposure to heat and hot substances, drowning, and exposure to mechanical forces. Unintentional injuries due to alcohol are dose-dependent and their serious effects often occur under blood alcohol levels of more than 0.05 g/dl.²

Sexual health

The quality of sexual relationships is one of the most important determinants of the quality of life; it depends on a set of psychological, social, and physical factors. Dissatisfaction with sexual life is known to cause anger and aggression and lead to increased marital violence and reduced warmth, all of which can be further exacerbated by alcohol consumption. The prevalence of alcohol-related sexual problems between couples is unclear, mostly because people tend to refrain from disclosing these issues. Many people believe that alcohol consumption improves sex, but research demonstrated that alcohol dependence was positively correlated with the increased incidence of male sexual disorders, such as erectile dysfunction, unsatisfying orgasm, premature ejaculation, and loss of libido. These conditions worsen with increasing duration of dependence and amount of alcohol consumed throughout a day.³⁰ Studies likewise uncovered that by eliminating and relieving anxiety and inhibition, alcohol use increases a person's desire to engage in unprotected sex (especially when aroused), have multiple sexual partners, and participate in forced sex.^{1,31}

Alcohol dependence is an equally serious risk factor for female sexual dysfunction. A study on women with alcohol dependence syndrome (ADS) showed that sexual disorders, such as low sexual desire, the inability to reach orgasm, dissatisfaction with orgasm, and low or lack of vaginal lubrication were significantly more prevalent among women with ADS than those who did not consume alcohol.³²

Academic performance

A significant proportion of individuals afflicted with alcohol use disorders (AUDs) are between the ages of 18 and 29, which is the age group to which most college students belong. Studies revealed that alcohol consumption damages mental health, unfavorably influences mental performance, and drives increased engagement in high-risk behaviors. Alcohol consumption also causes students to progressively engage in absenteeism, fall behind on schoolwork, perform poorly on exams, and overall, exhibit declined academic performance.^{33,34}

Fertility and pregnancy

More than 40 years has passed since alcohol became globally known as a teratogenic substance. In 1973, the term "fetal alcohol syndrome" (FAS) was used to describe abnormalities and disorders associated with alcohol consumption during pregnancy. Biological and epidemiological studies have comprehensively documented findings regarding the relationship between heavy drinking during pregnancy and risks to fetal health as well as the occurrence of developmental abnormalities, including stillbirth, spontaneous abortion, premature birth, intrauterine growth restriction, low birth weight, growth retardation, and neurodevelopmental disorders that bring about severe behavioral and cognitive abnormalities.^{1,35} Some studies argued that modest drinking during pregnancy was not as destructive as heavy drinking, but these endeavors failed to provide sufficient evidence on the safety of moderate alcohol intake.³⁶ Considering the wide variety of standards that apply to alcohol consumption and the alcohol content of beverages, recommending a specific maximum dosage for pregnant women is difficult, which is why most researchers advise mothers to stop consuming alcohol completely to

avoid any potential effects on their babies.³⁷

In 2016, the US Centers for Disease Control and Prevention (CDC) recommended that women of childbearing age who were pregnant or intended to become pregnant should avoid consuming alcohol to prevent harmful effects on the fetus.³⁸ Every year, nearly 119000 babies with FAS are born around the world. These statistics are alarming because, in addition to causing mental disabilities and birth defects, FAS causes developmental disorders that affect later stages of life and increase the likelihood of academic failure, drug abuse, mental illness, and criminal behavior.³⁹

In general, the effects of alcohol consumption on women, especially during pregnancy, seem to be underestimated and underreported given that such intake typically poses indirect consequences, such as unwanted teenage pregnancy, sexually-transmitted diseases (STDs) and their implications, exposure to assault and rape, interpersonal and domestic violence, and alcohol-related road accidents. In these situations, women themselves are not under the influence of alcohol and are therefore rarely included as a population category affected by such incidents; the aforementioned conditions are also always considered common harms of alcohol rather than risks specific to women of reproductive age.¹

