

Socio-Medical Problems Related to Alcohol Consumption

Mohammed A. Al-Bar, M.R.C.P., D.M.
Jeddah, Saudi Arabia

DOI: <http://dx.doi.org/10.5915/20-4-13300>

Abstract

Alcoholic beverages have been used since antiquity. Unfortunately, there is a tremendous increase in its consumption in the last three decades, both in the developed and developing countries.

The socio-economic losses are staggering. Alcohol consumption is a major factor in road accidents, industrial injuries and crimes of violence. Industrial loss is tremendous, and in many countries alcohol abuse is the most important cause of absenteeism, loss of production and hooliganism. Incest, rape and other sexual crimes are usually committed under the influence of alcohol. Wife and child batterers are usually heavy drinkers. This article discusses the increasing incidence of alcohol dependence and the ensuing socio-medical problems.

Key Words: Alcohol, alcohol dependence, alcohol abuse, socio-medical problems.

Alcohol was used since antiquity for many purposes including true and imagined benefits. "As a social lubricant, aperitif and mild 'anesthetic' it holds pride of place; as a drug of addiction, a physical poison and a community evil it has no equal".¹ The greatest part of the total harm arising from alcohol consumption in a community ensues from the large number who drink moderately, rather than the relatively few who drink heavily. Reduction of moderate drinking of the majority will have a better effect on the health of a community than comparable efforts to rescue or treat alcoholics.²

Extent of the problem

Although alcohol consumption was known to humanity since many thousand years, there is a tremendous global increase in its consumption in the last three decades. The total world consumption has never been so high.³ Probably the best criteria to estimate the marked increase of alcohol consumption are total and per capita consumption in different countries during a certain period of time (Tables 1 and 2).

Table 1. U.K. alcohol consumption, 1965-1975.

	1965 - 1975
Beer	30.3 - 40.1 (million bulk barrels)
Spirits	17.5 - 31.6 (million proof gallons)
Wines	35.6 - 77.5 (million liquid gallons)
Population; 15 years	41.531 - 42.887 (million)

Table 2. Alcohol consumption in liters of pure alcohol (100%) per person per year⁴

Country	1950-1952	1960-1961	1971
France	-	18	16.7
Italy	9	13	13.9
West Germany	3.1	8.5	12.3
Spain	7	6.7	12.0
Austria	6.5	6.8	11.4
Argentina	8	7	10.9
Hungary	6	6.7	9.5

The World Health Organization (WHO) Committee on Alcohol-Induced Problems found that per capita consumption of alcoholic beverages has been increasing throughout most of the world in the last 20 years. Between 1960 and 1972, for example, recorded worldwide production increased by 19% for wine, and by 68% for distilled spirits. Both industrialized and developing countries in various regions of the world showed that the annual consumption of alcoholic beverages, in terms of 100% ethanol (ethyl alcohol), was above 8 liters per capita in only two

*From King Fahd Medical Research Center
King Abdulaziz University*

*Reprint requests: Mohammed A. Al-Bar,
Consultant of Islamic Medicine
King Fahd Medical Research Center
King Abdulaziz University
P.O. Box 2631
Jeddah 21461, Saudi Arabia.*

countries in 1950, but by 1976 this level has reached in 22 countries.³

Another report of WHO in 1982³ showed that by 1982, beer production had increased by 124% worldwide. In some countries in Asia, the increase was horrible, viz 500%. In some African countries an increase of beer consumption was reported to be as high as 400%. Even remote villages, in many third-world countries, were consuming alcoholic beverages while they lacked clean water, sewage disposal and primary health amenities.

There is a consistent correlation within a community between per capita consumption of alcohol and crimes of violence, traffic accidents, major industrial and economic losses, cirrhosis of the liver, death from alcoholism and its related diseases.

In the U.K., the per capita spending on alcohol has increased by 76% in a ten years epoch (1960-1970). The adult population of the U.K. drank about twice as much alcohol in 1984 as it did in 1950. Spirit consumption increased by 135% while wine consumption increased by 250%⁶. The losses due to alcohol consumption are so great that it is impossible to list all the consequences which befall humanity from this menace.

In 1979, members of the executive board at its sixty-third session, and delegates of numerous countries at the thirty-second World Health Assembly, confirmed that alcohol problems now rank among the world's major public health concerns (WHO resolution 32.40)³. Alcohol problems in many parts of the world constitute a serious obstacle to socio-economic development and threaten to overwhelm the health services³. A summary of the major losses due to alcohol consumption will be given here.

