

Presidential Address

THE PREVENTION OF ALCOHOL-RELATED PROBLEMS¹

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Alcoholism is the most common psychiatric disorder. Epidemiological surveys carried out in our country (Dube et al., 1978; Lal and Singh, 1978; Mohan, 1981; Singh, 1986; Mathrubootham, 1989) reveal that 20 to 40% of subjects aged above 15 are "current users" of alcohol and nearly 10% of them are regular or excessive users. We find 15-20% of patients seeking admission in psychiatric facilities are for alcohol related problems. Many of them give a history of being habituated to it for 5 years or over and show signs and symptoms of physical and psychosocial complications of alcoholism. It is also observed that for every patient receiving treatment for alcohol dependence in the department of psychiatry, there are 10 more patients in the same hospital in various other departments receiving treatment for alcohol related problems such as gastritis, hepatic dysfunction, injuries, organic brain syndrome and suicide attempt etc. Further, alcoholism causes psychosocial problems such as disruption in the family, fall in work efficiency and also contributes to accidents, suicides, crimes and violence. The extent of the individual, public health and social problems associated with "current users" of alcohol is extensive, far reaching and grave.

During the Nehru Birth Centenary year (Nov. 1988-1989) the Government created a number of deaddiction beds

in the country by a circular from the health department. Additional staffs and funds are required to run these units effectively and efficiently. The social welfare department provides fund for voluntary agencies to establish rehabilitation units. However there is little coordination between the health and social welfare departments.

These sort of patchy programmes will only drain the finance without bringing any significant changes in the situation.

Special units have to be created for alcohol and chemical abuse management with programmes for prevention, early identification, treatment, after care and research. The special centres should have an epidemiologist, health educators, social workers, psychologists, psychiatrists and nurses trained in deaddiction service in their staff. We have very few special clinics for de-addiction and they lack considerably in facility and man-power.

Alcohol dependence and alcohol related problems cost heavily to the community and form a major public health problem. In my address I shall outline the steps and programmes that need to be taken for prevention of alcohol related problems.

The new perspective in preventive programme

In the past much was discussed for and against prohibition. Studies of con-

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sumption of alcohol in several countries have confirmed that the number of heavy drinkers can be estimated from the total alcohol consumption of the state and the country using Lederman's Lognorm or 'J' curve. Prohibition is included among the directive principle of the state policy set out in the Constitution of India article 17. But there is formidable political and emotional obstruction to prohibition. So the Government uses various control measures such as control of production, restriction on number of types of alcoholic beverages, outlet, pricing, excise duty and hours of sale.

W.H.O. (1975) "Purple Book" recommends alcohol control measures to limit consumption and views control of alcohol availability as a public health issue.

Until some years ago there had been a widespread tendency to conceptualize the whole gamut of alcohol problem as manifestation of an underlying entity alcoholism or alcohol dependence. However there are many physical, mental and social problems that are not necessarily related to alcohol dependence. Alcohol dependence constitute only a small part of the total alcohol related problems (W. H. O., 1977).

The conceptualization of the field only in terms of "Alcoholism" is felt to narrow the field of discussion. A broad view of alcohol related problems came to be accepted as the frame of reference for action.

The objectives are to reduce mortality and morbidity associated with alcoholism and also to reduce alcohol related problems. The constraints are that the objectives must be met without significant economic dislocations in the public or private sector and without infringement of individual freedoms.

Effective control of alcohol related problems will most likely result from

social policy which evenly addresses the following areas:— Alcohol supply, social environment and actual or potential user. I want to emphasise the word evenly here as no single measure or strategy will be able to control the multifaceted alcohol related problems.

David H. Knott (1986) advocates a communicable disease model of the alcoholism for the control and prevention of alcoholism and alcohol related problems. In a classical communicable disease such as viral encephalites, the agent is virus, host is the human (especially the central nervous system in humans) and the vector is a mosquito. With the alcoholism, the paradigm is; agent alcohol; host human (with emphasis on high-risk groups); and vector the distributing system, i. e., the sociocultural milieu. The research in regard to control and prevention efforts should embrace all three components of this model.

On the other hand, Blane (1986) argues that the traditional community health models derived from experience in combating infectious diseases requires rethinking and modification for effective application to social health problems such as alcohol, drugs, smoking and delinquency which do not follow disease definitions and are essentially behavioural and learned in nature.

Currently the preventive strategies employed and researched in the control of alcohol related problems are not confined to any discrete conceptual model described above namely distributions of consumption model, community health model and social science model and there is movement toward multimodel approaches.

