

ALCOHOL ADDICTION BRINGS MANY HEALTH PROBLEMS

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Abstract

Objectives: Alcoholism is a chronic addiction to alcoholic beverages. It is manifested through a strong desire to drink, loss of control when drinking, symptoms of physical withdrawal and increased tolerance to alcohol. Alcohol addiction is a severe mental disorder because it leads to a pathological process, which changes the way the brain functions. Alcoholism in the long run causes a whole range of serious health problems such as cirrhosis of the liver, alcohol poisoning, heart disease, kidney disease as well as a whole range of mental disorders. There are numerous and indirect consequences of alcoholism in the form of traffic accidents and accidents at work. Frequent alcohol consumption is one of the important criminogenic factors resulting in an increased crime rate. Attitudes towards drinking are formed already in childhood and early adolescence, and very often according to the model of identification with loved ones. Alcoholism as such is a familial disease. *ASEAN Journal of Psychiatry, Vol. S1(2): March- April 2021: 01- 06.*

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Introduction

In a survey of alcohol cultures-which embody the ways alcohol is perceived, valued, and consumed- in many regions over hundreds and thousands of years, the one constant that appears to be present, regardless of time and place, is that alcohol was a highly contested commodity [1]. On one hand, it was represented as good—as a beverage sometimes given by a god and often associated positively with religion, and as a beverage that had the potential to be healthy and therapeutic and support sociability and community at all levels. On the other hand, alcohol had the potential to cause individual and social calamities expressed through immorality, impiety, social disruption, poor physical and mental health, and crime. Alcohol misuse is an issue that expands beyond its physical and psychological consequences [2]. Overconsumption of, and addiction to alcohol, is a global health challenge. The social consequences of alcohol transcend class and its impact at the individual and population levels are of equal importance. At home it is a burden on the NHS budget and abroad an issue that stifles development in resource-poor

countries. It is through understanding the nature of excessive consumption that health professionals can act as advocates for the best use of resources at home and abroad.

Drinking

Alcohol consumption is regarded as a leisure activity that is classified as a regular pastime associated with socialising with friends in bars, clubs and when out on dates or at parties [3]. Drinking alcohol is also linked to identification and conformity with a reference group. Getting drunk is regarded as an important feature of making new friends and for strengthening bonds with existing friends. Drinking alcohol in adolescence is also associated with young people having more freedom to choose what to do with their lives as they gain more autonomy from their parents. Drinking can be a hedonistic pleasure in its own right. It can also be used as a form of escape and as a coping mechanism when confronted with problems.

Generally, drinkers tend to report more positive than negative consequences of alcohol consumption. While younger drinkers tend to have a rosier picture of alcohol consumption than do older drinkers, older

drinkers seem to be more willing to recognise the negative consequences that can accompany excessive drinking.

Social opinions about getting drunk have changed over time. Representations of drunkenness in the media are also signalled as playing a part in shaping public attitudes in this context. Social developments throughout the ages have created conditions under which alcohol consumption has been branded as acceptable or unacceptable. In pre-industrial Britain, it became fashionable to drink outside the home among the lower social classes and this was predominantly a male behaviour. Women who drank, particularly to excess, procured a negative social reputation for themselves. With industrialisation, working classes divided into two: those with skilled trades who sought to better themselves and those who remained unskilled for whom life was a struggle. The skilled working classes acquired affluence and also aspired to emulate the higher social classes not only through their growing wealth but also in terms of their behaviour. Drinking alcohol for this social group moved indoors into the private domain, while the unskilled working class continued to meet in public places to drink. For the latter, the alehouses often provided a more comfortable and hospitable space in which to spend one's time compared with the basic premises in which they tended to live. With class divides becoming more apparent, there was also a decrease in the extent to which the different classes shared the same recreational spaces.

Intoxication

There is a popular tendency to view all problems related to drinking as a part of, or due to, alcoholism [4]. Studies of drinking practices and problems in the general population question this assumption, showing a universe of drinking problems that lie outside the bounds of alcoholism. In the mid-1970s, partly based on evidence from general population studies, a population-based vision of the broad range of problems that alcohol sets for society began to emerge. This new approach cast off the constraints of the narrow view that made alcoholism the only salient issue. Given that alcohol-related social problems, interpersonal problems, and acute health problems are widely distributed throughout the population, the prevention paradox was put forward to draw attention to the broad range of alcohol-related problems in the drinking population at large. One of the main causes of alcohol-related harm in the general population is alcohol intoxication.

