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ALCOHOL AND ALCOHOLISM

Report of an Expert Committee

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WORLD HEALTH ORGANIZATION

PALAIS DES NATIONS

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Geneva, 27 September – 2 October 1954

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ALCOHOL AND ALCOHOLISM

Report of an Expert Committee *

1. Introduction

When the Expert Committee on Mental Health took up the question of alcoholism in 1949, it suggested that this matter should be studied by a special sub-committee.[1] At its first session, held in December 1950, the Alcoholism Sub-Committee submitted as its basic recommendation

" that WHO should take all steps within its power to stimulate public-health services to undertake work on this problem and should be prepared to provide advisory, educational, and other services on this subject to such national health authorities as request them ".[2]

This general recommendation and more specific suggestions contained in the two reports of the Sub-Committee,[3] as well as regional seminars conducted by WHO and consultative services rendered to some governments, have undoubtedly given an incentive to activities in the desired direction. Nevertheless, in many countries the tendency remains to deal with the problem of alcoholism on the social-welfare level rather than in the framework of public health. In many countries, the concern of public authorities with the problems of alcohol still does not go beyond some regulation of the sale of alcoholic beverages, the punishment of drunkenness, and the care of alcoholics with psychoses.

While the physical and the mental sequelae of alcoholism have always been recognized as medical disorders, there has been—outside the circle of specialists—much less readiness to regard as a matter of medical concern the behaviour which results in these complications.

One of the difficulties in engaging the active interest of public-health authorities in the control of alcoholism lies in the fact that the medical

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* The Executive Board, at its fifteenth session, adopted the following resolution :

The Executive Board

1. NOTES the report of the Expert Committee on Alcohol and Alcoholism ;
2. THANKS the members of the Committee for their work ; and
3. AUTHORIZES publication of the report.

(Resolution EB15.R10, *Off. Rec. Wld Hlth Org.* 1955, 60, 4)

[1] *Wld Hlth Org. techn. Rep. Ser.* 1950, **9**, 19

[2] *Wld Hlth Org. techn. Rep. Ser.* 1951, **42**, 4

[3] *Wld Hlth Org. techn. Rep. Ser.* 1951, **42** ; 1952, **48**

nature of this problem is presented to the public-health worker in the form of authoritative statements rather than through the explanation of those features which give alcoholism the character of a medical disorder.

If public-health authorities are led to believe that the problems of alcohol are entirely economic problems—and that is the entrenched opinion in many countries—they will not see the cogency of incorporating the control of alcoholism into their programme of activities. On the other hand, if it can be shown that alcoholism as a behaviour is *per se* a medical disorder and that socio-economic factors are contributing elements to its etiology, public-health workers will not shy away from it, as social and economic elements are involved in most or all health problems with which they have to cope.

The presentation of alcoholism and other problems of alcohol as a matter of medical concern, however, requires a good deal of clarification of certain aspects of alcoholism and some effects of alcohol which have often been left to tacit implication, and more frequently have been obscured by inconsistent and inadequately defined terminology, as well as by conceptions which remained on the level of figures of speech.

Such clarification can only be brought about gradually in a process of revision and re-evaluation. The Expert Committee on Alcohol (composed of pharmacologists and physiologists), which was convened in 1953,[1] contributed much towards the clarification of questions referred to it by the psychiatrists of the Alcoholism Sub-Committee of the Expert Committee on Mental Health. It became evident, however, that to approach certain questions satisfactorily required the direct exchange of experience among pharmacologists, physiologists and psychiatrists, as well as their agreement on the interpretation of some basic conceptions of alcoholism.

The present Committee, drawn from the Expert Advisory Panels on Mental Health and on Drugs Liable to Produce Addiction, has been convened for this purpose of direct mutual clarification of ideas.

The terms of reference of the Committee call not only for the discussion of some basic conceptions related to alcohol, but also for consideration of those features which differentiate the nature of the problems of alcohol among various nations. The statement of such differences is indispensable to the application of suggestions offered by an international body.

As there was initial agreement that the term " alcoholism " does not designate a definite nosological entity, but is a collective term for a " family of problems " related to alcohol, the Committee was concerned to determine and define those features of the various alcohol problems which give them a medical and public-health character.

