Singapore Med J 1997; Vol 38(5):214-216

Alcoholism - Treating The Disease

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INTRODUCTION

Alcoholism is a chronic, relapsing and progressive disease with dire physical, psychological and social consequences. Medical and surgical wards have long been the bane of the stigmatised alcoholic seeking treatment for his medical complications yet resisting or refusing treatment for his underlying alcoholism. At the Alcohol Treatment Center, we focus on treating the disease of alcoholism and rehabilitating the whole person. Admission figures culled from the first 8 months of its inception since August 1993 showed that of 80 consecutive male inpatient alcoholics who completed our programme, the majority were from the 2 major ethnic groups of Chinese (36.3%) and Indians (51.3%). With an over-representation of the latter. The reasons for this disparity are subject to a separate study but among other things, are likely to be a combination of social stigma, selective referral, service utilisation and cultural or religious taboos in treatment seeking.

DEFINITION

In order to establish a more precise use of the term 'Alcoholism', the National Council of Alcoholism and Drug Dependence and the American Society of Addiction Medicine created a Joint Committee to study the definition and criteria for the diagnosis of alcoholism[1]: 'Alcoholism is a primary, chronic disease with genetic, psychosocial, and environmental factors influencing its development and manifestations. The disease is often progressive and fatal. It is characterised by impaired control over drinking, preoccupation with the drug alcohol, use of alcohol despite adverse consequences and distortions in thinking, most notably denial. Each of these symptoms may be continuous or periodic.'

Epidemiology

Alcohol dependence and abuse are among the most prevalent mental disorders in the general population. In the US, the lifetime risk for alcohol abuse or dependence is between 15% and 20% for men and a lower but substantial figure for women[2].

Much research interest in the area of genetic epidemiology has focused on the clinical and genetic heterogeneity of alcoholics, which to date have found much overlap[3], between Cloninger's type 1 and type 2 Alcoholics[4] and the Primary versus Secondary Alcoholism Diagnostic Scheme of Schuckit[2], and others. Type 1 ('milieu-limited') alcoholism occurred in both female and male offspring of alcoholic biological mothers and fathers, was influenced by postnatal environmental effects in the adoptive family with adult onset and minimal criminality. In contrast, type 2 ('male-limited') alcoholics have earlier age of onset for severe alcohol-related problems, are impulsive, more likely to have other associated drug use disorders, and have a psychological profile similar to the anti-social personality disorder.

Physical examination

Physical examination should be directed at detecting signs of acute intoxication/withdrawal syndrome and medical complications of alcoholism. A thorough physical examination is necessary with particular attention to the gastrointestinal, hepatic and neurological systems. Also, look for evidence of recent and past illicit drug use (eg track marks, abscesses on arms, etc) in younger male patients who may have polysubstance abuse.

Mental state examination is then carried out with particular focus on cognitive functioning. Continual assessment is necessary to elicit the presence of co-morbid conditions and personality disorders especially after the period of detoxification.

Investigations

Blood markers of heavy alcohol use include elevation of gammaglutamyl transferase (GGT > 40) and mean corpuscular volume (MCV > 90). With liver cell alterations, levels of Aspartate Transaminase, AST (SGOT) and Alanine Transaminase (SGPT) may also rise. However, it should be noted that none of the biochemical markers are pathognomonic of alcoholism. Another marker, Carbohydrate Deficient Transferrin (CDT)[5] has tremendous potential for clinical use. It has a specificity of 80% or higher, with a similar sensitivity.

Goals of treatment

In our Alcohol Treatment Center, as in most treatment centers in the US, total abstinence is the only relevant goal of treatment as 95% or more of alcoholics are unlikely to achieve any long period of controlled drinking[2].

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Beyond abstinence, sobriety is the ultimate goal of treatment. Viewed from this broad perspective, a life free of alcohol and other drugs with return to normative functioning in all major areas of life should be the long-term aim of treatment. Social drinking cannot substitute for sobriety if risk of relapse is to be tackled realistically.