The term alcohol intoxication is defined here as a more or less short-term state of functional impairment in psychological and psychomotor performance induced by the presence of alcohol in the body. The

impairments produced by alcohol are mostly dose-related, are often complex, and involve multiple body functions. Some (such as slurred speech) are evident and easily recognized, while others, such as impaired driving ability, may be subtle and detected only via laboratory testing. Some of these effects stem directly and almost inevitably from a given blood alcohol concentration, while others depend on personal characteristics, the individual's previous experience with alcohol, and the setting and expectation of effect. Other psychoactive drugs, especially central nervous system depressants, may exacerbate the effects of alcohol when taken concomitantly.

Intoxication, occasional or regular, is a key risk factor for the adverse consequences of drinking, which in some cases might also involve dependence. However, just as behavioural changes associated with intoxication are influenced by social and cultural expectations, so too is the link between intoxication and adverse harms, especially social harms. These types of harms have been defined as a failure to fulfil major social obligations associated with family, job, and public demeanour. Social reactions to intoxication are a key part of the mechanism by which social harms (public drunkenness, drink-driving, job-related problems such as absenteeism and loss of job, family problems such as separation and divorce) are recognized by society. In places where drinking is a daily or almost daily activity of many, and even heavier drinking is accepted in special circumstances (e.g. weddings, carnival), reactions to intoxication may take some time to develop, and so will related social harms. In other places, such as 'dry' cultures where most people do not drink and rules against intoxication are strict, reactions to small behavioural changes associated with drunkenness may be swift and severe, leading to social harms for intoxicated drinkers and those around them.

Increasing consumption leads to a state of intoxication, which depends on the amount drunk and previous experience of drinking [5]. Even at a low blood alcohol concentration of around 30 mg/100 ml (6.5 mmol/l), the risk of accidental injury is higher than in the absence of alcohol, although individual experience and complexity of task have to be taken into account. In a simulated driving test, for example, bus drivers with a blood alcohol concentration of 50 mg/100 ml (10.9 mmol/l) thought they could drive through obstacles that were too narrow for their vehicles. At 80 mg/100 ml (17.4 mmol/l)- the current legal limit for driving in this country- the risk of a road accident more than doubles; and at 160 mg/100 ml (34.7 mmol/l), it increases more than 10-fold.

People become garrulous, elated, and aggressive at levels greater than 100 mg/100 ml (21.7 mmol/l) and

then may stop drinking as drowsiness supervenes. After-effects ('hangover') include insomnia, nocturia, tiredness, nausea, and headache. If drinking continues, slurred speech and unsteadiness are likely at around 200 mg/100 ml (43.4 mmol/l), and loss of consciousness may result. Concentrations greater than 400 mg/100 ml (86.8 mmol/l) commonly are fatal as a result of ventricular fibrillation, respiratory failure, or inhalation of vomit (this is particularly likely when drugs have been taken in addition to alcohol).

The psychoactive impact of alcohol leads to immediate effects on mood, motor function and thinking processes [6]. Even a single occasion of excessive alcohol consumption can lead to a range of risk-taking behaviors, such as violence, unplanned and unprotected sex, accidents, falls, injuries sustained while driving vehicles or operating machinery, and acute alcohol poisoning, which may require intensive care admission. Intoxication can also be associated with a range of social and legal harms that may have far-reaching consequences for the individual and those around them. The consequences of these acute episodes of intoxication can result in chronic health problems such as disability in the case of injury, sexually transmitted diseases in the case of unprotected sexual activity and increased risk of blood-borne viruses such as hepatitis B, C and HIV, particularly where concurrent intravenous drug use is present.

Addiction

All addictions have at least one thing in common: the first step is to admit that you might need help [7]. In some ways, this may be one of the hardest of a series of incredibly hard steps. But it is impossible to finish the journey to sobriety without taking that first step of admitting that you have a problem. Simply admitting to having a problem dealing with alcohol will get the treatment ball rolling, and the sooner treatment is begun, the greater its chance of success. And you don't have to be an alcoholic to seek treatment. Many people recognize they have a problem with alcohol and seek treatment, hoping to avoid falling into deeper problems.