PRIMARY PREVENTION

Primary prevention is aimed at reducing the incidence of alcohol, and alcohol related problems.

The following approaches are generally employed:

1. Reducing the availability of alcohol
2. Strengthening of host resistance
3. Controlling the contributing environmental conditions (W.H.O., 1990)

Alcohol control measures

Gandhiji said "by prohibition we may not leave to the future government the fate of lakhs of men and women who are labouring under the curse of intoxicants and narcotics".

The political and financial power of the alcoholic beverage industry, plus the societal ambivalence towards drinking vs. prohibition lead to the lifting of prohibition and introduction of control measures.

There are laws and regulations controlling production, sale, outlet and price of alcoholic beverages.

Strengthening of host resistance

Enhancement of host resistance is attempted through information and education.

The models that are used are (1) The moral principles model (2) The scare model (3) The factual knowledge model (4) The affective educational model and (5) The health promotion model (W.H.O., 1990).

Providing factual knowledge is preferred over the moral principles model and the scare model. The factual knowledge about the risk factors and complications of alcohol use should be provided. The public should be informed about the alcohol content of various alcoholic beverage, and safe limit and helped to take responsible and sensible decision.

The thinking that alcohol is a 'Magic elixer' and 'tranquillizer' for all stresses should be countenanced.

I am reminded of the saying:

"We drank for happiness and became unhappy

We drank for relaxation and got the shakes

We drank to erase problems and saw them multiply

We drank to cope with life and invited death".

Affective approaches are educational techniques that focus on the correction of some predisposing personal deficiencies-problems related to self esteem, defining and clarification of personal values, decision making, coping skills, problem solving, interpersonal skills and the recognition of social pressure and responses to it.

Health promotion programmes, consist of promoting interest in sports and exercise, relaxation training and healthy life styles.

Controlling the contribution environmental conditions

Restriction of the advertisement of alcoholic beverages in mass media, enforcing time limited abstinence for airline pilots and drivers operating public vehicles, drinking and driving laws and server training in establishments serving alcohol are some of the programmes aimed at controlling the environmental conditions that contribute to alcohol-related problems.

SECONDARY PREVENTION

Alcoholism is a common treatable condition which remains unrecognised and untreated for long in the community. Secondary prevention aims at early identification and detection of alcohol related problems in the community and get incipient alcoholics into treatment, with the goal of reducing its prevalence, by shortening its duration.

Alcoholism and health care professionals

The prevalence of alcoholism in people seen in health care settings require health care professionals to be astute diagnosticians for the presence of this disorder. Patients with alcoholism experience multitude of physical and psychosocial complications and are seen with great frequency in emergency rooms, hospital wards, psychiatric clinics and practitioner's office. Yet it is currently estimated that in 85% of subjects the diagnosis of alcoholism is missed or overlooked and receive no treatment for the primary disorder.

If the patient present with problems such as sleep disturbances, heartburn, liver enlargement or dysfunction, frequent trauma, bruises and burns or heavy smoking and harsh morning cough, the physician should be on the alert as the complaints may be alcohol related.

Physicians should cultivate a more alert eye and aim at earlier and more complete diagnosis. If the element of drinking is allowed to remain hidden, it will defeat the plans to help the patient. On the other hand early diagnosis of alcoholism under the cover of these physical complaints will lead to proper care of the illness and also help treating patients before dependence is advanced.

Similarly one should always be on the look-out for a hidden alcohol problem in the spouse if a woman repeatedly comes for depression, hypochondriasis and psychosomatic complaints (alcoholism is a family disease).

Spouse's complaints about patients drinking, disturbed marital relationship, separation and threats of divorce, sexual problems, economic problems, frequent quarreling, violence and the wife being burdened with all the family responsibilities are the family clues of alcoholism.

It is not only general physicians

and specialists of other branches who are guilty of missing the diagnosis of alcoholism, psychiatrists also miss the diagnosis or fail to initiate treatment against alcoholism especially when there is scapegoating, which the alcoholic's wife or child present with psychiatric problems.

Alcoholism in Industrial workers

In Industry if the worker frequently absents, regularly comes for certificates on Mondays for vague gastrointestinal symptoms, if there is deterioration in the workers job performance and he has quarrels with co workers and supervisors, it is probable that the industrial worker is increasingly becoming dependent on alcohol. Alcoholism, Absenteeism, Argumentativeness and Accidents are the four 'A's that are to be remembered in the diagnosis of alcoholism in industrial workers.

Early Diagnosis

Why is diagnosis of alcoholism missed in the early stages and the diagnosis is made only when all its complications are badly obvious and sadly irreparable?