MANAGEMENT

Management may be broadly divided into 3 phases:

A. Detoxification

It aims to help patients achieve safe withdrawal from alcohol and facilitate further rehabilitation. Medications are important for adequate sedation, alleviation of symptoms (especially autonomic nervous system dysfunction) and in particular, reduce the risk of withdrawal seizures and delirium tremens.

Benzodiazepines are the drug of choice as they are long-acting, cross-tolerant with alcohol and anti-convulsive. Diazepam and Chlordiazepoxide (half-life 30 to 60 hours) have been extensively studied and have the best proven efficacy[6]. Rapid tapering (through stepwise dose reduction of 10% - 20%) may be achieved usually within 5 to 7 days after initial stabilisation through a flexible or fixed schedule. Chlormethiazole[7] is less popular as an alternative to Benzodiazepines with a disadvantage of greater potential for dependence and respiratory depression (in combination with alcohol). Shorter acting benzodiazepines with no active metabolites (eg lorazepam, oxazepam) are preferable for the elderly, those with hepatic impairment, liver failure, elevated blood alcohol and perioperative patients. For patients with a past history of withdrawal seizures, current expert opinion is divided about the addition of phenytoin[8] in the presence of adequate coverage of benzodiazepines. What is certain is that long-term prophylaxis with phenytoin is not indicated except for patients with co-existing seizure disorder unrelated to alcohol.

Inpatient detoxification is advisable for patients with severe withdrawal symptoms, previous withdrawal fits, medical or psychiatric complications, the elderly and those with poor social support.

Outpatient detoxification is less desirable in the local context where supervision tends to be less stringent and the alcoholic is likely to continue drinking and default follow-up.

Patients who suffer from morbid jealousy, alcoholic hallucinosis and delirium tremens may benefit from the additional use of anti-psychotic medications like Haloperidol up to a maximum of 20 mg/day. Chlorpromazine should be avoided for its tendency to reduce the seizure threshold and risk of precipitating withdrawal fits.

Concurrent medical conditions should be treated. As prophylaxis against Wernicke's encephalopathy, intramuscular thiamine 100 mg given for at least 3 days can be followed by oral thiamine/B complex preparations.

B. Rehabilitation

The primary focus on alcoholism as a primary disease should underscore all rehabilitation efforts. Most inpatient alcohol and substance abuse programs in the US stress abstinence as the cornerstone of successful treatment. The majority adopt the comprehensive and multi-disciplinary approach of the Minnesota Model[9,10] treatment program for alcoholism and drug dependence. Our program at the Alcohol Treatment Center is basically modeled after this approach.

Treatment components include group therapy, multi-professional staff, use of lay counselors, lectures, therapeutic milieu, work assignments, family involvement, a Twelve-Step Program, daily readings from AA literature, AA attendance and recreational therapy. This model views alcoholism as a chronic, progressive illness which, in the absence of a cure can proceed to successful treatment if the patient adheres to the comprehensive continuum of care plan. The use of lay counselors (often themselves recovering alcoholics) has yet to gain wide acceptance locally, but is known to be particularly effective in engaging patients in their own treatment within the therapeutic community[9]. The intense immersion within a therapeutic milieu of the Minnesota type model offers many powerful tools such as instillation of hope, challenging addictive thoughts and beliefs through group therapy, supervised peer evaluation and meetings with counselors/therapists, identification of barriers to recovery, understanding the nature and treatment of addiction (especially the relapse/recovery process), clarification of emotions and use of self-help groups. Cook[9] has also concluded that perhaps the Minnesota Model's most powerful tool is its comprehensive and dogmatic ideology, which acts to counter the pathological cognitive tendencies of the alcoholic.

Group psychotherapy is useful in addressing narcissistic blind spots, defense mechanisms (eg denial, rationalisation, minimisation, projection etc) and maladaptive coping styles. Psychotherapeutic techniques like confrontation and feedback are utilised skillfully in an honest, yet non-judgmental way. Treatment focus should be on the individual's 'here and now'. Past events and behaviour are explored only to demonstrate current patterns of dysfunctional behaviour. Individuals are encouraged to talk openly and reflect on the feedback given by group members. Progressive insight gradually emerges on areas of change necessary to facilitate recovery. However, psychoanalytic orientations and interpretations are avoided.

