

Editorial

Alcohol – good or bad

Anula Wijesundere*

Journal of the Ceylon College of Physicians, 2003, 36, 3-5

The history of alcohol consumption is as long as the history of civilization and dates back over 10,000 years. Initially, man fermented barley and brew beer. Five thousand years later fruits were fermented and wine was made. Over 2548 years ago, Lord Buddha realized the evil of alcohol and advised all his disciples to abstain from drinking alcohol. Abstinence from alcohol is in fact the fifth basic precept of Buddhism. Unfortunately, most male Buddhists reject this basic precept.

Consumption of alcohol in excessive amounts leads to deterioration of physical and mental health, inter-personal relationships and smooth economic and social functions. Alcoholism also leads to deterioration of moral and spiritual standards and often miserably wrecks and destroys life on a devastating scale.

The consumption of alcohol over a period of time leads to both physical and psychic dependence and the development of tolerance. Alcohol is also addictive and psychoactive. However, unlike tobacco and heroin dependence which also show these properties and is socially taboo, alcohol remains socially acceptable. How come?

Most people start with "safe levels" which mean 3 units of alcohol for men and 2 units for women as daily maximum. (1 unit of alcohol = 8gms eg: ½ pint beer, 25ml spirit, 1 glass of wine or sherry)¹. However, due to genetic, environmental, developmental, biochemical and personality factors, they soon become hazardous or "at risk drinkers" and later progress to "alcohol dependence syndrome".

Alcohol abuse: the burden on the NHS, UK

Alcoholism accounts for 12.5% of all accident and emergency attendance in the UK. It also account for 25% of admission to intensive care units and 30% of road traffic accidents. In the UK, 28% of men and 14% of women drink in excess of recommended levels. The total loss to the UK government from alcohol is over 10 billion sterling pound annually².

* *Consultant Physician, Sri Jayawardanapura General Hospital, Nugegoda.*

Alcohol, illness and death in the United States

Over 73% of adult Americans consume alcohol and alcohol is therefore the most widely distributed toxin in the US. Alcohol is directly responsible for over 100,000 deaths annually and accounts for 15% over all health costs in the United States. Alcohol drains on the US economy to the tune of 184 billion dollars annually³.

Alcohol dependence in Sri Lanka: Magnitude of the problem

Sri Lanka has extremely high per capita consumption of alcohol which for males only over 15 years is 15.2 l⁴. Community survey done by Alcohol and Drug Information Centre (ADIC) show that 43% of urban shanty dwellers, 65% of male estate workers and 50% fathers of school children consume alcohol in Sri Lanka⁴. Among new entrants to the universities in Sri Lanka, 18% consume alcohol⁵.

Consequences of alcohol dependence in Sri Lanka

Sri Lanka has the second highest rate of alcohol cirrhosis in the world (55/10,000 population). We are second only to Moldava, (formally of the Russian Republic) a nation of Vodka drinkers⁵. Alcohol cirrhosis is a leading cause of death in the age group 25 – 44 for the entire nation. Alcohol cirrhosis is also the leading cause for deaths of all ages in Gampaha, Puttiam and Kurunegala districts. Alcohol cirrhosis also accounts for 70% of all gastrointestinal deaths, the second leading cause of deaths for the nation⁶.

Why do people drink?

To many alcoholics, alcohol appears to the panacea for everything. To many, alcohol seems to be the solution for insomnia, tiredness, sorrow, joy, hot or cold weather, for energy or to forget problems. Others drink to be in vogue, to go with the herd, for sexual drive, to feel high and may take one drink for the road with disastrous consequences. Some others drink alcohol to get "Dutch courage" to commit crimes which they would never have resorted to if they were not intoxicated. So it appears that people drink for any imaginable reason or every reason or no reason at all. To many to them, alcohol is "pure magic".

Removing the magic from alcohol

It must be remembered that alcohol is not a CNS stimulant as is widely believed but a CNS depressant. The hyperactivity which is often seen following alcohol is due to removal or inhibition of inhibitory effects on the brain. This soon leads to loss of finer grades of judgment, reflection, observation and attention. Later, disorientation, confusion, aggression and violence set in.

Beneficial effects of alcohol on health

Recently, attention has focused on the effects of alcohol on physical health, and the evidence that it protects against some diseases⁷. When alcohol is used "wisely and well" it is believed to lead to pleasure and benefit. Alcohol has also been shown to be cardio protective by increasing LDL and by its anti inflammatory and anti platelet properties⁸. However, alcohol is certainly not beneficial to the rest of the body .

Over the past 50 years many studies have shown a "J shaped curve" relationship between overall risk of mortality and alcohol consumption. The lowest mortalities is seen in individuals who drink a small amount of alcohol: mortality is higher in those who drink a large amount and those who drink none⁷. However all studies^{7,8,9} only show association between no alcohol and mortality. Causation however, has not been established in any of the above surveys.

