UNDERAGE DRINKING IN SOUTH AFRICA

Introduction

The World Health Organization estimates that alcohol is consumed by perhaps 1 in 3 of all humans on earth and that estimated 76 million have alcohol consumption disorders.

The adverse effects of alcohol have been associated with 38 different diseases and conditions, including psychosis, alcohol-dependence syndrome, polyneuropathy, cardiomyopathy, gastritis, liver cirrhosis, and ethanol, and methanol toxicity.

In addition, alcohol abuse has been related to pancreatitis, several types of cancer, and damage to the fetus (fetal alcohol syndrome). The link between alcohol consumption and its adverse consequences depends upon the amount of alcohol consumed over a period of time and the complex mediating process of internal biochemical reactions, intoxication, and dependence.

Alcohol and Substance Abuse and the Young

According to data collected by the South African Community Epidemiology Network on Drug Use (SACENDU), admission of patients to treatment centers for alcohol abuse is increasing in South Africa, and the age of those being admitted is growing younger each year. SACENDU, an alcohol and other drug (AOD) sentinel surveillance system established in 1996, meets every 6 months to report on AOD abuse and drug-use trends as well as associated consequences, through the presentation and discussion of quantitative and qualitative research and other data. SACENDU operates out of Cape Town, Durban, Port Elizabeth, Mpumalanga, and Gauteng, (Johannesburg/Pretoria) and uses data from multiple sources, such as treatment centers, psychiatric hospitals, mortuaries, trauma units, police departments, schools, and primary health care clinics.

In the SACENDU proceedings from July to December 2006 data collected from a psychiatric treatment center in the Port Elizabeth province showed that a majority of patients being treated for drug abuse first used or experimented with alcohol between the ages of 11 and 19. In the Durban province treatment center, the average age of first use of alcohol dropped from 21 years of age during the months of July through December 2002 to 19 years in 2006.

In addition to alcohol abuse, treatment centers care for patients for the abuse of dagga (dope), crack, cocaine, heroin, ecstasy, over the counter/prescription medications, methamphetamine and methcathinone. Not all of the patients under 20 in these various South African treatment centers were treated for alcohol as their primary substance of abuse. Data collected from 7 of the treatment centers in the central region of South Africa showed that most youth in the central region of South Africa were treated for the abuse of cannabis and inhalants. Still, alcohol is the most common primary substance of abuse among patients at all sites and at least 33% of the patients are black: alcohol abuse continues to be a problem globally.

A South African health fact sheet on alcohol and other drug use by South African adolescents concluded that adolescents face many health consequences from alcohol abuse, such as increased injury and death due to interpersonal violence, motor vehicle accidents and drowning. In addition, other problems include increased risks for suicidal ideation and behavior; psychiatric disorders, including, but not limited to, conduct, mood and anxiety disorders. The social implications of alcohol abuse for adolescents and young adults, teachers see declining grades, absenteeism, truancy, and dropping out of school all together for students who abuse alcohol and other drugs. Adolescents who use alcohol also are more likely to be involved in crime and gang-related activities and to have impaired psychological and social development, and poor peer and family relationships.

Currently, South Africans in general consume over 6 billion litres of alcoholic drinks per year. The per consumption of absolute alcohol is between 9 and 10 litres per year. The range is low compared with Europeans who consume between 9.9 to 16.5 litres per year. Based on the production figures, overall consumption of alcohol in South Africa did not increase between 1994 and 2000, but increasing steadily growing was per capita consumption of alcoholic fruit beverages and spirit coolers, with a decline in the consumption of sorghum. There was also an increase in the consumption of natural wine, brandy, and vodka.

In a 2003 report from the Department of Health Republic of South Africa entitled If You Drink Alcohol, Drink Sensibly, the Food-based Dietary Guidelines for Health South Africans Older Than Six Years Work Group warned that excessive use of alcohol leads to intoxication and other health and social problems. In their guidelines, the Work Group urged South Africans to set reasonable limits if they choose to drink (low-risk drinking and sensible drinking). Low-risk drinking is defined as no more than 4 units of alcohol per day for men and no more than 2 units per day for women, with at least 2 free alcohol-free days per week for both men and women. The definition of a unit of alcohol or standard drink of wine is 120 mL (11 grams). The average alcohol concentration for 1 glass of wine is 12 %

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compared with beer at 5%. Excessive daily consumption of alcohol, that is, consumption above the limits recommended, may lead to multiple-organ-system dysfunction over a period of time.

