

Reliability of Surveys on Alcohol Consumption, Sexual Coercion and Contraception

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Introduction

A series of case reports has been started in preceding papers on alcohol misuse, sexual misbehavior and related topics from the last decades of the Soviet period [1-5]. These cases have been reported to the authorities after a many years' delay or not reported at all. The denunciation has been generally condemned in the former Soviet Union: on the one hand, whistleblowers were seen as accomplices of the regime; on the other hand, it has been reasonably assumed that the regime cooperates with criminals. Indeed, the fact of denunciation has sometimes become known to the criminals with undesirable consequences for the whistleblower [2]. However, this letter is not on the crime detection but on public health; and the method under discussion is the survey. The proper use of surveys, in condition of mutual trust of participants, could contribute to detection and eradication of immoral and illegal acts. Several case reports follow.

Case Reports

Case 1

Previously we reported a case of child abuse followed by the alcohol misuse in the teenage victim [4]. This case had a prehistory. A divorced woman 33 years old with her 5-years-old son visited en route her relatives in another Soviet republic. The head of the inviting family was an officer of non-Russian ethnicity [4]; there had been violence in his family. Generalizations must be avoided; but it is known that some higher officers' sons, as well as those from the party nomenclature, have been prone to promiscuity and sexual coercion regarded as manly behavior [2,6]. Some of them were taught masculinity being set at other children; however, stronger boys also from ethnic minorities (Case 2) usually have not been victims. The officer had a 20-years-old son, who invited the visiting mother's cousin to a party. During the party, the aunt was raped by him and his friend. There was not much resistance possibly due to alcohol, personal and situational factors, but the psychical trauma was considerable... Two years later the officer's son married the victim. In view of the restrictive Soviet-time registration system (propiska), true and fictive marriages were the common way to move to the capital. However, the couple has remained together ever since. The above-mentioned friend visited in Moscow once, consumed alcohol and behaved immorally. As reported in detail previously [4], the cousin/stepfather physically abused his cousin/stepson during seven years, until the latter run away, landed in the family of his physical father and lived there for two years, sleeping on a folding bed, in one room with the married couple.



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Case 2

In the 7th class of a school (13-14 years old children) appeared two brothers from the South; both early-ripening. Later it has become known that they seduced or raped several girls. One of the girls recollected that it happened so quickly that she noticed it when it was too late; the boy was adroit, later on he hinted that he had been instructed within his family. She liked him and dated repeatedly. Some female teachers knew about the liaison, laughed, and said so that the girl could hear them: "Now she cannot do without!" The theory around incest is beyond the scope of this letter; but sexual experience with relatives is not uncommon in a certain milieu [7]. It was reported that 49% of the "child perpetrators" had been sexually abused themselves prior to their sexually abusive behaviors [8]. In particular, mother-son and sister-brother relationships result in teenagers feeling themselves as men and behaving accordingly when they deem it safe. It should be commented that in conditions of the increasing gender imbalance, it would be more reasonable not to discourage masturbation in boys [9-11]. Contemporary medicine holds masturbation to be developmentally normal, health-neutral if not health-enhancing [12].

Case 3

In a good medical school, normal anatomy is a difficult subject. It is not surprising that some female students had difficulties with tests and exams. Some of them were proposed tutoring in privacy... In the midst of this business was the deputy dean. Later, when the author of this letter was a junior lecturer, he was on agricultural works with students [3]. Students were compulsorily sent to harvest potatoes during the semester. In Moscow Medical Academy it usually happened at the third year, so that some themes in pathology, surgery and internal medicine were lost. The agricultural works lasted up to 2 months, in 1984 even longer. The "commander" of the agricultural brigade was the son of the former rector (chancellor), who had been the first-generation military surgeon [13]. The son was prone to the alcohol consumption, during the agricultural works at least. Once the author came with some duty to the commander's room unusually late and saw him together with the above-mentioned deputy dean

and two female students. The dean came to inspect the agricultural brigade. Until recently, he has been professor of normal anatomy. During agricultural works (before the start of the anti-alcohol campaign in 1985) alcohol was abundantly consumed; there were relationships between certain lecturers and students, sometimes amounting to seduction with the indirect use of authority or the lecturer's image. That behavior is sincerely regretted today by some former participants.

