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THE ALCOHOLICS' REGISTER AND ITS USE IN OCCUPATIONAL HEALTH WORK

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ABSTRACT

In many countries occupational health is faced with frequent alcohol related health disturbances. In Croatia 15 per cent of adult males are alcoholics and other 15 per cent are excessive drinkers.

In the effort to control alcohol related problems the Republican Register of Inpatient Alcoholics was organized in 1965. The Register was started by the Centre for the Study and Control of Alcoholism and Other Addictions in collaboration with the Croatian Public Health Institute.

The registered data can be used for planning the needs of services for the control of alcoholism, studying national characteristics of alcoholism, planning personnel and facilities, personnel education and training, evaluating treatment and rehabilitation procedures, developing legislation for scientific investigations, etc.

Although serious difficulties were met in maintaining the function of the Register its results proved that the work done was worth while doing, the final aim being prevention, early identification of the problems and treatment and rehabilitation at an early phase parallel to work.

Alcoholism is a frequent disturbance of health[1,2]. Alcohol addiction in itself, even without any attendant health and social disturbances, results in reduced working ability, or total disability, particularly on certain jobs (for instance, those involving the driving of vehicles, work with complex equipment, handling of weapons, etc.). At the point when some of the disturbances appear which are typical of alcoholism, a certain degree of disability for work is invariably already present. This is fully borne out by the evidence contained in the records of Disability Retirement Medical Boards[3,4]. In Croatia, for instance, 9.5 per cent of all those examined by Disability Retirement Medical Boards have been found to suffer from alcoholism (12.2 per cent men and 1.3 per cent women), and in these cases alcoholism appears as the sole, or at least major, cause of disability for work.

A study made among industrial workers in three Yugoslav Republics[5] has shown 15 per cent of the male respondents to be alcoholics, and another 15 per cent excessive consumers of alcohol.

In spite of this situation, measures to control alcoholism in industry have hardly begun to be taken. When taken at all, they are mainly disciplinary (to restrict drinking at work) or therapeutic (involving treatment of severe forms of the alcoholic disease).

The picture of the situation presented here is not complete due partly to a lack of precise and usable statistics on alcoholism, without which longitudinal and dynamic studies of this phenomenon and an evaluation of the measures and procedures used to control alcoholism are difficult to make.

Alcoholism is a form of disturbed behaviour in an individual living within formal and informal groups (family, work group, social groupings, etc.). With the beginning of an increased consumption of alcohol, increasingly clear signs of disturbed behaviour begin to appear, affecting individuals and group interactions in living and working communities (Fig. 1).

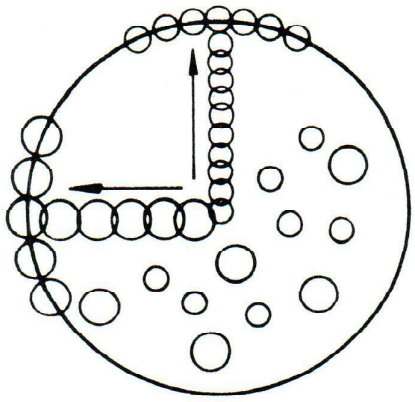

FIG. 1 — Representation of individual and group behaviour in relation to the consumption of alcohol.

The big circle represents society, the rim of the circle represents marginal subcultures, the smaller circles are individual human beings, and the slightly larger circles are primary social groups (families, work groups, etc.). Once it sets in, behavioural disturbance does not remain a static characteristic but rather becomes a dynamic process which depends both on the individual and on the reactions of society. These are the factors which determine the rate of movement towards marginal subcultures and the depth of disturbance.

When behavioural disturbance is seen in a dynamic light, the possible measures to be taken by the professional services or social forces to cure and control it become clearer. This is a long-term process, in which re-education plays a major role. In the case of alcohol-induced disturbances, the therapeutic and rehabilitation process takes at least five years.

The existing medical model of approach to alcoholism is therapeutically oriented and it usually means waiting until the alcoholic's health is seriously

impaired, at which point it is in most cases too late for successful rehabilitation. The treatment and rehabilitation procedures required in this situation are prolonged and the patient cannot work during that time.

In our studies we have tried, therefore, to investigate not only the effects of alcohol and alcoholism on working ability but also to examine the development of the alcoholic disease longitudinally and to evaluate the procedures which have been taken. In order to achieve this aim, the Centre for the Study and Control of Alcoholism and Other Addictions, Zagreb, in collaboration with the Croatian Public Health Institute, started a register of alcoholics treated in hospitals in the Socialist Republic of Croatia. Registering began on 1st January 1965.

THE REGISTER OF HOSPITAL-TREATED ALCOHOLICS IN CROATIA AND ITS POSSIBLE UTILIZATION

In the system of modern health care, particularly in the case of social diseases, a growing need is felt for the use, analysis and dissemination of information. The methods of modern information science based on a computer technology are therefore used in the development of data banks, files or registers.

