

# Alcohol Consumption, Sexual and Reproductive Coercion: Case Series and Mini-Review

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## Abstract

**Title:** Alcohol consumption, sexual and reproductive coercion. Case series and mini-review. This article presents a continuation of the series of case reports and letters on alcohol abuse, sexual, reproductive coercion and violence.

**Background:** Abortion rate in the former Soviet Union was the highest in the world, caused not only by the insufficient availability of modern contraception but also by irresponsible behavior. The overconsumption of alcohol is generally perceived as a contributing factor. Currently there is an improvement tendency.

**Methods and findings:** Four case histories are presented, based author's observations and interviews with participants. The social background and cause-effect relationships between certain behavioral stereotypes, alcohol overconsumption and heavy binge drinking are discussed.

**Conclusions:** The use of condoms is dependent on personal traits and the level of social development; however, alcohol consumption at sexual encounters and heavy binge drinking are risk factors for the non-use of condoms and other irresponsible behaviors.

**Keywords:** Sexual coercion; contraception; alcoholism; alcohol-related dementia

## Introduction

The alcohol consumption is known to be associated with sexual and intimate partner violence (IPV) [1,2]. An impetus to the writing of this report is the ideology of machismo or "manliness", related to militarism, spreading today in the former Soviet Union (SU) [3,4] and possibly also in some other countries. The wrongly understood concept of manliness directly or indirectly justifies interpersonal violence. Scenes of cruelty and death are often shown on Russian TV thus trivializing less presentable phenomena such as sexual coercion, child and elder

abuse. Four case histories follow, a continuation of a series of case reports and letters on alcohol overconsumption, sexual misbehavior and child abuse [5-8]. All facts are true; some former participants sincerely regret their misbehavior in the past. Certain cases were reported to the authorities after a delay as Soviet-time morality generally disapproved reporting of illegal and immoral acts especially those committed by people from privileged milieu.

## Case Series

1- A son of a higher officer awarded himself a next rank every time he was infected with gonorrhea. In this way he became a "generalissimo" illustrating his irresponsibility – the patient was proud of his "career". He was one of the informal leaders in a company that involved adolescents in binge drinking and teenage girls in sexual contacts e.g. with foreign truck drivers coming to international exhibitions in Moscow. Self-treatment of gonorrhea with antibiotics was routinely applied; patients avoided the dermato-venereological prevention and treatment centers (so-called dispensaries), where the treatment was long-lasting, unpleasant and stigmatizing [5]. Intramuscular injections of Hexestrol or Synoestrol® oil solution were used to induce abortions—a well-known method in the former SU [9].

The case was reported to the law enforcement authorities after the patient's activities had already continued for many years. The informer made no secret of the denunciation; later he was battered. It is known that some sons of higher officers and functionaries have been prone to promiscuity, with sexual coercion regarded as manly behavior [5,10]. This behavior has been favored by impunity coupled with militarist and machismo ideology [3]. Besides, this case demonstrates that the society and its institutions factually permitted the spread of sexually transmitted infections (STI). Being informed of the lengthy and unpleasant treatment [5], high-risk groups avoided the governmental medical institutions, practiced self-treatment and/or continued spreading STI.

2- A case of child abuse followed by alcoholism in the victim was reported previously [8]. The case history had a prequel. A 33-year-old single mother with her 5-year-old son was visiting by

relatives in another Soviet republic. The head of the inviting family was an officer of non-Slavic ethnicity; there had been violence in his family. The officer had a 20-years-old son, who (together with his friend) sexually assaulted the visiting mother's cousin. Two years later the officer's son married the victim. Under conditions of the Soviet registration system, aimed to counteract mass migration to the capital, factual and fictive marriages were frequently used to be registered in Moscow.

It is known that one of the reasons for women to remain with their assailants was the shortage of community resources such as the legal assistance and social support [11]. In the former SU, the registration and accommodation were important, being a strong motive especially for Moscow and other cities that attracted immigrants. In some less-developed societies with a widespread rape myth acceptance, sexual violence was a way of acquiring wives [11,12].