Case 4

The head of the department asked Serge to assist a senior colleague in her research: "She has requirements, you know, but you will be able to comply with". He understood it as scientific requirements: Stella was a "teacher" for him and all irrelevant thoughts were taboo. Besides, he was married. It was already second time that the chief arranged for that kind of scientific cooperation, probably with the similar objectives. They did some research indeed, and then he told that he is going abroad, and she said: "You are leaving, and I'll be alone!" Alcohol was consumed almost every day. After five years he returned to Russia and was offered a position at a university. After the practice abroad, there was a lot of modern knowledge to share with colleagues. Some criticism was inevitable, which was not welcomed by certain bosses. Serge was invited to his former institution, for consultation and some talk; and Stella was also there. He did not intend to restart. They visited public places, theaters and museums. For some reasons, Stella motivated him to criticize, informed about forged studies with participation of high officials, plagiarism and manipulations with statistics in medical research. Serge publicly criticized, at conferences and in publications [14-16]. He was dismissed from his position at the university. Then she put an end, while he was threatened on telephone. The gossip ensued that he was immoral, an alcoholic etc. which was far from reality.

Reliability of Surveys

Many studies on the alcohol misuse and sexual behavior have been based on surveys [e.g. [17-20]]. However, there are international differences in reliability of surveys. Evaluating results of surveys and opinion polls, it should be taken into account that these research tools have been discredited in Russia since the 1990s by obtrusive proposals to take part in different surveys, often asking for private information - in the streets, on telephone, and also by agents coming to private homes. Accordingly, many people are "sick and tired" of questionnaires and tend to conceal true facts and opinions [21]. This equally pertains to opinion polls and scientific surveys. Moreover, research itself is partly discredited in the public's eyes as it is known about scientific misconduct and biases due to the conflicts of interest [22,23]. Many people generally mistrust authorities because of corruption, disrespect for some laws and regulations (Figure 1). The tendency to discredit surveys and opinion polls can be seen as a continuation of the Soviet-time policy, when the "frame of mind of the working people" was monitored but the data were kept undisclosed or published in a biased form in accordance with the official ideology [21]. The statements like "earlier research has suggested that, at least for drinking behavior, reports [by adolescents] can be regarded as being generally valid" are in fact not supported by the references to studies from Western Europe, where the attitude to surveys is probably more responsible [17,20]. However, biases

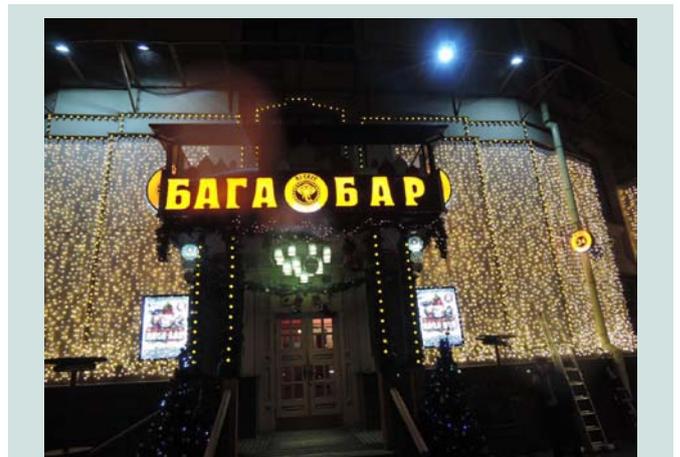


Figure 1: Baga Bar functioning as a night club in Moscow is a source of noise all night through; windows of the neighboring apartment house are vibrating from loud music. Complaints to the authorities do not help; kickbacks are probably paid.