[1] See *Wld Hlth Org. techn. Rep. Ser.* 1954, **84.**

Pre-eminent among these features of the alcoholic process are some symptoms which have been explained often as a " craving " for alcohol; " withdrawal symptoms " ; the conception of the " loss of control "; and the " alcoholic amnesias " (" blackouts "). The clarification and definitions of the above items serve as a basis for the reconsideration of the position of alcohol in relation to drug addiction and for a classification of the disorders induced by the heavy use of alcoholic beverages.

The Committee has also considered certain forms of excessive drinking which by definition do not constitute alcoholism but which can, nevertheless, have grave consequences and form, in certain countries, the main problems relating to alcohol.

2. " Craving " for Alcohol

The terms " craving ", " irresistible desire ", " need ", and sometimes " appetite " have been employed in alcohol literature to explain certain or all forms of abnormal drinking behaviour seen in alcoholics.

There exists a variety of alcoholic drinking behaviour which specifically suggests " craving " in the vernacular sense, but closer analysis reveals that different mechanisms are at work and that a term such as " craving " with its everyday connotations should not be used in scientific literature to describe them if confusion is to be avoided.

The onset of the excessive use of alcohol, the drinking pattern displayed within an acute drinking bout, relapse into a new drinking bout after days or weeks of abstinence, continuous daily excessive drinking, and loss of control, are all behaviours which have been claimed as being manifestations of " craving " of the same order.

" Craving " and its alternative terms have been used to explain drinking arising from (*a*) a psychological need, (*b*) the physical need to relieve withdrawal symptoms, or (*c*) a physical need which originates in physiopathological conditions involving the metabolism, endocrine functions, etc., and existing in the drinker before he starts on his drinking career or developing in the course of it.

It has been pointed out by some investigators that a physical craving for alcohol, as indicated by withdrawal symptoms (see section 3), is seen immediately following withdrawal of alcohol only after prolonged, continuous, and heavy use ; such a physical craving cannot be postulated as the cause of the resumption of drinking after a considerable period of abstinence when withdrawal symptoms are no longer present.

The Committee feels that a sharp distinction should be drawn between (*a*) the processes operative immediately after withdrawal of alcohol in the

situation described above, and (*b*) those which lead to resumption of drinking after the disappearance of withdrawal symptoms.

Since, on the interruption of continuous drinking, the distressing withdrawal symptoms provoke the drinker to seek relief from them by the use of more alcohol, the Committee would prefer to refer to this condition as a *physical dependence* on alcohol.

During a period of abstinence, even in the absence of withdrawal symptoms, one observes clinically the building up of psychological tension which provokes a " pathological desire " [1] for alcohol as a means of relieving this tension ; in this condition, the individual may be said to be *psychologically dependent* on alcohol. It must be pointed out, however, that mounting psychological tension is not the only cause of resumption of drinking. It can also be caused by social pressure to drink, or sometimes even by the accidental ingestion of alcohol.

In addition, a physiopathological condition (other than physical dependence) cannot be excluded as one of the factors which may lead to the resumption of drinking after days or weeks of abstinence.

In all alcoholics, regardless of whether they have an abnormal disposition or suffer from any acquired personality disorder, one observes a weakening of that part of the higher personality from which the inhibition of primitive tendencies derives. As a result there appears a release of the primitive side of the personality. The pathological desire for alcohol therefore becomes more evident as the inhibiting forces weaken and ultimately fail.

There is also a relatively small group of drinkers in which the pathological desire for alcohol appears practically at the beginning of their drinking career, instead of after many years, and can thus lead to a rapid development of alcoholism. Among these will be found certain types of psychopaths (e.g., the volitionally weak and the impulsive personalities) and certain cases of somatic or mental disorder (e.g., post-concussion states, epilepsy, certain psychoses, and oligophrenia). There is, however, a minority in this group who show none of these conditions and yet manifest a pathological desire for alcohol from the beginning of their drinking history.

3. Withdrawal Symptoms

Withdrawal symptoms may be defined as those manifestations which appear either after cessation of drinking or even after an abrupt decrease in the rate of intake, either of which, in the opinion of the Committee,

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[1] The Committee considers this term preferable to the frequently used " compulsion ", which gives a false impression to patients and in addition has a clear-cut technical sense in psychiatry which makes it inappropriate in this connexion.

constitutes a " withdrawal ". It follows that such symptoms are not present as long as a sufficient degree of intoxication is maintained and that the symptoms can be relieved by alcohol or by some drug with similar pharmacological effects (e.g., paraldehyde, barbiturates, and chloral hydrate).[1]

The kind and intensity of the withdrawal symptoms vary between individuals but appear to be correlated with the degree of intoxication and with the length of time over which this degree of intoxication has been maintained before cessation, or reduction, of intake of alcohol. After relatively short periods of continuous heavy drinking, withdrawal symptoms include tremor, weakness, perspiration, hyper-reflexia, insomnia, anorexia, nausea, vomiting, diarrhoea, slight hypertension with postural hypotension and slight elevation of body temperature. Under these circumstances, the symptoms persist for only 24 to 72 hours.