The fact that some victims married their rapists was erroneously seen as indication that women enjoy it; in fact, existing accounts demonstrate various degrees of trauma [12]. The above-mentioned friend visited in Moscow and abundantly consumed alcohol; once he attempted to sexually assault a 13-year-old boy, having climbed into his bed and applied force.

The attempt was unsuccessful due to the boy's resistance. The stepfather and possibly also mother heard it as the apartment

was small. They did not interfere; but the next morning the stepfather laughed about it. As reported previously [8], the stepfather physically abused his stepson and applied violence also to his wife who was 13 years older.

3- Anatomy is a difficult subject in a good medical school. It is not surprising that some students had difficulties with tests and exams. Some female students were proposed tuition in privacy. As discussed previously, in the midst of this activity was the deputy dean. Sexual harassment by lecturers is a known problem, while some universities do not recognize the problem and tend to remain silent, thus indirectly supporting perpetrators [13,14].

Note that professors have responsibility to be strong allies of the women affected by sexual misconduct [15]. Later on, when the author of this report started his career as a lecturer, he participated in agricultural works with students [4]. Medical students were compulsorily sent to collective farms during semesters to harvest potatoes and other vegetables, usually during the third academic year, so that many fields of knowledge were lost. The agricultural works lasted around 2 months (September-October) and sometimes longer.



**Figure 1:** The agricultural works at the I.M. Sechenov Medical Academy lasted in 1984 from the beginning of September till approximately 7 November, that is, more than a half of the 5th semester, so that many topics from internal medicine, pathology and surgery were lost.

The "commander" of the agricultural brigade was the son of a first generation military surgeon, later a high-positioned functionary, known among others as the Halsted mastectomy

was presented in his textbooks edited even in the 21st century as a single surgical treatment method of breast cancer;

discussed in [16]. The son was prone to alcohol consumption during agricultural works.

Once the author of this report came with some duty to the commander's room late in the evening and saw him together with the above-mentioned deputy dean and two female students. It is known that sexual offenders sometimes hold high positions, which can impede reporting [11]. During this agricultural work occurring prior to the anti-alcohol campaign (launched 1985), alcohol was abundantly consumed; there were relationships between some lecturers and students, sometimes amounting to seduction with the indirect use of authority or the lecturer's image. Besides, officers from a nearby military unit and local administrators visited the agricultural brigade, where females constituted around 50% of the cohort, and consumed alcohol with the above-mentioned commander.

At the same time, the commander disapproved of reporting students initiating alcohol consumption during working hours. As mentioned in the introduction, the social climate did not encourage reporting of illegal acts let alone immoral behavior by people from privileged social spheres. That said, many students and lecturers behaved appropriately, having no involvement with the topic of this report (**Figure 1**).

4- This case summarizes numerous similar experiences of date rape [17], which was often not recognized and prosecuted as such in the former SU, if not arranged as provocation. He invites her or vice versa, they sit on a sofa and drink wine, then she says "no"; there follows a more or less intensive resistance. Studies indicate that sexually aggressive acts often do not involve condom use, whereas rapist alcohol consumption and condom non-use correlated significantly [18]. Indeed, the condom use is technically inconvenient in settings of sexual violence even if resistance is weak and insincere. Admittedly, the withdrawal method of contraception can always be applied. Date rape aggravated by neglect of contraception sometimes amounts to reproductive coercion and leads to an abortion, while alcohol may be a contributing factor [6].