in survey studies can occur in any country. Misreporting about illicit drug use, abortions, seizures, and unsafe sexual behaviors has been reported [24,25]. Owing to the "social desirability" effect, respondents may deny or deflate their responses about undesirable behaviors and exaggerate desirable ones. The social desirability effect has been observed also in conditions of anonymity [24]. The mechanism of distortion can include self-deception or deliberate self-impression management [26]. Conscious misinformation related e.g. to conflicts of interest or ideological biases is a possibility as well. As for the public opinion polls, they can misrepresent the attitudes of the population; in particular, the polls on health care should be treated with caution because of the frequent non-response or "don't know" answers [27]. In the author's opinion, a nation-specific cause of untruthful answering can be the shortage of trust within the society - between the authorities and different social groups. The motives behind discrediting surveys and opinion polls seem to be obvious: the proper use of these methods would disclose social phenomena, which the ex-Soviet establishment and their heirs would prefer to conceal. In regard to the topic of this letter, survey studies could reveal e.g. the indirect use of authority to persuade females to sexual contacts; use of manipulation, threats, alcohol and drugs to engage teenage girls into sexual contacts by males from privileged social strata or by schoolmates from ethnic minorities taking advantage of their earlier ripening and sexual experiences within families, cooperation of certain teachers and other personnel in such affairs; use of alcohol and drugs in teenagers for these and other purposes, etc. The topic of sexual coercion, also at schools and universities, is rarely discussed in Russian-language literature.

For example, the study was based on a survey carried out in Arkhangelsk among adolescents 13-17 years old [17]. "In terms of sexual behaviour, there was no difference in the odds ratios between binge drinking and non-binge drinking girls and boys for non-condom use during last sex" [17]. In other words, the adolescent binge drinking was reported to be not associated with "non-condom use during last sex". It can be reasonably assumed that the study subjects answered the question "The last time you had sex did you

or your partner use a condom?" with "yes" without pondering that it is a research having potential significance for the public health [17]. Respondents might be unwilling to admit to disapproved practices such as the non-use of condoms. Besides, according to our observations, there is mistrust towards official organizations and a concern, based on precedents that information may leak through and become known to other people. However, responsibility about condom use has obviously increased contributing to the considerable decline in the abortion rate in Russia since the last 20 years [28].

Alcohol, Sexual Coercion and Contraception

The abortion rate in the former Soviet Union has been the highest in the world, which was caused not only by the insufficient availability of modern contraception and poor quality of condoms but also by irresponsible behavior of some males [1,28-30]. The widespread alcohol misuse has been generally perceived as a contributing factor. The association between alcohol consumption and high-risk sexual behavior is explainable within the scope of the alcohol myopia theory [31,32]. As discussed previously, alcohol reduces cognitive capacity and causes people to focus on the cues that are most salient in the environment [30]. Less salient cues require additional cognitive resources to process and are, therefore, less likely to be acted upon by an intoxicated individual [32]. In sexual encounters, the most salient cues are usually those that involve immediate sexual engagement. More distant cues, such as a suspicion that the partner could be infected by a sexually transmitted infection, are less salient. Thus, when intoxicated by alcohol, the ability to consider less salient cues decreases and the protective behavior is less likely to be enacted [32]. However, according to other research, intoxicated people reported more prudent intentions than sober ones, provided that the most salient features of the situation emphasized the risks of unprotected sex, which also agrees with the alcohol myopia theory [33]. The role of alcohol in safer sex decision making has been broadly discussed, the prevailing opinion being that heavy binge drinking and alcohol consumption at sexual encounters are risk factors for the non-use of condoms and sexual risk behaviors [34-38]. For example, within-day links between alcohol use and the oral sex have been reported [39,40]. The importance of the oral cavity rinsing before and after the oral sex to prevent transmission of the papillomavirus, HBV or other infections should be stressed [41]. Note that alcohol concentration in beverages probably does not possess the necessary virucidal activity [42,43]. Antiseptic and antiviral properties of different mouth rinse solutions must become the topic of literature review and further studies [44,45].