Socioeconomic losses

Although the alcohol industry seems to benefit few big international industrial companies and provide jobs for many workers, and even seems to increase state revenue by levying taxes on alcoholic beverages, the total socioeconomic loss is so tremendous that these benefits become trivial. The deleterious effect on health, welfare and social consequences of alcohol consumption will more than tilt the balance towards the benefits of proscribing or at least limiting alcohol consumption.

The cost of alcohol abuse to a society is difficult to measure. In the U.S.A., it was estimated that 30,000 million dollars were lost due to alcohol consumption in 1971¹. Table 3 gives some details. By 1979 these estimated costs were put at 43,000 million dollars³, and by 1986 the estimates were put at the staggering figure of 120,000 million dollars⁷. The U.K. spent 3,000 million Sterling pounds on alcohol in 1971; the figure increased to 11,434 million pounds in 1984⁶, while France, in 1971, spent an equivalent amount

Table 3. Estimated economic costs in the U.S.A. in U.S. dollars (1971)

Lost industrial production	14,869 million
Health care costs	8,293 million
Road accidents	4,666 million
Violent crimes	1,466 million

(7,000 million dollars annually)⁸. West Germany in 1971 was spending 27,584 million Marks on alcohol compared with 12,756 for smoking.

Alcohol features prominently in traffic accidents. WHO statistics suggest that it is involved in about 50% of all traffic accidents. Even in countries where alcohol and drugs of addiction are prohibited, like Saudi Arabia, the director of the department of alcohol and drug control claims that about 50% of long road accidents are due to alcohol and drug abuse⁹. In the U.S.A., 25,000 deaths occur annually due to accidents caused by alcohol consumption. Another 15,000 deaths occur due to diseases caused by alcohol, and another 15,000 deaths occur due to murder, crimes and suicide committed under the influence of alcohol¹⁰. The risk of accidents rises exponentially when blood alcohol levels exceed 50 mgs percent, and at blood alcohol levels of 200 mgs percent, the risk is one-hundred-fold above that of the non-drinker¹. It is estimated that 250,000 citizens die annually due to tobacco and alcohol consumption.

In crimes of violence, alcohol plays a prominent role. Nearly 70% of murders are committed under the influence of alcohol¹. WHO, after studying violent crimes in thirty countries including the U.S.A. and the U.K., came to the conclusion that 86% of murder crimes, and 50% of rapes and other crimes of violence were committed under the influence of alcohol¹¹. The Daily Mail, June 26, 1980, quoted Lord Harris, who headed a commission on prison population in the U.K., who found out that the majority of criminals were suffering from alcohol related problems. At least 50% of those terrible crimes were committed under the influence of the intoxicant drug.

Industrial losses are tremendous. In Scotland alone they reached 100 million pounds annually¹². In the U.S.S.R., alcohol abuse is the most important cause of absenteeism and loss of production¹³.

WHO Technical Report 650, 1980, cites the following consequences of alcohol abuse: absenteeism, illness, decreased production, decreased quality of work, difficulties in work relationships, accidents and loss of trained personnel. Many countries, especially in the third world, suffer badly from loss of management and trained staff due to alcohol abuse.

A lot of other social problems arise due to alcohol

abuse. Seventy-four percent of wife and child batterers are heavy drinkers. Incest, rape and other sexual crimes are usually committed under the influence of alcohol. Divorce and separation are the ultimate result of indulgence in alcohol.

The price paid in human misery, poverty, broken homes and social degradation is beyond calculation.

Incidence of alcohol dependence

The term "alcohol dependence" has replaced the rubric "alcoholism" which is a denigratory unspecified term. Alcohol dependence is manifested by overt drinking behavior, a continuation of drinking in a way not approved by one's culture, and changed behavioral state. The dependent person's control over his drinking becomes impaired, his craving for drink becomes relentless, his thirst unquenched, and planning for drinking takes precedence over all his other activities. Altered psychosomatic states occur whereby the dependent person experiences the psychological and/or somatic signs of withdrawal during periods of abstinence. There is also increased tolerance whereby the effective dose of the intoxicant has to be increased in order to get the same pharmacological effect and satisfaction from the drug abused.^{14,15}

It is estimated that at least one in ten of those who drink alcohol, even occasionally, will become alcohol-dependent. In the U.S.A., the majority of the adult population drink. Some 100 million Americans drink alcoholic beverages at least occasionally.¹⁶ The statistics seem to show that practically every 17- or 18-year-old will have experimented with at least one drink. As many as 50 to 85 percent of high school students drink at least occasionally. The average age at which youth begin to experiment is 13 to 14.¹⁶ In Scotland, 92% of boys and 85% of girls have experienced alcohol by age 14.¹⁷ In the age group 17-30, no less than 87% of men and 60% of women are regular drinkers.¹⁸