Alcohol supposedly enhances the misperception of intentions in such cases, which may increase the risk of sexual aggression, although some males believe that coercion they commit is merely seduction [19]. On the other hand, it is assumed that alcohol impairs a woman's ability to recognize the sexual assault risk and to resist advances [20]. Although intoxication is not a prerequisite of sexual violence, their frequent co-occurrence suggests that alcohol may play a causal role in some cases [21]. Furthermore, one of the risk factors of reproductive coercion (contraception sabotage) is hostility toward women [22,23], either towards all women or to a certain racial, ethnic or another type. A direct association between men's misogynistic attitudes and use of coercion to obtain unprotected sex was reported [18]. This may be a conscious or subconscious "retaliation" for some true or imagined offences in the past; a date may provide an opportunity for that. Definitions of non-consent and coercion in such cases are not always straightforward [24-26], although this is beyond the scope of the present report. It should be also mentioned that rape in marriage and partnership was widespread in the former SU [12]. Hopefully, today matters are improving helped by a decline in

heavy binge drinking and alcohol consumption [7,24]. The rape culture was defined as an ideology supporting or excusing sexual assault [23]. One rationale for rape is that women going into dates know that men expect sex; therefore, if a woman did not want to have sex, she should not have agreed to a date [23]. Moreover, resistance is sometimes viewed as an "invitation for increased effort" [27]. To avoid misunderstandings, the matter should be possibly discussed in advance: the simple question can be simply answered. By analogy with the principle of informed consent in medicine, there can be no circumstances under which a person gives up her or his right to say 'no' to any kind of sexual engagement [6,16,28].

## Discussion and Conclusion

The abortion rate in the former SU was the highest in the world caused not only by the insufficient availability of modern contraception but also by irresponsible behavior [25-27]. The incidence of HIV infection is growing [29], which also underscores importance of condom use. Fortunately, both the abortion rate and alcohol consumption in Russia tend to decrease [30-33]. The "consumerist" attitude to women has been widespread. Apparently, there was an unofficial directive behind this attitude aimed at the birth rate enhancement initially in conditions of the gender imbalance after the World War II. In the meantime, the gender imbalance has reverted and global overpopulation has come to the fore; the male/female ratio is growing worldwide due to sex-selective abortions used increasingly, in particular, in some regions of Asia [34]. Atheism propagated during the Soviet time was a factor conducive to immorality e.g. irresponsibility in marriage. The high level of alcohol consumption was also known as a contributing factor.

The association between alcohol consumption and negligent behavior is explicable within the framework of the alcohol myopia theory [35,36]. Under the impact of alcohol, the cognitive capacity is impaired, so that intoxicated individuals concentrate their attention on cues most momentarily significant for them. Less salient cues, needing more cognitive resources, tend to remain out of the vision field. Under these circumstances, immediate sexual engagement involves the limited cognitive resources, while more remote cues such as the risk of STI or unintended pregnancy are ignored [35]. Remarkably, inebriated persons may concentrate their attention on the risks and display more prudent behavior if the salient features of the sexual encounter emphasize the risks [37]. For example, under the impact of alcohol, "partner pressure decreased condom-decision abdication" [38] i.e. inebriated women negotiated for condom more decisively, which is also explainable within the scope of the alcohol myopia theory. There is an opinion that alcohol use may increase the probability of condom use in women from certain ethnic background by decreasing anxiety about proposing condoms [39].

The relationship between safer sex decision making and alcohol intake depends on the stage of social development. Some studies conducted in more developed countries did not unequivocally confirm the correlation between the alcohol consumption and non-use of condoms [39-46]. According to some research, only extremely high levels of drinking reduce the



probability of condom use [39]. On the contrary, all known studies performed in less developed or recently industrialized countries, confirmed the association between alcohol intake and the non-use of condoms [47-53]. It can be reasonably assumed that the social progress correlates with the improvement of morality, so that distracting factors such as alcohol lose their force. Admittedly, international migrations may confound this scheme.