Some researchers did not find any correlations between alcohol drinking and the non-use of condoms [46]. There is a concept that people who use condoms when they are sober tend to use them also when they are drinking, whereas people who fail to use condoms when drinking would probably fail to use them when sober. However, empirical exceptions from this rule are recognized by the same researchers [32]. It should be commented that all known reports, not unequivocally confirming the association between the alcohol drinking and the non-use of condoms, originated from more developed countries [32,33,46-49]. Numerous reports from the less developed and newly industrialized countries do confirm such association [50-54]. Remarkably, less acculturated men have

been found to drink more heavily and were more likely to engage in risky sexual behavior than those who were more acculturated [55]. Apparently, along with the social development, the attitude towards contraception becomes more responsible and stable, the effect of distracting factors such as alcohol becoming less significant. An example is Russia, where the attitude has considerably improved since the 1980s.

Another issue is the dependence of the alcohol-related modification of the risk perception on the preceding experience of alcohol consumption. Multivariate analyses indicated that women who had been heavy drinkers perceived themselves at higher risk for sexual victimization than nondrinkers [56]. On the contrary, in younger and less experienced people such as students, excessive use of alcohol is associated with novelty and popularity seeking, overcoming communication barriers etc. and hence with more risky behavior [57]. According to the author's observations, individuals with alcohol dependence and increased alcohol tolerance may preserve a high level of risk perception and behavioral skills in the state of intoxication. However, personality changes slowly progressing after a prolonged alcohol misuse and heavy binge drinking (discussed below) would sooner or later interfere with the risk perception and behavioral skills. The topic of risk perception at different stages of chronic alcoholism needs a separate literature review and further studies.

Among personality traits and neurological conditions related to the risk perception in drinkers, associated with the irresponsible behaviors such as the non-use of condoms, are also those developing after a prolonged alcohol abuse, related to the deficit in frontal inhibitory control and cognitive impairment i.e. features of organic personality disorder, frontal syndrome or alcohol-related dementia [58,59]. The frontal lobe dysfunction has been defined as a hallmark of the alcohol dependence [60]. Frontal lobes of chronic alcoholics tend to shrink in volume with a decrease in neuron density [61,62]. It should be mentioned that the term "alcoholic dementia", used in Russia, does not exactly correspond to the internationally used term "alcohol-related dementia", as traumatic brain injuries, old hematomas, malnutrition, protein deficiency, and chronic diseases can play a role in the pathogenesis [22,63,64]. Among possible manifestations are social and personal neglect, insufficient foresight including poor individual risk perception, disinhibition in the affective and emotional sphere [65,66]. The topic "violence and dementia" is beyond the scope of this letter; however, aggressive behavior is known to occur in patients with the frontal syndrome [67].

Violence is also often associated with alcohol abuse, while the use of condoms within the context of violence would be less probable than in other circumstances [68,69]. On the other hand, provocations and false accusations on the part of female partners, sometimes in complicity with third persons, occur as well. It should be stressed that reproductive coercion and contraception sabotage are the forms of intimate partner violence [70]. Birth control sabotage, pregnancy pressure and coercion may be harmful for a woman's mental health [70].

Conclusion

In the author's opinion, the use of condoms in relation to the alcohol drinking is largely dependent on personal characteristics but,

taken on overage, heavy binge drinking and alcohol consumption at sexual relations are risk factors for the non-use of condoms. Survey data from Russia are of limited value in this debate. In conclusion, surveys and opinion polls are valuable research tools and a feedback mechanism for administrative decisions [71]; they should not be discredited by obtrusive questioning, asking for private information. Leakage of private information obtained by surveys must be efficiently precluded. Future efforts should be aimed at creation of an atmosphere of mutual trust between authorities, research institutions and the population, which would contribute to truthful answering of questionnaires, and hence to detection and eradication of immoral or illegal acts such as the child and elder abuse, intimate partner violence, sexual and reproductive coercion. In other words, the use of surveys and opinion polls in conditions of responsibility and trust would contribute to openness of the society, observation of laws and human rights.

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