One deterrent to getting help can be misconceptions about who alcoholics are. Sadly, the myth of the alcoholic as a weak person with low morals still exists in our society. The truth is that almost anyone who drinks can become an alcoholic. Talking to a health-care provider trained in treating alcohol-related problems can help someone overcome his sense of shame or embarrassment and allow treatment to begin.

Mental Health

Harmful alcohol use and dependence is a common comorbidity of mental disorders [8]. Managing the physical sequelae of alcohol dependence, the

psychological consequences and underlying mental health problems takes skill, patience and time.

Symptoms of all kinds of mental disorder and illness can be caused, exacerbated or hidden by alcohol dependence. If the exact diagnosis is in doubt, then the risk assessment and safety of the patient needs to be the first priority.

Key modifiable risk factors for clinicians are the following:

- Alcohol misuse
- Mental illness or disorder
- Chronic pain or illness

Liaison psychiatry works at the interface and overlap of psychological and physical illness and disease. Some patients present with physical problems, and while in the hospital are supported in withdrawing from alcohol dependence. If there are specific management problems, or concerns about underlying mental health needs, referral to liaison psychiatry services is appropriate.

One of the functions of many liaison psychiatry teams is the assessment of people who have self-harmed or attempted suicide. Not infrequently, patients presenting to hospital with these problems are intoxicated. A mental health assessment can be completed while the patient is intoxicated, but this only tells us what the mental state of an intoxicated person is. It is more useful to wait for the patient to 'sober up' when their mental state can be better assessed at the point of discharge, and the patient involved in any plans for follow up or ongoing care.

Violent Behavior

Many investigators have reported a close link between violent behavior, homicide, and alcohol intoxication [9]. Studies conducted on convicted murderers suggest that approximately half of the murderers were under heavy influence of alcohol at the time of the murder. When consumed in large quantities, alcohol may induce aggression and violent behavior by disrupting normal brain function. By impairing the normal information processing capability of the brain, a person can misjudge a perceived threat and may react more aggressively than warranted. Serotonin, a neurotransmitter, is considered to be a behavioral inhibitor. Alcohol abuse may lead to decreased serotonin activity, causing aggressive behavior. High testosterone concentrations in criminals have been associated with violent crimes. Adolescents and young adults with higher levels of testosterone compared to the general population are more often involved in heavy drinking and consequently violent behavior. Young men who exhibit antisocial behavior often "burn out" with older age due to a decreased level of testosterone and an increased level of serotonin. By

modulating serotonin and testosterone concentration, alcohol may induce aggressive and violent behavior when consumed in excess. Alcohol abuse by a husband may be related to husband-to-wife marital violence. Studies have shown a link between alcohol abuse by a husband before marriage and husband-to-wife aggression in the first year of marriage. The most violence abuse occurs in the first year of marriage in cases in which the husband was a heavy drinker before marriage and the wife was not.

Diseases

Alcohol is recognized as a causal agent for many illnesses, so it is no wonder that alcoholism has been referred to as the ‘great imitator’ of other diseases [10]. Yet the key to any alcohol problem lies within the brain and the mind. People consciously drink alcohol with the purpose of altering mood states; the mechanisms behind this and why alcohol may end up becoming an addiction has puzzled researchers for decades. First, alcohol may be part of our nature, in the sense that alcohol liking and seeking may have been under positive selection during our evolutionary history, which may make alcohol distinctive from other drugs of abuse. Second, individuals vary widely in their innate responses to alcohol; however, the neurobiological mechanisms underlying these differences are likely not the ones causal to addiction. Third, alcohol addiction is not defined by physical dependence, *i.e.* the emergence of withdrawal symptoms upon cessation of drinking, but rather by its chronic relapsing course, where relapse is triggered by powerful urges or cravings that cause the loss of behavioural control. The phenomenon of craving is at the focus of neurobiological theories of alcohol addiction. Finally, although substantial knowledge on the neurobiology of alcohol addiction has been accumulated, there is so far little progress in the pharmacotherapy for this disorder; part of the reason for this is that existing pathophysiological concepts are not consequently applied to medication development.