Apart from immediate effects of the alcohol intake, the consequences of prolonged alcohol overconsumption and heavy binge drinking should be taken into account. The term "alcoholic dementia", used in the former SU, does not exactly correspond to the term "alcohol-related dementia", used in other countries for repeated head trauma, old hematomas, undernourishment, and/or deficiency of proteins and vitamins (thiamine in particular) that may contribute to the damage of neural structures and advancement of the personality changes [54-57]. Frontal lobe syndrome is considered as a hallmark of chronic alcohol abuse. Post mortem studies demonstrated a lower mean brains weight in alcoholics, particularly of the frontal lobes, while their density of neurons tends to dwindle under the influence of ongoing alcohol overconsumption [58-64]. Manifestations of the frontal syndrome and alcohol-related dementia largely overlap, including personal and social neglect, affective disinhibition, derangements of the cognitive capacity with impaired perception of risks, lack of concern about consequences or morals, and irresponsible behavior such as the non-use of condoms [61-66]. The topic of violence in alcohol-related dementia is beyond the scope of this report; but aggressive behavior is known to occur in such patients [67,68]. Finally, it is not always considered in the literature that aggression in alcoholics and patients with alcohol-related dementia is sometimes intentionally provoked by their female partners and other persons.

It is known that women who experience intimate partner violence (IPV) are at greater risk of unintended pregnancy. There is a correlation between reproductive coercion and IPV [69]; in fact, reproductive coercion is classified as a form of the IPV, thus being comparable with violent crime. Reproductive coercion includes contraception sabotage and pregnancy pressure; it may lead to unintended pregnancy, abortion, STI, poor pregnancy outcomes, and psychological trauma [70,71]. Among the predisposing social factors, currently becoming more conspicuous in Russia, are militarist and machismo ideology, disrespect for laws and regulations, impunity of some offenses, and the habitual display of death and violence on TV, thus trivializing less presentable phenomena such as sexual and reproductive coercion, child and elder abuse. It can be concluded on the basis of literature overview that the use of condoms in relation to the alcohol drinking is largely dependent on personal characteristics and the level of social development; but alcohol consumption at sexual relations and heavy binge drinking tend to enhance the risk of the non-use of condoms. Analogously, alcohol administration research had demonstrated that people behave more aggressively when drinking; however, these effects are strongest for people who are already predisposed to be aggressive [21]. Overall, survey research indicates that the personality characteristics of sexual assault

perpetrators who drink alcohol during the assault are similar to those who do not drink during the assault [21]. However, as discussed previously, survey data from Russia are of limited value in this debate as surveys have been largely discredited by obtrusive proposals to answer various questionnaires, often asking for private information [6]. Furthermore, many people generally mistrust authorities because of corruption, disrespect for some laws and regulations. An example was given in the preceding report: on the contrary to laws and regulations, BagaBar in Moscow is a source of noise all night through; windows of the neighboring apartment house are vibrating from loud music. Complaints to the authorities do not help; kickbacks are probably paid [6]. Future effort should be aimed at strengthening mutual trust between authorities and the population, which would contribute to the elaboration of efficient preventive measures.

## References

1. Oliveira JB, Kerr-Correa F, Lima MC, Bertolote JM, Tucci AM (2013) Sexual abuse and alcohol use among women in metropolitan Sao Paulo, Brazil: a general population study. *Rev Bras Epidemiol* 16: 817-825.
2. Zhan W, Shaboltas AV, Skochilov RV, Krasnoselskikh TV, Abdala N (2013) History of childhood abuse, sensation seeking, and intimate partner violence under/not under the influence of a substance: A cross-sectional study in Russia. *PLoS ONE* 8: e68027.
3. Jargin SV (2016) Nuclear facilities and nuclear weapons as a guarantee of peace. *J Def Manag* 6: 146.
4. Jargin SV (2013) Some aspects of medical education in Russia. *Am J Med Stud* 1: 4-7.
5. Jargin SV (2016) Treatment of gonorrhea in Russia: Recent history. *Global J Dermatol Venereol* 4: 1-5.
6. Jargin SV (2016) Reliability of surveys on alcohol consumption, sexual coercion and contraception. *J Addiction Prevention* 4: 1-5.
7. Jargin SV (2015) Alcohol abuse and alcoholism in Russia. *IJEMHRR* 17: 603-604.
8. Jargin SV (2017) Child abuse, autism and excessive alcohol consumption. *J Addiction Prevention* 5: 1-4.
9. Muzhanovskii EB, Fartushnyi AF, Sukhin AP, Sadov AI (1992) The detection of abortion agents in biological material. *Sud Med Ekspert* 35: 24-28.
10. Voslensky MS (1984) *Nomenklatura: the Soviet ruling class*. New York: Knopf Doubleday, Garden City.
11. Renzetti CM, Edleson JL, Bergen RK (2012) *Companion reader on violence against women*. Los Angeles: Sage.
12. Russell DEH (1990) *Rape in marriage*. New York: McMillan.
13. Rautio A, Sunnari V, Nuutinen M, Laitala M (2005) Mistreatment of university students most common during medical studies. *BMC Med Educ* 5: 36.
14. Valls R, Puigvert L, Melgar P, Garcia-Yeste C (2016) Breaking the silence at Spanish universities: Findings from the first study of violence against women on campuses in Spain. *Violence Against Women* 22: 1519-1539.
15. Wood B (2015) Zero tolerance. *Period. Science* 350: 487.

