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The Relationship of Alcohol and Crime in Korea

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Millions of Koreans enjoy drinking alcohol. According to the report of Korea Alcohol and Liquor Industry Association and Ministry for Health and Welfare, every night about 6 million people put away almost 20 million bottles, including 9.53 million bottles of beer and 8.97 million bottles of soju (a popular type of Korean liquor with about 20% alcohol) (1). In fact, the World Health Organization has reported that the rate of drinking problem of adults is considerably higher in Korea compared to that in other countries and the prevalence of alcohol use disorder (alcohol abuse and alcohol dependence) was reported to be 6.76% (2). This is the world's highest and almost double the world's average rate.

ALCOHOL-RELATED HARM

It is well known that alcohol is a neurotoxin which has harmful effect to every organ, including the brain. The average volume and pattern of alcohol drinking can increase not only the risk of physical illnesses (e.g. diabetes mellitus, hypertension, myocardial or brain infarction, various alcoholic liver diseases) and injuries (e.g. car accidents, falls, drowning) but also the risk of mental illness such as alcohol dependence and various kinds of behavioral and social problems including suicide, drunk driving, violent behavior, domestic violence, crime, and antisocial behavior(3).

In Korea, the annual cost of alcohol-related harm is estimated to be 23.4 trillion Korean won (KRW), which is about \$21 billion, but the cost does not include 8.8 trillion KRW caused by alcohol-related violence and crime. Therefore, the total annual cost is actually 32.2 trillion KRW (4). Alcohol certainly has an extensively negative impact on individuals, families and society and imposes on enormous financial burden on society as a whole.

Since the inevitable process of physical, psychological, socioeconomic, and legal problems caused by binge drinking or chronic use of alcohol is repetitive and spirals progressively downward, prevention of these problems is one of the most important strategies for reducing alcohol-related harm (5). However, according to the Korea National Health and Nutrition Examination Survey, in 2009, only about 1.5% of people who

drink at least over one standard drink for lifetime and 1.9% of people who are suspected to have alcohol dependence reported that they had the experience of counseling or treatment about their alcohol problems (6). Increasing counseling or treatment experience rate at least to the level of 11.4% which is counseling or treatment rate of major mental disorder in Korea (7) or 17% which is the rate of whom enter treatment each year among alcoholics in the United States would reduce the cost of alcohol-related harm (8).

NEUROBIOLOGICAL MECHANISMS OF ALCOHOL-RELATED VIOLENCE AND ITS IMPLICATION

Several studies have demonstrated a relationship between alcohol consumption on violent or aggressive behavior (9-11). While earlier studies considered alcohol-associated violence primarily due to alcohol's disinhibiting effects, recent scientific studies have demonstrated a complex interaction of various bio-psycho-social factors (9). Animal experiments and human studies have shown that environmental factors such as early life stress, genetic variations in serotonin-related genes that affect serotonergic and GABAergic neurotransmission, dysfunctional amygdala activity and impaired prefrontal function all together predisposed individuals to both increased alcohol intake and impulsive aggression. In addition, acute and chronic alcohol intake can further impair executive functions and thereby facilitate aggressive behavior (12). Executive functioning comprises several cognitive abilities that contribute to the planning, goal setting, organizing, initiation, prioritizing, self-monitoring, and anticipation of consequences of behavior (13). These are handson functions to pull through daily life and regulate goal-directed behavior. Alcohol is a neurotoxin and executive functions of the frontal lobe are especially vulnerable to the neurotoxicity of alcohol (14). It has been suggested that alcohol intake can disrupt the executive functions, leading to disinhibition that could increase aggressive and violent behavior (15). Furthermore, executive dysfunction caused by alcohol-related brain damage is closely related to alcoholic denial (16). It implicates that the more alcohol people drink and the more they have a tendency to initiate alcohol-related violence, but the more they refuse to

own up to their alcohol-related problems. In this context, it is very difficult to motivate themselves to get involved in counseling or treatment even though they have serious alcohol-related violence problems.

PEOPLE WHO ARE VIOLENT UNDER THE INFLUENCE OF ALCOHOL

Not everyone who drinks alcohol becomes violent and even in the case of those who do become violent, the frequency and severity of violence varies according to the occasion. However, there is no doubt that alcohol use and violent/aggressive behavior are closely related to each other. Alcohol use is implicated in approximately one-half of all violent crime and sexual assaults and domestic violence (12). In Korea, according to the police about 40% of all violent crime is alcohol-related. When we take a look at the mean rate and number of crimes related to alcohol use in the 3 yr from 2007 to 2009, 36.2% of homicides, 34.1% of violent assaults, 45.0% of arsons, 31.1% of sexual assaults and 59.8% of cases of obstruction of justice are alcoholrelated (17). Every year, about 200,000 people are arrested for alcohol-related crimes, and more than 300,000 are arrested for drunk driving. On the top of that, it is estimated that about 500,000 people are freed after admonition every year in spite of alcohol-related misbehavior (4). At 2012, the Seoul Metropolitan Police Agency declared war on "violent behavior under the influence of alcohol intoxication". However, declaring war, enforcing punishment, and putting them behind bars was not sufficient. Leaving these people without any screening, therapeutic intervention, or referral to treatment simply allows them to become involved in more serious criminal activities under the influence of alcohol in the near future.