Youngsters are more prone to heavy drinking when they are exposed to alcohol. In Scotland, 70% of boys and 61% of girls admitted to heavy drinking occasionally, while 40% of boys and 32% of girls (15-16 years) are regularly heavy drinkers.¹⁹ sixty percent of Glasgow's 6-year-olds had tried alcohol.¹⁷

More women are exposed to drinking. Heavy drinkers among women rose from 4% in 1972 to 11% in 1978.²⁰ In the U.S.A. 93% of teenagers (12-17) have experienced alcohol and 1.2 million people drink regularly.²¹

In the U.S.S.R., the problem seems even worse. Ninety percent of all cases of acute alcoholic intoxication being treated for the first time are individuals under 15 years of age; one-third of them are under 10 years.²² Fifteen percent of the adult population are at present getting treatment for alcohol dependence.

Due to this high consumption of alcohol, there are hundreds of millions who suffer from alcohol abuse annually in the whole world. In the U.S.A., it is estimated that 10 million individuals are suffering from deleterious effects of alcohol abuse¹⁰ (problem drinkers and alcohol dependent). Tens of millions of people are involved with alcohol dependent persons.¹⁶ In France and West Germany, there are 2.5 million alcohol dependent persons for each country, while in the U.K. the figure is lower at 0.5 to 1 million. Those who are labelled heavy drinkers (drinking more than 51 units weekly for males and 35 units for females), amounted to 3 million in England and Wales in 1981²³. In the U.S.S.R., a staggering figure of 25 million individuals puts the Soviet Union on top of the world as the first alcohol dependent country. In France, one-third of the electorate get some or all of its income from the production and sale of alcoholic beverages²⁴.

It is estimated that 40,000 deaths occur annually in the U.K. due to alcohol consumption. Though this figure is staggering, it is less than half those killed by smoking cigarettes (100,000). Heavy drinkers have a mortality rate over twice the normal population.²³

WHO Technical Report on Alcohol, 1980, claims that in many countries the heavy drinkers and alcohol-dependents constitute 4-10 percent of the whole population. The WHO Expert Committee on Drug Dependence concluded that "in many parts of the world, problems associated with the use of alcohol far exceed those associated with the non-medical use of less socially accepted dependence-producing drugs such as those of amphetamine, cannabis and morphine types.³ The reason for this widespread alcohol dependence emerges from the fact that many civilizations look upon alcohol drinking, at least in moderation, as a normal behavior. "Alcohol is such a permissible and trusted poison, so easy of access for those who wish to escape from their troubles that it is resorted to in excess by mal-adjusted persons," as Sir Aubry Lewis said in Price's Textbook of Medicine.²⁵

Even in Muslim countries where alcohol is completely banned by Islam, alcohol dependence is becoming a problem that has to be tackled. In Khartoum province (Sudan), Dr. al-Bager studied the incidence of alcohol consumption and alcohol dependence in 1975-1976.²⁶ He found the following important facts: 1) That females rarely drink alcohol; 2) that most of those who drink alcohol started at the age of 16 or over; 3) that the majority of alcohol drinkers do not drink at home as there is still strong refusal by the family; 4) the male adult population in Khartoum province in 1975 was 417,820. Forty-seven percent of them have had a try at least once with the intoxicating liquor. Eighty-seven percent of those who drink are social drinkers while the remaining 13% are regular daily drinkers who are starting to

have some problems from their drinking habits. 5) Divorce was high in those who drink compared with non-drinkers of alcohol; 20% and 4% respectively. 6) Twenty-two percent of those who drink do so because of psychological problems, while 9% do drink because of problems at home. 7) Fifty-two percent of all traffic accidents in 1975-76 were committed under the influence of alcohol. 8) The amount spent on alcoholic beverages (10 million Sudanese pounds) represents double the amount allocated to the Ministry of Health in 1975. In Bahrain, a small Gulf country, the consumption of alcohol is very high indeed. As much as 9 million Kg of alcoholic beverages were consumed in 1981. The total annual cost was estimated at 3195 million pounds.^{27,28}

Medicine Digest⁵ summarized the WHO 1982 report on alcohol and its problems. Most Islamic countries have minor problems related to alcohol consumption.