16. Jargin SV (2017) Invasive procedures with questionable indications used in Russia: Recent history. *J Surgery* 5: 1-8.
17. Black KA, McCloskey KA (2013) Predicting date rape perceptions: the effects of gender, gender role attitudes, and victim resistance. *Violence Against Women* 19: 949-967.
18. Davis KC, Kiekel PA, Schraufnagel TJ, Norris J, George WH, et al. (2012) Men's alcohol intoxication and condom use during sexual assault perpetration. *J Interpers Violence* 27: 2790-2806.
19. Farris C, Treat TA, Viken RJ, McFall RM (2008) Sexual coercion and the misperception of sexual intent. *Clin Psychol Rev* 28: 48-66.
20. Testa M, Livingston JA (2009) Alcohol consumption and women's vulnerability to sexual victimization: can reducing women's drinking prevent rape? *Subst Use Misuse* 44: 1349-1376.
21. Abbey A (2011) Alcohol's role in sexual violence perpetration: Theoretical explanations, existing evidence, and future directions. *Drug Alcohol Rev* 30: 481-489.
22. Wegner R, Davis KC, Stappenbeck CA, Kajumulo KF, Norris J, et al. (2017) The effects of men's hostility toward women, acute alcohol intoxication, and women's condom request style on men's condom use resistance tactics. *Psychol Violence* 7: 593-601.
23. Johnson NL, Johnson DM (2017) An empirical exploration into the measurement of rape culture. *J Interpers Violence* 886260517732347.
24. Cook SL, Gidycz CA, Koss MP, Murphy M (2011) Emerging issues in the measurement of rape victimization. *Violence Against Women* 17: 201-218.
25. Heise L, Moore K, Toubia N (1996) Defining "coercion" and "consent" cross-culturally. *SIECUS Rep* 24: 12-14.
26. Bouffard LA, Bouffard JA (2011) Understanding men's perceptions of risks and rewards in a date rape scenario. *Int J Offender Ther Comp Criminol* 55: 626-645.
27. Perlman FJ (2010) Drinking in transition: trends in alcohol consumption in Russia 1994-2004. *BMC Public Health* 10: 691.
28. Frese B, Moya M, Megías JL (2004) Social perception of rape: how rape myth acceptance modulates the influence of situational factors. *J Interpers Violence* 19: 143-161.
29. Lan CW, Scott-Sheldon LA, Carey KB, Johnson BT, Carey MP (2014) Alcohol and sexual risk reduction interventions among people living in Russia: a systematic review and meta-analysis. *AIDS Behav* 18: 1835-1846.
30. United Nations Department of Economic and Social Affairs Population Division (2013) World Abortion Policies.
31. Popov AA, Visser AP, Ketting E (1993) Contraceptive knowledge, attitudes, and practice in Russia during the 1980s. *Stud Fam Plann* 24: 227-235.
32. Jargin SV (2016) High abortion rate in Russia: on the role of condom use and alcohol misuse. *J Addict Prev Med* 1: 1-4.
33. Federal State Statistics Service of Russian Federation (2018) [http://www.gks.ru/wps/wcm/connect/rosstat\\_main/rosstat/en/main/](http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/en/main/)
34. Jargin SV (2016) Letter to the Editor. *Int J Risk Saf Med* 28: 171-174.
35. Weinhardt LS, Carey MP (2000) Does alcohol lead to sexual risk behavior? Findings from event-level research. *Annu Rev Sex Res* 11: 125-157.