References

1. World Health Organization. Global status report on alcohol and health 2018 [Online]. [cited 2018]; Available from: URL: https://www.who.int/substance_abuse/publications/global_alcohol_report/en/
2. Rehm J. The risks associated with alcohol use and alcoholism. *Alcohol Res Health* 2011; 34(2): 135-43.
3. Griswold MG, Fullman N, Hawley C, Arian N, Zimsen SRM, Tymeson HD, editors. Alcohol use and burden for 195 countries and territories, 1990-2016: A systematic analysis for the Global Burden of Disease Study 2016. *Lancet* 2018; 392(10152): 1015-35.
4. Shield KD, Parry C, Rehm J. Chronic diseases and conditions related to alcohol use. *Alcohol Res* 2013; 35(2): 155-73.
5. Burton R, Sheron N. No level of alcohol consumption improves health. *Lancet* 2018; 392(10152): 987-8.
6. World Health Organization. Alcohol and Health - WHO 2018 infographic [Online]. [cited 2018 Nov 10]; Available from: URL: <https://alcoholcampaign.org/2018/11/10/alcohol-and-health-who-2018-infographic/>
7. White IR, Altmann DR, Nanchahal K. Alcohol consumption and mortality: Modelling risks for men and women at different ages. *BMJ* 2002; 325(7357): 191.
8. Rosenberg G, Bauld L, Hooper L, Buykx P, Holmes J, Vohra J. New national alcohol guidelines in the UK: Public awareness, understanding and behavioural intentions. *J Public Health* 2017; 40(3): 549-56.
9. Nutt DJ, King LA, Phillips LD. Drug harms in the UK: A multicriteria decision analysis. *Lancet* 2010; 376(9752): 1558-65.
10. Lachenmeier DW, Rehm J. Comparative risk assessment of alcohol, tobacco, cannabis and other illicit drugs using the margin of exposure approach. *Sci Rep* 2015; 5: 8126.
11. Rehm J, Soerjomataram I, Ferreira-Borges C, Shield KD. Does alcohol use affect cancer risk? *Curr Nutr*

Conclusion

The findings of the latest scientific studies increasingly highlight the profound and extensive implications of alcohol-related harms for individuals and larger populations, casting doubt on previous hypotheses regarding alcohol potentially having favorable effects on certain conditions and explicitly indicating that no level of alcohol intake is safe.⁸ Even articles that emphasize some benefits of alcohol consumption caution readers that the alcohol industry pays journalists to steer public opinion toward one that favors alcohol consumption.⁴⁰ Hence, it may be time to stop using the phrase "harmful use of alcohol" when describing the adverse effects of the substance, because this construction implies that alcohol can be taken in a positive manner. In reality, consuming even small amounts can be detrimental to health. Public education should also be updated to inform people about the latest scientifically supported results regarding the health implications of alcohol consumption.

Conflict of Interests

The Authors have no conflict of interest.

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- Rep 2019. [Epub ahead of print].
12. Department of Health (UK). UK Chief Medical Officers' Alcohol Guidelines Review Summary of the proposed new guidelines [Online]. [cited 2016 Jan]; Available from: URL: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/489795/summary.pdf
 13. Connor J. Alcohol consumption as a cause of cancer. *Addiction* 2017; 112(2): 222-8.
 14. Simpson RF, Hermon C, Liu B, Green J, Reeves GK, Beral V, et al. Alcohol drinking patterns and liver cirrhosis risk: Analysis of the prospective UK Million Women Study. *The Lancet Public Health* 2019; 4(1): e41-e48.
 15. Hydes T, Gilmore W, Sheron N, Gilmore I. Treating alcohol-related liver disease from a public health perspective. *J Hepatol* 2019; 70(2): 223-36.
 16. Yang Y, Luk J, Sofair AN. Epidemiology of chronic liver disease in the United States. In: Wong RJ, Gish RG, editors. *Clinical epidemiology of chronic liver diseases*. Cham, Switzerland: Springer; 2019. p. 57-74.
 17. Pan CS, Ju TR, Lee CC, Chen YP, Hsu CY, Hung DZ, et al. Alcohol use disorder tied to development of chronic kidney disease: A nationwide database analysis. *PLoS One* 2018; 13(9): e0203410.
 18. Whitman IR, Agarwal V, Nah G, Dukes JW, Vittinghoff E, Dewland TA, et al. Alcohol abuse and cardiac disease. *J Am Coll Cardiol* 2017; 69(1): 13-24.
 19. Manthey J, Probst C, Rylett M, Rehm J. National, regional and global mortality due to alcoholic cardiomyopathy in 2015. *Heart* 2018; 104(20): 1663-9.
 20. Santana NMT, Mill JG, Velasquez-Melendez G, Moreira AD, Barreto SM, Viana MC, et al. Consumption of alcohol and blood pressure: Results of the ELSA-Brasil study. *PLoS One* 2018; 13(1): e0190239.
 21. Zhou Y, Zheng J, Li S, Zhou T, Zhang P, Li HB. alcoholic beverage consumption and chronic diseases. *Int J Environ Res Public Health* 2016; 13(6).
 22. Fuchs FD, Chambless LE, Whelton PK, Nieto FJ, Heiss G. Alcohol consumption and the incidence of hypertension: The Atherosclerosis Risk in Communities Study. *Hypertension* 2001; 37(5): 1242-50.
 23. Toma A, Pare G, Leong DP. Alcohol and cardiovascular disease: How much is too much? *Curr Atheroscler Rep* 2017; 19(3): 13.
 24. Simou E, Britton J, Leonardi-Bee J. Alcohol and the risk of pneumonia: A systematic review and meta-analysis. *BMJ Open* 2018; 8(8): e022344.
 25. World Health Organization. Global tuberculosis report 2018 [Online]. [cited 2018]; Available from: URL: https://www.who.int/tb/publications/global_report/en/
 26. Imtiaz S, Shield KD, Roerecke M, Samokhvalov AV, Lonnroth K, Rehm J. Alcohol consumption as a risk factor for tuberculosis: Meta-analyses and burden of disease. *Eur Respir J* 2017; 50(1): 1700216
 27. Mental Health Foundation (UK). Cheers?: Understanding the relationship between alcohol and mental health [Online]. [cited 2006 Apr 1]; Available from: URL: https://www.drugsandalcohol.ie/15771/1/cheers_report%5B1%5D.pdf
 28. Pompili M, Serafini G, Innamorati M, Dominici G, Ferracuti S, Kotzalidis GD, et al. Suicidal behavior and alcohol abuse. *Int J Environ Res Public Health* 2010; 7(4): 1392-431.
 29. Cherpitel CJ, Ye Y, Bond J, Room R, Borges G. Attribution of alcohol to violence-related injury: self and other's drinking in the event. *J Stud Alcohol Drugs* 2012; 73(2): 277-84.
 30. Prabhakaran DK, Nisha A, Varghese PJ. Prevalence and correlates of sexual dysfunction in male patients with alcohol dependence syndrome: A cross-sectional study. *Indian J Psychiatry* 2018; 60(1): 71-7.
 31. Scott-Sheldon LA, Carey KB, Cunningham K, Johnson BT, Carey MP. Alcohol use predicts sexual decision-making: a systematic review and meta-analysis of the experimental literature. *AIDS Behav* 2016; 20(Suppl 1): S19-S39.
 32. Anil Kumar BN, Shalini M, Sanjay Raj J, Prasannakumar DR. Sexual dysfunction in women with alcohol dependence syndrome: A study from India. *Asian J Psychiatr* 2017; 28: 9-14.
 33. El Ansari W, Stock C, Mills C. Is alcohol consumption associated with poor academic achievement in university students? *Int J Prev Med* 2013; 4(10): 1175-88.
 34. Patte KA, Qian W, Leatherdale ST. Marijuana and alcohol use as predictors of academic achievement: A longitudinal analysis among youth in the COMPASS study. *J Sch Health* 2017; 87(5): 310-8.
 35. Kelly Y, Iacovou M, Quigley MA, Gray R, Wolke D, Kelly J, et al. Light drinking versus abstinence in pregnancy - behavioural and cognitive outcomes in 7-year-old children: a longitudinal cohort study. *BJOG* 2013; 120(11): 1340-7.
 36. Mamluk L, Edwards HB, Savović J, Leach V, Jones T, Moore THM, et al. Effects of low alcohol consumption on pregnancy and childhood outcomes: A systematic review and meta-analysis. *The Lancet* 2016; 388: S14.
 37. Kahila H, Halmesmaki E, Baldacchino A, Graca L, Kersmanc MH, Kesmodel US, et al. EBCOG position paper on alcohol and pregnancy. *Eur J*