After a prolonged period of very heavy drinking (more than 30 days of continuous intoxication with amounts of alcohol sufficient to induce definite motor incoordination), withdrawal symptoms include those mentioned above in a more severe degree and, in a proportion of drinkers, convulsions and mental disturbances ranging from hallucinations without loss of insight to typical delirium tremens. The symptoms usually appear in a definite time sequence. Tremor, weakness, digestive symptoms, and circulatory disturbances become evident within 12 hours after sudden cessation or reduction of alcohol intake ; [2] hallucinations without loss of orientation or insight may appear during the first 24 hours after withdrawal ; convulsions, when they occur, usually appear between the twenty-fourth and forty-eighth hours after withdrawal ; typical delirium tremens, when it occurs, is most likely to begin between the third and fifth days after withdrawal. Under such circumstances, symptoms usually disappear in 14 days or less, though minor disturbances may occasionally persist for six weeks. Convulsions and delirium must be considered dangerous to the life of the patient and should be prevented or treated by appropriate means such as the administration of sedatives with slow reduction of the amount over a period of days. Other kinds of disturbance (e.g., nutritional deficiencies, water and electrolyte imbalance) must also be corrected.

4. " Inability to Stop Drinking " and " Loss of Control "

Frequently the expressions " loss of control " and " inability to stop drinking " have been used synonymously and have been explained as manifestations either of an undefined or of a more or less specified " craving ".

[1] Isbell, H., Fraser, H. F., Wikler, A., Belleville, R. E. & Eisenman, A. J. (1955) *Quart. J. Stud. Alcohol*, **16**, 1

[2] Victor, M. & Adams, R. D. (1953) *Res. Publ. Ass. nerv. ment. Dis.* **32**, 526

In the opinion of the Committee, the two expressions should not be employed interchangeably but should be used to designate two different manifestations of alcoholic behaviour, for the following reasons.

In " wine-drinking " countries, and some of the " beer-drinking " countries, a certain proportion of the drinkers reach a stage at which they cannot withstand any—even short—periods of abstinence, and drink day in, day out from rising till retiring for sleep, but do not lose the ability to regulate their alcoholic intake. They are able to adjust their degree of intoxication to the circumstances in which they find themselves. But they cannot be induced to abstain even when it has become evident to them that continuation of their drinking will lead to grave disease or other serious consequences.

This behaviour may be called " inability to stop drinking " and may be attributed to either physical or psychological dependence, or both. In wine-drinking countries this inability to stop has been regarded by some authors as the sole criterion of alcoholism.

A different course of the process of alcoholism may be seen in countries or social groups where the pattern of drinking involves predominantly the use of distilled spirits. Under such conditions the alcoholic, after an early phase of daily use, may change to drinking bouts separated by longer or shorter intervals. In these drinking bouts severe intoxication is the rule. After the ingestion of a small amount of alcohol, the drinker finds himself impelled to continue drinking on increasingly higher levels until he is stopped by external or internal factors. After that event, he is able to refrain from drinking for weeks or even months, i.e., he is " able to stop drinking ", but he evidently suffers from " loss of control " within a drinking bout once drinking has started. The " loss of control ", on account of its grave social and medical consequences, must also be regarded as a criterion of alcoholism.

The " inability to stop " may be followed in certain instances, after several years, by " loss of control " and, conversely, " the loss of control " occurring in irregular bouts may, in certain instances, lead to " inability to stop ". Thus the drinking pattern may change from " bouts " to continuous daily drinking. Each of these drinking patterns may be found in all countries, but one of them may be so predominant that the other is liable to be overlooked.

The distinction between " inability to stop " and " loss of control " may be formulated as follows. The " inability to stop " indicates a pressure to express action regardless of consequences and must be considered a manifestation either of primitive impulses or of physical dependence. The " loss of control ", on the contrary, indicates a failure of counter-pressures which act as brakes.