Continuing on the "J shaped curve" it must be realized that the higher mortality among non drinkers may have resulted from inclusion of reformed drinkers as non drinkers already with evidence of disease, other variables such as un healthy diet and the cardio protective effects of alcohol. However, the cardio protective effects could easily be achieved by exercise and aspirin, rather than by boozing.

It must be remembered that the beneficial effects of alcohol on the heart is seen only over 40 years of age. Under 40 years, the adverse effects of alcohol far outweigh the beneficial effects. In contrast, at higher levels of alcohol as commonly consumed, leads to deaths from cardiomyopathy, atrial fibrillation and heart failure⁹.

Alcohol consumption and mortality among women

For younger women with no cardiac risk factors, there is no associated reduction of mortality with alcohol. However, with higher doses of alcohol there is a substantial increase of mortality among women from carcinoma of the breast. Only older women with cardiac risk factors were shown to have reduced mortality with mild to moderate alcohol consumption¹⁰.

Alcohol and violence

There is a substantial body of evidence that show a direct relationship between overall level of consumption of alcohol and population related road traffic accidents, violence in the community, sexual harassment of women and children, homicide and suicide^{11,12}.

Alcohol is bad for it warps the mind and produces a variety of psychiatric disturbances. Amongst these are depression and suicide, epilepsy and fugue states, delirium tremens and alcohol related dementia. Alcoholism also leads to variety marital squabbles such as pathological jealousy, impotence, misery and family wrecking.

Alcohol and drug interactions

Alcohol is a potent drug and interferes with metabolism of numerous drugs such as warfarin, analgesics, antibiotics, anti-histamines, benzodiazepines, barbiturates and anti-epileptic drugs. Thus patients receiving the above medications should abstain from alcohol completely.

Foetal alcohol syndrome

This disaster occurs when a pregnant mother drinks consistently more than 8-10 units of alcohol daily. (80-100 gms of alcohol). This syndrome is characterized by the birth of a baby with growth retardation, dysmorphic features, congenital abnormalities, CNS defects and mental retardation. There is an increased risk of abortion, prenatal deaths and epilepsy with brain malformation with neurological heteroptopia. Therefore all pregnant women should abstain from alcohol consumption during pregnancy.

Alcohol is only good for State coffers and distilleries companies in Sri Lanka. During the tax year ending March 2002 the Distilleries Corporation of Sri Lanka recorded a phenomenal profit of Rs 517.8 million. This exceeded the previous years profit by a staggering Rs. 100 million.

Unfortunately, all successive governments of Sri Lanka encourage Sri Lankans to drink by handing out liquor licenses liberally to all political stooges for favours granted. Thus alcohol is freely available with easy access even in the remotest part of the country.

Following reduction in excise duty on beer, the beer consumption increased in Sri Lanka by 523% in 10 years. The population increase in this period was only 13.9%. These only encourage men, youth and even some women to consume alcohol. The ever

increasing revenue that the government gets by the sale of alcohol is at the expense of the health of the nation.

During the reign of King Parakramabahu Sri Lanka was referred to as “the Granary of the East”. Sadly due to the alcohol policy of successive governments that have ruled this country we have now become the “Brewery of the World”.

In conclusion, we have now reached the silver medal for alcohol consumption and cirrhosis in the whole world. Thus, it is only too evident that at the present phenomenal, ever increasing rates of alcohol consumption in Sri Lanka, we will soon reach the gold! This is inevitable unless the government introduces very strict laws to curtail the production, distribution and sale of alcohol in order to save our countrymen from the evil of alcohol dependence.

References

1. Kumar P, Clark M. Alcohol: effects of excess alcohol consumption. *Clinical Medicine* 4th edition. 1999; 214-215.
2. Pirmohamed M, Gilmore IT. Alcohol abuse and the burden on the NHS – Time for action. *Journal of the Royal College of Physicians of London* 2000; 34: 161-167.
3. Good and evil: Alcohol and health. *Harvard Health Publications* 2002; 2: 1-7.
4. ADIC surveys: Profile of alcohol and tobacco in Sri Lanka. 1997; 16-18.
5. Abeysinghe DA. Illicit alcohol – drinking culture in Colombo 2002; 1-8.
6. Annual Health Bulletin, Dept. of Health Services in Sri Lanka 1999; 25-26.
7. Kemmy J. How much alcohol can people drink without harming themselves. *Medicine* 1999; 27: 3-7.
8. Alcohol, atherosclerosis and survival, *Harvard Health Publication* 2002; 2: 2-3.
9. Alcohol policy and public good. A guide for action WHO Publication 1995: 1: 9-14.
10. Peters TJ, Preedy R.V. Chronic alcohol abuse: effects on the body. *Medicine* 1999; 27: 11-14.
11. Fuchs CS, Meir J, Stampfer MJ, Colditz GA, et al. *New England Journal of Medicine* 1995; 332: 1245-1250.
12. Skog OJ. Alcohol consumption and mortality rates for traffic accidents, accidental falls and other accidents in 14 European countries. *Addiction* 2001; 549-558.
13. Ramstaed M. Alcohol and suicide in 14 European countries. *Addiction* 2001; 96: 59-75.