Saudi Arabia, Iran, Kuwait, Qatar, Libya and North Yemen were all prohibiting alcohol in 1982. By 1984, Pakistan and Sudan followed suit while Egypt and Bahrain allowed alcohol in tourist places, both for indigenous persons and foreigners.

Unfortunately, many Muslim governments tried to spread alcohol consumption against the will of the majority of the populace. In Egypt, Turkey, Tunisia, South Yemen, Indonesia, Iraq, Syria and many others, the governments not only encourage private enterprise of the brewing industry, but the governments themselves either share or own completely the breweries and alcohol factories. They help spread alcohol consumption in their nations on the assumption that they will get more income and provide more jobs for the unemployed. The ill-effects that ensue from this policy are well manifested by the staggering bills of debts to the international banking system.

Though the majority of the masses in Muslim countries abstain from alcohol despite incitement by governments, the elite, unfortunately, are entangled in the cobweb problems of alcohol consumption. This is due to the contradictory effects of westernization on the elite and junta who are deeply hypnotized by the western civilization and who try to promulgate its values to a completely different culture.

References

1. Brunt P: Alcoholism as a medico-social problem. In: Vere, D.W. ed, Topics in Therapeutics, London, Royal College of Physicians, Pittman Medical Pub. Co. 1978:124-135.
2. Report of Royal College of General Practitioners: Alcohol, a Balanced View. J Roy Coll Gen Pract 1986,24:1-3.
3. Report of a WHO Expert Committee: Problems Related to Alcohol, WHO Technical Report Series No. 650, WHO, Geneva, 1980:7-13.
4. Fosander, O: Biochemical Problems in Alcohol Studies. *Das Med Prisma* 1974,3:3-5.
5. *Medicine Digest* 1982; 8(12):57.
6. Report of Royal College of General Practitioners: Alcohol, A Balanced View. *J Roy Coll Gen Pract* 1986,24:4-7.
7. Al-Sharq al-Awsat Newspaper, Nov. 11, 1986 (last page).
8. Al-Sharq al-Awsat Newspaper, July 1, 1980 (last page).
9. Personal Contact with the Director of the Department of Alcohol and Drug Control, Saudi Arabia.
10. Harris, I: Alcohol Problem and Alcoholism. In: Beeson, P B, McDermott, W, eds, Cecil Loeb Textbook of Medicine. Philadelphia, Saunders Co., 1971:138-142.
11. Daily Mail, June 26, 1980.
12. Scottish Council on Alcoholism: Annual Report, 1977.
13. Gulf Times, Jan. 12, 1983.
14. Edwards, G, et al: Alcohol Related Disabilities. WHO, Geneva (WHO Offset Pub. No. 32) 1977:13.
15. Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death, WHO, Geneva, 1977, 1:198.
16. Miles, S: Learning About Alcohol, American Association for Health Physical Education and Recreation/A National Affiliate of the National Education Association, Washington, D.C. 1974:10-14.
17. Jahoda, G, Grammond, J: Children and Alcohol. London, OPCS, HMSO, 1972.
18. Dight, S: Scottish Drinking Habits. London, OPCS, HMSO, 1976.
19. Plant M A, Peck D F, Stuart R: Self Reporting Drinking Habits and Alcohol Related Consequences among Cohort Scottish Teenagers. *Br J Addict* 1980, 77:75-90.
20. Show S: Causes of Increasing Drink Problems Amongst Women. In: Women and Alcohol. London, Camberwell Council on Alcoholism, 1980:1-40.
21. Stranger, V: Sex, Drugs and Rock 'N Roll. Understanding Teenager Behavior. *Paediatrics*, 1985; 76:659-63.
22. Al-Madinah Newspaper, Dec. 13, 1984 quoting a Russian Magazine "Nash Supermenik".
23. Report of Royal College of General Practitioners: Alcohol, A Balanced View, Alcohol and Society. *J Royl Coll Gen Pract* 1986; 24: 45-53.
24. Badri, M: Islam and Alcoholism, American Trust Publications, 1976:41.
25. Lewis A: Psychological Medicine, 10th Edition, London, Oxford University Press, 1966: 1172-74.
26. Al-Bager, O S: Zāhīrat Ta'āṭī al-Khumūr. Khartoum (Sudan), Military Press, 1979:34-38.

27. Towaijri, A M: Ghadan Sawfa Yuqtalūn
“Tomorrow, they will be killed”, Journal of
Risālat al-Khalij 1985, 16(5):9-29.

28. Musaiger, A: Youngsters and Drugs in Arab Gulf
Countries (Arabic), Kuwait, al-Rabiān Pub. Co.,
1985.