The representative therapeutic intervention in the criminaljustice system of Korea is an order to attend a lecture at the probation center for 40 hr. However, this community order is too brief and insufficient to make changes and reduce recidivism. This brief and insufficient order only becomes available in case of third arrest because of drunk driving and when the level of legal punishment is more than suspended a sentence. A suspended a sentence could be ordered within 1 to 5 yr when the court took extenuating circumstances into consideration for the punishment of a crime that is less than 3-yr' prison labor or confinement. Actually previous to get the order to attend a lecture, majorities of suspects have got the career of 2 or 3 times of punishment of a fine due to alcohol-related misbehavior or crime (4).

For decades, violent/aggressive misbehavior by people who are intoxicated with alcohol has been a burdensome problem in Korean society. But because of the public's generous attitude toward misbehavior after drinking alcohol and issue of human rights, some loop-holes in legislation, lack of insight about addiction in the judiciary and above all insufficient of effective therapeutic intervention within the criminal-justice system, Korean society has been struggling to manage and prevent alcohol-related misbehavior appropriately. This leaves perpetrators in the vicious cycle of recidivism.

The result of a system insufficient for preventing the downward spiral of alcohol dependence or reducing recidivism is painful. We speculate that more than 1.5 million patients suffer from alcohol dependence among a total population of 50 million. On the other hand, in Japan, there is only an estimated 800,000 alcohol-dependents among total population of 120 million (18, 19). The total cost to the national health insurance for alcohol-related disease almost doubled over a period of 4 yr, 3,212 billion KRW in 2005 to 6,122 billion KRW in 2009 (20). According to a 2011 report of the National Mental Health Commission, 21.2% of patients who were admitted in mental hospitals or mental health care facilities were alcohol dependent (21). According to a survey on criminals under probation or in office and prison, 64.7% of subjects under probation and 42.4% of subjects in prison reported their crimes were alcohol-related and over 60 % of both types of subjects who had committed the alcohol-related crime are at least their second conviction (4).

SUGGESTION

In the "Alcohol Harm Reduction Strategy for England" of 2004, Prime Minister's Strategy Unit of the UK Cabinet Office reported that alcohol-related harm of 2003 cost around £20 billion (about 35.2 trillion KRW), including £7.3 billion due to alcoholrelated crime (22). In the forward to the report written by Prime Minister Tony Blair, he not only explained the background of the report and strategies of the government for harm reduction but also tried to persuade the public and alcohol industry about the appropriateness and legitimacy of alcohol harm reduction strategies. And he also underlined the partnership between government, local authorities, police, industry and the public themselves to minimize harm.

In 2011, we also published the "National Strategy 2020 for Alcohol Harm reduction" (23). However, we are remaining unsatisfied with the level of national concern about alcohol-related harm and the will of the government to make harm reduction done. Establishing governance to make a partnership among the police, prosecution, courts, Ministry of Health and Welfare, National Taxation Service, local authorities, medical community and the public themselves is urgently needed.

Because of the concept of moderate drinking and the involvement of beverage and alcohol industry, there could be resistance against the policy to reduce the total average level of alcohol consumption in the population, which is strongly correlated with the prevalence of heavy drinking and associated harm (24). Someone could argue that drinking problems are a matter of individual responsibility. However, like cigarette smoking, government must take an action to reduce alcohol-related harm for public health and safety reasons. All adults have a right to enjoy drinking. However, for those who cannot balance their right to drink with others' health and well-being, and begin to harm others, government should take the responsibility of preventing them from progressing to the more serious state through the active therapeutic intervention in the criminal-justice system. As we noted from the outset, it is not too much to say that these risky people are currently being left as they are, even though there are order to attend a lecture so-called therapeutic intervention. This lack of therapeutic intervention is likely to enable them to get involved in more serious criminal activity under the influence of alcohol in the near future. Simply exacting punishment and locking them up without therapeutic intervention does not reduce recidivism for alcohol-related crimes. Proper therapeutic intervention does not mean simply attending 40 hours of lectures. It should be a supervision system in the continuum of treatment. Treatment must last long enough to produce stable behavioral changes for a long period, and better outcomes are associated with treatment that last longer than 90 days (25).

In conclusion, because the scope of alcohol-related harm in the Republic of Korea is huge, a wide variety of national strategies should be established to intervene in a downward spiral of alcohol misuse and vicious cycle of recidivism of alcohol-related crime.

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