That the effects of long-term heavy drinking can be serious and even fatal is generally well known [2]. Less well known is the range of medical conditions to which alcohol contributes and the relatively low levels of consumption at which the risk of harm begins to be important. The relationship between alcohol and health is complex. Alcohol-related disease has a direct dose–response relation: the greater the amount drunk, the more the harm done. This applies to liver cirrhosis, hypertension, and haemorrhagic stroke. Alcohol-attributable disease results from a series of factors that can be ‘related to levels and patterns of consumption but also other factors such as culture, regulation and beverage quality’. These are deaths that would not have happened without the presence of alcohol. In

cardiovascular disease a modest beneficial effect had been reported with moderate amounts of alcohol; however, recent research suggests that any benefit had been overestimated and the so-called protective effect is losing favour among experts.

Comorbidity

Comorbidity of substance use and mental health disorders among older adults is particularly complex [11]. Given biological changes that occur as a natural part of aging, many criteria used for identification of substance use or mental health disorders manifest differently in older adults compared to their younger counterparts. For example, older adults endorse AUD (alcohol use disorder) criteria differently than younger adults, suggesting an age-related bias. Criteria such as tolerance to alcohol or not fulfilling a role obligation may not apply to an older adult whose tolerance naturally reduces with age and whose number of roles may be reduced due to events such as retirement. Depressive symptoms also manifest differently among older adults, as they do not demonstrate sadness or depressed mood at the same rates or intensity as their younger counterparts. Similarly, bipolar disorder is often difficult to diagnose among older adults given that they are much less likely to manifest manic or hypomanic symptoms than younger adults.

Comorbidity in older adults manifests primarily via two distinct pathways. The first pathway is an adult who had one or more psychiatric disorders in early adulthood or middle age and has carried those through to older age. The second pathway is late onset, where the older adult experiences psychiatric symptoms, including an AUD, for the first time in later life. Historically, it has been assumed that those with early onset generally present with greater severity of psychiatric problems and more entrenched histories of addiction, which may be considered treatment resistant. For the older adult, however, biological vulnerabilities resulting from natural aging, in addition to chronic disease or maladies that tend to be more common in later years, create a complex picture of health for either pathway.

Health Care

Where alcohol causes physical withdrawal syndromes, detoxification is a treatment intervention [12]. Medically assisted detoxification can be delivered both in the community and in - patient settings. Patients with moderate or severe withdrawal may require in - patient detoxification. The main objectives of pharmacological interventions in alcohol withdrawal are the relief of subjective withdrawal symptoms, the prevention and management of more serious complications, and preparation for more structured psychosocial and educational interventions. The alcohol withdrawal syndrome lasts for about 5 days,

with the greatest risk of severe withdrawal symptoms in the first 24 to 48 hours.

During the period of detoxification, chlordiazepoxide or diazepam are safe to use and have an anticonvulsant effect that helps to safeguard against epileptic seizures. The principles of nursing care in alcohol detoxification include monitoring of dehydration, blood pressure, dietary intake, orientation to time, place and person, and sleep. The key areas of nursing care are to:

- Promote client safety.
- Maintain physiological stability during the withdrawal phase.
- Meet physical and psychological needs.
- Provide appropriate referral and follow - up.

Conclusion

Alcohol in small quantities creates a feeling of relaxation, *i.e.*, it affects the loss of shyness. Such a mental state encourages sociability and facilitates

intimacy with other people. Likewise, alcohol relieves feelings of fatigue, exhaustion, boredom and brings a person into pleasant emotional states. By increasing the per mille to a certain limit, the euphoria grows and creates a feeling of omnipotence and freedom as well as a feeling that everything can be achieved with ease. A person under the influence of alcohol very quickly accepts a beautified and idealized image of himself. Whoever experiences this once, after sobering up and ugly confrontation with reality, has a need to repeat the same feeling of false omnipotence. As with any other addiction, in the case of alcohol, tolerance grows rapidly and increasing amounts are needed for the same effect. On the other hand, the desired effect of alcohol is getting shorter. Drunkenness frees a person from their own obligations and responsibilities, so the whole environment suffers in order to be nice to the alcoholic for a short time.

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