36. Giancola PR, Josephs RA, Parrott DJ, Duke AA (2010) Alcohol myopia revisited: Clarifying aggression and other acts of disinhibition through a distorted lens. *Perspect Psychol Sci* 5: 265-278.
37. MacDonald TK, Fong GT, Zanna MP, Martineau AM (2000) Alcohol myopia and condom use: can alcohol intoxication be associated with more prudent behavior? *J Pers Soc Psychol* 78: 605-619.
38. George WH, Davis KC, Masters NT, Kajumulo KF, Stappenbeck CA, et al. (2016) Partner pressure, victimization history, and alcohol: Women's condom-decision abdication mediated by mood and anticipated negative partner reaction. *AIDS Behav* 20: 134-146.
39. Walsh JL, Fielder RL, Carey KB, Carey MP (2014) Do alcohol and marijuana use decrease the probability of condom use for college women? *J Sex Res* 51: 145-158.
40. Parks KA, Collins RL, Derrick JL (2012) The influence of marijuana and alcohol use on condom use behavior: findings from a sample of young adult female bar drinkers. *Psychol Addict Behav* 26: 888-894.
41. Livingston JA, Testa M, Windle M, Bay-Cheng LY (2015) Sexual risk at first coitus: Does alcohol make a difference? *J Adolesc* 43: 148-158.
42. Gilmore AK, Granato HF, Lewis MA (2013) The use of drinking and condom-related protective strategies in association with condom use and sex-related alcohol use. *J Sex Res* 50: 470-479.
43. Senf JH, Price CQ (1994) Young adults, alcohol and condom use: what is the connection? *J Adolesc Health* 15: 238-244.
44. Davis KC, Masters NT, Eakins D, Danube CL, George WH, et al. (2014) Alcohol intoxication and condom use self-efficacy effects on women's condom use intentions. *Addict Behav* 39: 153-158.
45. Cooper ML (2002) Alcohol use and risky sexual behavior among college students and youth: evaluating the evidence. *J Stud Alcohol Suppl* 14: 101-117.
46. Weir BW, Latkin CA (2015) Alcohol, intercourse, and condom use among women recently involved in the criminal justice system: Findings from integrated global-frequency and event-level methods. *AIDS Behav* 19: 1048-1060.
47. Gallo MF, Warner L, Bell AJ, Bukusi EA, Sharma A, et al. (2011) Determinants of condom use among female sex workers in Kenya: a case-crossover analysis. *J Womens Health (Larchmt)* 20: 733-738.
48. Xiao Z, Palmgreen P, Zimmerman R, Noar S (2010) Adapting and applying a multiple domain model of condom use to Chinese college students. *AIDS Care* 22: 332-338.
49. Matovu JK, Ssebadduka NB (2013) Knowledge, attitudes & barriers to condom use among female sex workers and truck drivers in Uganda: a mixed-methods study. *Afr Health Sci* 13: 1027-1033.
50. Faye A, Faye MD, Leye MM, Diongue M, Niang K, et al. (2014) Study of determinants of unprotected sex in sailors of the Senegalese merchant navy. *Bull Soc Pathol Exot* 107: 115-120.
51. Fentahun N, Mamo A (2014) Risky sexual behaviors and associated factors among male and female students in Jimma Zone preparatory schools, South West Ethiopia: comparative study. *Ethiop J Health Sci* 24: 59-68.
52. Mola R, Pitangui AC, Barbosa SA, Almeida LS, Sousa MR, et al. (2016) Condom use and alcohol consumption in adolescents and youth. *Einstein (Sao Paulo)* 14: 143-151.
53. Chen Y, Li X, Zhang C, Hong Y, Zhou Y, et al. (2013) Alcohol use and sexual risks: use of the Alcohol Use Disorders Identification Test