Edward (1987) in his book "The treatment of drinking problems" lists the possible reasons for alcoholism so often remaining under cover.

1. Not knowing what we are looking for:

The diagnostician may only be attuned to looking for alcohol dependence or the extreme case (with his ideas even on these presentations no more than vaguely formed) but with no real knowledge of the many different types of alcohol-related problems which may be daily impinging on his work.

He must be familiar with the common diagnostic clues.

2. Lack of Vigilance:

The possibility of a drinking problem

should always be borne in mind, for otherwise even the person who is armed with all the necessary book learning is at risk of missing the obvious case.

3. Embarrassment:
Physician's embarrassment at asking about drinking problems.
4. Not knowing What to do:
Not knowing what to do if the case is uncovered.
5. The patient's denial or evasion.

He further observed that these five sub-headings together point a need for much investment in relevant professional training, by educators who are themselves close to the realities of practice.

At this juncture I wish to point out that we at the Deaddiction Unit, Institute of Mental Health, Madras have taken up the task of training primary care physicians in early diagnosis and interview skill in the diagnosis of alcoholism.

Interview skill

Alcoholics will vary in the degree of their cooperation. They may tend to deny and minimize their problem with alcohol. When interviewing a person about alcohol use, it is important to avoid terms such as alcoholic or addict. A friendly, empathetic non-judgemental and supportive approach is necessary. Questions about alcohol use need to be asked in a matter of fact, direct manner without hesitation or embarrassment. The physician's comfort level in asking the questions will increase as questions about alcohol and other drugs are routinely incorporated into every health history. Questions about heartburn, early morning severe cough, attempt to cut down their drink, how his spouse and other family members feel about his drink may be asked. Questions which thus feel out the possibility of worry or

trouble are more likely to provide a way into fruitful dialogue rather than sterile and mechanistic questions such as "How much do you drink?" When there is a history of alcohol use it is then essential to construct the outlines of a 'typical drinking day' and go fully into quantity and frequency of drinking.

Screening Questionnaire

A number of screening questionnaire have been devised which are intended to aid in the diagnosis of alcoholism. The test which has been widely researched in terms of its reliability and validity is the 25 item MAST (Michigan Alcoholism Screening Test), which has also been published in a shorter 10 item form.

The CAGE Questionnaire is very brief and contains only 4 questions that focus on *Cutting down* alcohol consumption, *Annoyance* by criticism, *Guilty* feelings associated with alcohol use and *Eye-opener* or early morning drinking.

These instruments may be used for screening the patients attending gastroenterology clinic, liver clinic, casualties, trauma unit, toxicology (attempted suicide) hypertension and diabetic clinics.

Laboratory Tests

Laboratory tests such as measurement of Mean Corpuscular Volume (MCV) and certain tests of liver function (Serum Gamma Glutamyl Transpeptidase, serum amino transferase and serum glutamate dehydrogenase levels), estimation of serum proteins, uric acid and lipid levels are useful in the diagnosis of drinking problems. The determination of blood alcohol level and use of breath analysis will help determining heavy drinking.

Occupational Alcoholism Programmes

Early intervention service (i. e. secondary prevention) has also been emphasized in the work place. Occupational alcoholism programmes also called employee assistance programmes are aimed at early detection of and intervention with employee whose work performance is impaired by misuse of alcohol. The reported success rate of these programmes, using a criterion of job retention is impressively high. However, most referred employees are alcoholics with long standing problems rather than pre-alcoholics or early alcoholics. Occupational programmes therefore appear to miss individuals towards whom the programmes are primarily targeted (Blane, 1989).

Drink-Driving Programmes

The early intervention service is directed towards persons convicted of drinking driving offences. In such programmes, offenders are offered treatment and probation instead of fines, imprisonment or other punishments.

Social learning Techniques

Social learning techniques such as assertive training, Saying 'no' to drink and training at moderate drinking may be an effective intervention for nondependent drinkers. The most frequently used approach for moderate drinking generally includes (1) setting specific limits (2) self-monitoring of alcohol consumption (3) slowing drinking through use of rate control methods (4) identifying frequent antecedents or consequences that affect drinking behaviour (5) altering antecedent conditions through stimulus control and teaching new skills such as drink refusal and (6) learning behaviour alternatives to drinking (Miller, 1984).

Stress Management Programme

It is not uncommon to find excessive drinking beginning following stressful life events or to detect underlying anxiety, panic or depressive disorder in persons suffering from alcohol dependence. Many consider alcohol as the 'Magic Elixir' which will dissolve depression and help coping with stress.