Length of treatment (eg 2 to 4 weeks' inpatient stay) and emphasis on various components should be skillfully individualised for each patient with ample consideration to their specific needs. It is necessary to understand that the milieu is itself therapeutic, and unnecessary leave (except to attend AA meetings in the evenings) are best discouraged.

C Aftercare (or Continuing Care)

Continuing Care is an important part of ongoing rehabilitation to consolidate the gains already achieved in primary rehabilitation and help minimise relapses. Throughout rehabilitation and continuing care phases, personal responsibility for recovery needs to be emphasised, taking into consideration the ever-present possibility of relapse. Various relapse prevention strategies may also be taught, rehearsed and reinforced at the rehabilitation and after-care phases to prevent any 'slip' (initial drinking without resuming the previous addictive pattern) escalating to a full-blown 'relapse'.

Besides regular outpatient follow-up, patients are expected to be involved in local support group meetings with other recovering alcoholics and led by a staff member. This is a crucial avenue for sustained support, continued education, clarification of concepts learned, reinforcement of positive life-style changes and an ongoing reminder to avoid various triggers for relapse. At ATC, evening support groups are held twice a week, where patients interact with other members who have had several years of sobriety, many of whom are active AA members. Currently, we also have family education with counseling by our Medical Social Worker for alcoholic spouses and close family members (or significant others). Separate sessions are held with family members and the alcoholic when ready for therapeutic confrontation of his drinking behaviour and alcohol related abuses, usually upon completion of detoxification (about the 2nd or 3rd week of stay).

Another invaluable community resource is the local Alcoholics' Anonymous (AA) meeting, a self-help group first established in Akron, Ohio in 1935, that has spread all over the world. It is a non-profit organisation with no religious/political affiliation and only one criterion for membership - 'a desire to stop drinking'. AA's simple but sensible slogans and group identification help provide a structure and focus for the recovering alcoholic, who gradually acquires a network of sober friends amongst whom he can 'work out' his recovery. Al-anon, its counter-part for spouses/family members, is similarly available in Singapore to address dysfunctional caretaking/enabling behaviour and support spouses/family members deal with their own denial, isolation and demoralisation.

Some patients may require further rehabilitation in the form of residential half-way houses, where a longer (eg 1 to 2 years) but less intensive program provides support. These patients typically have inadequate social resources or personality problems that require a broader, more structured program. Such extended care in a half-way house is particularly conducive for the socially displaced (at least temporarily) and those who need additional supportive services to bridge their transition to independent community living.

Useful pharmacological adjuncts to treatment are also available in the form of Disulfiram (Antabuse) and Naltrexone. Either should be be used within the context of ongoing psychosocial treatment. Disulfiram acts by inhibiting acetaldehyde dehydrogenase which then results in the Disulfiram-ethanol reaction. The latter is precipitated by alcohol consumption and produces flushing, nausea, dyspnoea, palpitations, dizziness, headache, apprehension and hypotension. Suitable patients are those well-motivated to stop drinking and are cognitively intact.

Naltrexone, an orally active, opioid antagonist, known for the treatment of opiate dependence, is available for use in the recently abstinent alcoholic, at 50 mg daily. Subjects who drank while on Naltrexone reported less of a 'high' from alcohol. O'Malley et al[11] further demonstrated interaction with the type of psychotherapy received in that the naltrexone and supportive therapy group of patients had the highest cumulative abstinence rate.

ACKNOWLEDGEMENT

The author gratefully acknowledges the supervision, mentoring and ongoing support of Prof Robert M Morse, Director of Addiction Services & Prof of Psychiatry at Mayo Clinic. It was at his Alcohol and Drug Dependence Unit (Rochester Methodist Hospital/St Mary's Hospital), Rochester, Minnesota that the author's experience with the Minnesota Model was first developed in 1993.

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