Other agencies and organizations are also working to limit and control drinking, for instance, one of the nongovernmental organizations (NGOs) is helping to educate people globally on the prevention and treatment of alcohol and other drug dependencies. Established in 1956, the South African National Council on Alcoholism and Drug Dependence (SANCA) achieved their 2 objectives through public education and provision of treatment services for chemically dependent people and their families. SANCA, national umbrella organization, consists of 38 alcohol and drug-help centers providing over 76 service points/satellite offices in all 9 provinces of South Africa.

Effects of Alcohol and Drug Use

Youth who drink frequently and heavily (5 or more drinks on 1 or more days) are at risk for vitamin deficiency, especially thiamine, which could lead to a more severe and fatal neurologic disease, Wernicke-Korsaff syndrome, or as it is used to be called, beriberi. This serious condition that can lead to psychosis and encephalopathy, which is characterized by confusion, anterograde, and retrograde amnesia, confabulation, nystagmus, aphthalmoplegia, ataxia, coma and death. Heavy alcohol consumption can damage the brain, liver, gastrointestinal tract, and pancreas. To reverse the neurologic and cardiac disorders brought on by alcoholism, many young people need to receive B1 injections. According to Sandy Lund, Clinical Service Manager at a SANCA treatment center in the Pieermaritzburg province, some alcohol-dependent patients undergo a regime of multivitamins and vitamin B Co with thiamine. Clinic doctors also prescribe a regime of diazepam or oxazepam. A representative from Vaal Triangle, a SANCA treatment center in the Gauteng province, stated that clinic doctors prescribe vitamin B Co followed by 2 months of 5 booster injections for liver function and thiamine hydrochloride to prevent Wernicke-Korsaff syndrome.

Drug Therapy

Acamprosate, marketed by Lipha Pharmaceuticals, Inc. received approval by the US Food and Drug Administration (FDA) for the treatment of alcohol dependence in July 2004. The drug is currently registered in 39 countries, including 2 in Africa. Acamprosate which interacts on glutamate and gamma-amino butyric acid (GABA) systems is designed to reverse the craving effect of alcohol and lengthen the period of sobriety in an alcohol-dependent person. However, clinics, such as the SANCA detoxification clinic in the Johannesburg province and the Aurora Centre in the Bloemfontein province do not use it. Lund, for one argues that acamprosate was too expensive, citing that private physicians do prescribe it.

Professor Willie Pienaar, Associate Professor in the Department of Psychiatry, Faculty of Health Sciences, University of Stellenbosch in Western Cape South Africa, concurred that acamprosate was too expensive to use in a state system. Professor Pienaar, Clinical Head and Principal Psychiatrist at Stikland Psychiatric Hospital, Bellville RSA, believes that acamprosate cannot stand alone in therapy; it has to be combined with a patient rehabilitation program. According to the FDA Web site, the most common adverse effects reported for patients taking acamprosate include headache, diarrhea, flatulence, and nausea.

Conclusions

In a 2005 article in Addiction, Charles DH Parry, Director of the Alcohol and Drug Abuse Research Unit at the Medical Research Council in South Africa, argued that alcohol consumption is likely to increase in South Africa over the next decade. In addition to their Food-based Dietary Guidelines, the Department of Health is also in the process of drafting regulations to restrict alcohol advertisements and introduce warning labels on containers about the harmful effects of alcohol abuse. By reading labels, we can only hope that underage drinkers will take heed of the warnings before their way of escape leads to misery and injury.

By AL Hunter

RESOURCES

South African health information: http://www.sahealthinfo.org

World Health Information: http://www.who.int

Parry, CDH South Africa: alcohol today. Society for the Study of Addiction, 2005,100:426-9.