A stress management package composed of muscle relaxation, meditation, training, cognitive restructuring and coping skills rehearsal may be useful in subjects who are experiencing difficulties with drinking but who are not clinically alcoholic.

Tertiary prevention

The goal of tertiary prevention is to reduce the prevalence of residual defects or disabilities due to illness or disorder.

Relapse prevention programmes

At the time of discharge from the hospital, in an *in patient* programme, the success rate is almost 100% and within six months after discharge it is reduced to 60%. We also find that many alcoholics who enter into treatment suffer 2 or 3 relapses following that they tend to remain sober for years. I am reminded of the saying '**Wisdom comes from experience; experience comes from foolish acts**'. If one has to avoid a relapse, micro-analysis of the antecedents, situations, mood state, and cognition that preceded relapse is necessary.

Litman et al. (1983) have developed 25-items Relapse Precipitating Inventory from the information obtained from the interviews and the sentence completion questionnaire using the concepts and actual language used by the patient themselves.

They identified four factors associa-

ted with relapse—

1. Unpleasant mood states (e. g. 'When I feel depressed', 'When I feel tense')
2. External situation and euphoric state (e. g. 'When I pass a pub or off-licence', 'When I feel happy')
3. Lessened cognitive vigilance (e. g. 'When I start thinking that one drink would do no harm')
4. Social anxiety (e. g. 'When I have to meet people')

Marlatt et al. (1984) described three categories associated with highest relapse rates—

1. Negative emotional state (35%): situation in which the individual is experiencing a negative emotional state, mood or feeling such as frustration anger, anxiety, depression, boredom, etc.,
2. Interpersonal conflicts (16%): conflict associated with any interpersonal relationship such as marriage, friendship, family members or employer-employee relations.
3. Social pressure (20%):

From the inpatient programme, treated alcoholics return to a world that hold many dangers both internal and external which may precipitate excessive drinking. So the patients should be made to identify and recognise the situations that may precipitate a lapse (slip) and learn how to prevent a single lapse into a full blown relapse. **"Forewarned is forearmed"**.

Once you are seated in the aircraft are you told what to do when the cabin pressure falls? The same way the patients have to be trained in skills to handle high risk situations. There are many slogans of A. A. 'One day at a time'. 'You are only one drink away

from a drunk' are helpful in relapse prevention and maintenance programme.

Litman et al. (1983) studying the coping behaviour of alcoholics identified four factors:

1. Positive thinking (e. g. Pausing and really thinking the whole alcoholic cycle through. Thinking about how much better off I am without drink).
2. Negative thinking (e. g. Remembering how I have let my friends and family down in the past).
3. Avoidance (e. g. 'Keeping away from people who drink').
4. Distraction/substitution (e. g. 'Start doing something in the house').

The social and behavioural skills training to maintain abstinence consist of instruction and coaching and small group programmes such as modelling, role playing and behavioural rehearsal.

The three main strategies employed in relapse prevention are skill training, cognitive reframing and life style changes.

For an alcoholic to give up alcohol and remain abstinent is an uphill task requiring all his coping skills and social support.

It can be compared to a high way journey through easy paths and mountain passes having 'U' bends and narrow passages. The driver should read the warning signs and must use extra caution and driving skills to avoid accident and keep the car on the road. The same way the alcoholic should be cautious in high risk situations and steadily walk in the path of abstinence avoiding slips and relapse.

The situation can also be compared to 'Snake and ladder's game' the children play and finally reaching the goal of abstinence for all times to come.

Prevention Research

Research in preventive approaches of alcohol related problems are few in our country. Thakur et al. (1982) reported a fall in the number of cases of alcoholism immediately following prohibition and increasing to previous levels within few months. However they reported a significant decrease in alcohol related crimes during prohibition compared to previous years.

I. C. M. R. along with All India Radio has taken up the study of the effects of drug education programmes on the listening public.

Further, research on the effect of utilization of services, by education through video tapes and personal contacts of community workers of the vulnerable groups of people in the community and work places are being considered by I. C. M. R.

Special reports on Alcohol and Health by U. S. Department of Health and Human Services describe the American scene of applied prevention research in the field of alcoholism and also developing computer programmes using survey information, the effect of pricing and age limit etc. on alcohol-related problems. Robin Room (1989) describes the developments in evaluating programmes to prevent alcohol problems from many countries and provides the international scene on this subject.

"Action in anticipation is the action of the wise" a sanskrit proverb says.

I shall end my talk with a Quotation:

Confucius said, "A man who does not think and plan ahead will find trouble right at his door".

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