- Obstet Gynecol Reprod Biol 2016; 202: 99-100.
- 38.** Centers for Disease Control and Prevention (CDC). An alcohol-free pregnancy is the best choice for your baby [Online]. [cited 2016 May 20]; Available from: URL: https://www.cdc.gov/ncbddd/fasd/documents/fasdbrochure_final.pdf
- 39.** Tsang TW, Elliott EJ. High global prevalence of alcohol use during pregnancy and fetal alcohol syndrome indicates need for urgent action. *Lancet Glob Health* 2017; 5(3): e232-e233.
- 40.** Braillon A, Wilson M. Does moderate alcohol consumption really have health benefits? *BMJ* 2018; 362: k3888.

مروری بر صدمات ناشی از مصرف الکل: به روزرسانی اخیر

عابدین ایران پور^۱، نوذر نخعی^۲

مقاله مروری

چکیده

مباحث پیرامون الکل در دهه‌های اول قرن بیستم به این امر اختصاص داشت که فواید درمانی آن تبیین گردد؛ در حالی که هم‌اکنون صاحب‌نظران بر این عقیده می‌باشند که هر میزانی از مصرف الکل برای سلامتی ضرر دارد. در ماه‌های اخیر، توجه بیشتری به بیماری‌های ناشی از مصرف الکل شده است. همچنان که مطالعات گسترده‌تری این موضوع را روشن می‌سازد، لازم است نتایج آن‌ها به طور وسیعی منتشر گردد. هدف از انجام پژوهش مروری حاضر، تبیین شواهد اخیر پیرامون مضرات مصرف الکل بر بدن بود

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۱- مرکز تحقیقات مراقبت HIV و عفونت‌های آمیزشی و مرکز همکار سازمان جهانی بهداشت، پژوهشکده آینده‌پژوهی در سلامت، دانشگاه علوم پزشکی کرمان، کرمان، ایران
۲- مرکز تحقیقات علوم اعصاب، دانشگاه علوم پزشکی کرمان، کرمان، ایران

Email: nakhaeen@kmu.ac.ir

نویسنده مسؤول: نوذر نخعی