- (AUDIT) among female sex workers in China. *Health Care Women Int* 34: 122-138.
54. Pohanka M (2016) Toxicology and the biological role of methanol and ethanol: Current view. *Biomed Pap Med Fac Univ Palacky Olomouc Czech Repub* 160: 54-63.
  55. Ropper AH (1979) A rational approach to dementia. *Can Med Assoc J* 121: 1175-1190.
  56. Matsui T, Yokoyama A, Matsushita S, Kozaki K, Higuchi S (2014) Alcohol-related dementia. *Nihon Rinsho* 72: 749-756.
  57. Jargin SV (2016) Comment on "Use of carnosine for oxidative stress reduction in different pathologies". *Oxid Med Cell Longev* 2016: 1-3.
  58. Nakamura-Palacios EM, de Almeida Benevides MC, da Penha Zago-Gomes M, de Oliveira RW, de Vasconcellos VF, et al. (2012) Auditory event-related potentials (P3) and cognitive changes induced by frontal direct current stimulation in alcoholics according to Lesch alcoholism typology. *Int J Neuropsychopharmacol* 15: 601-616.
  59. Ridley NJ, Draper B, Withall A (2013) Alcohol-related dementia: an update of the evidence. *Alzheimers Res Ther* 5: 3.
  60. Sullivan EV, Harding AJ, Pentney R, Dlugos C, Martin PR, et al. (2003) Disruption of frontocerebellar circuitry and function in alcoholism. *Alcohol Clin Exp Res* 27: 301-309.
  61. Courtney KE, Polich J (2009) Binge drinking in young adults: data, definitions, and determinants. *Psychol Bull* 135: 142-156.
  62. Quemada JI, Sánchez-Cubillo I, Muñoz-Céspedes JM (2007) Organic personality disorder: conceptual review and research strategies. *Actas Esp Psiquiatr* 35: 115-121.
  63. Brun A, Andersson J (2001) Frontal dysfunction and frontal cortical synapse loss in alcoholism - the main cause of alcohol dementia? *Dement Geriatr Cogn Disord* 12: 289-294.
  64. Grodin EN, Lin H, Durkee CA, Hommer DW, Momenan R (2013) Deficits in cortical, diencephalic and midbrain gray matter in alcoholism measured by VBM: Effects of co-morbid substance abuse. *Neuroimage Clin* 2: 469-476.
  65. Fuster JM (1989) *The prefrontal cortex: Anatomy, physiology, and neuropsychology of the frontal lobe*. 2nd edition. New York: Raven Press.
  66. Johnson SA (2014) Understanding the role of alcohol during rape: the perfect storm of attention, emotion, & expectancies. *Int J Emerg Ment Health* 16: 259-269.
  67. Rommel O, Widdig W, Mehrtens S, Tegenthoff M, Malin JP (1999) 'Frontal lobe syndrome' caused by severe head trauma or cerebrovascular diseases. *Nervenarzt* 70: 530-538.
  68. Kim JM, Chu K, Jung KH, Lee ST, Choi SS, et al. (2011) Criminal manifestations of dementia patients: report from the national forensic hospital. *Dement Geriatr Cogn Dis Extra* 1: 433-438.
  69. Grace KT (2016) Caring for women experiencing reproductive coercion. *J Midwifery Womens Health* 61: 112-115.
  70. Park J, Nordstrom SK, Weber KM, Irwin T (2016) Reproductive coercion: uncloaking an imbalance of social power. *Am J Obstet Gynecol* 214: 74-78.
  71. Silverman JG, Raj A (2014) Intimate partner violence and reproductive coercion: global barriers to women's reproductive control. *PLoS Med* 11: e1001723.