In very general terms, a register could be defined as a set of documents containing specific medical, socio-medical or demographic information about individual persons gathered in a systematic and purposeful way to serve a clearly defined objective. A computerized register is the best available instrument for the study of mass, chronic, non-communicable diseases. In the register scheme, the unit of observation is not a single episode of a given disease but a diseased individual who appears in the mass of statistical data each time that he comes into contact with a hospital institution (in our case, mainly stationary psychiatric institutions).

TABLE 1
Numbers of alcoholics recorded for the first time (treated in stationary psychiatric institutions in Croatia). Source: Register of Alcoholics in Croatia.

Year of incidence	Male	Female	Total
1965	2792	357	3149
1966	2674	306	3020
1967	2804	380	3184
1968	3466	476	3942
1969	3558	504	4062
1970	4435	673	5108
1971	4500	748	5248
1972	4341	652	4993
1973	4469	656	5125
1974	4321	702	5023
1975	4737	793	5530
Total	42097	6287	48384

We have made an arrangement with the psychiatric institutions in Croatia for all patients admitted for treatment of alcoholism. It was only more recently that data from certain non-psychiatric institutions, as well as from some other sources (clubs of treated alcoholics, Disability Retirement Medical Boards, etc.), began to be included in the Register. All data covering the period from 1st January 1965 to the end of 1975 have been computer-processed at the Zagreb University Computing Centre (SRCE), as shown in Table 1.

The Register of Treated Alcoholics can be used in various ways and for various purposes.

Planning the needs of the alcoholism combating service

Without an appropriately organized service for the combating alcoholism, society will hardly be able to overcome the difficulties which alcoholism poses for its individual members, family groups, and society as a whole.

The prevention of alcohol abuse and alcoholic diseases, as well as the treatment and rehabilitation of alcoholics, requires considerable resources and large numbers of trained personnel. The planning of resources, institutional networks and personnel is very difficult without appropriate data, and it is quite possible that resources may be spent on less important activities. It is important to know how many cases of alcoholism there are in a given population. Data on hospitalizations, which are easily obtainable, ar bound to produce a distorted picture, since one and the same alcoholic may appear in several hospitalizations even within a single year. Over longer periods, the number of hospitalizations involving the same patient becomes even greater. Not even a register of hospital treated alcoholics in psychiatric institutions can give an accurate picture of the prevalence of alcoholism, but it can serve as a basis on which further investigations can be conducted.

The planning of the activities of the alcoholism combating service also requires data from regional and sub-regional territorial units. Such data facilitate regional and sub-regional planning. This shows that the Register serves not only national but also regional needs.

The Register also serves in the planning of alcoholism combating activities in business and industry. In the future, the treatment and rehabilitation of alcoholics should be conducted at their places of work while they continue their regular working lives. This approach is possible, provided the procedure starts on time.

Study of national characteristics of alcoholism

Alcoholism is a phenomenon which corresponds with the development of production relations, with social relations, and with the cultural characteristics of a given group at a given point of time. Though alcoholism is universal, and alcohol itself older even than historical written documents, there are considerable differences in the patterns of drinking and in the prevalence of alcoholic disease in different cultures. This is why alcoholism should be studied not only on a national level but also in a more narrower sense between different subcultures. A

successful national programme for the control of alcoholism can only be organized on the basis of reliable domestic and local data. Such a programme is particularly important for Yugoslavia, as one of the major wine-producing countries, which probably has the world's biggest number of plum-trees, and in which private production of spirits is still possible.

Data from the Register will give us a clearer view of the difficulties facing us in connection with alcoholism in this country and will facilitate the planning of measures for its eradication which are best suited to our needs.

Personnel planning

Modern alcohology stresses the need for a quick translation of research results into practical action programmes. More has been learned about alcoholism scientifically over the past fifty years than in the whole of mankind's previous history. Different types of trained personnel have become involved in practical work with alcoholics, in addition to those traditionally working in this field. Mention must be made in particular of social workers, psychologists, alcoholics themselves, educators, and various other types of paraprofessional and paramedical personnel. Personnel planning and choice of adequate methods of work are only possible on the basis of reliable data. The speed at which new knowledge is applied in practice and new personnel introduced into practical work requires that we always have at our disposal accurate and up-to-date information. Such information can be supplied by the Register provided it is suitably designed and properly maintained. Of course, this work requires considerable effort, adequate staff and resources, and it must rest on a sound professional, social and economic basis.

Planning of facilities

Different types of institutions are needed nowadays for combating alcoholism – preventive, therapeutic and rehabilitational. Their number, size and equipment depend on a number of factors. Even if we knew which procedure could produce optimum results, the planning of these institutions would still depend on data which only an Alcoholics' Register can supply. For instance, what is the practical use of a procedure which can only be applied individually, but which, for economic reasons, cannot be introduced on a wide spread basis? The planning of institutions for such a procedure would simply not be justified. It is quite understandable that before a procedure is introduced and institutions are planned for its implementation, its results will have to be scientifically evaluated. Again, for a scientific evaluation of different procedures, data from the Register of Alcoholics will be invaluable. It is particularly important to plan for the combating of alcoholism in firms in which alcoholics are employed, for it is there that the treatment and rehabilitation at work will be done.

Planning personnel education and training

Scientific advances are made almost daily nowadays, and this makes a continuous education of personnel imperative, both during regular schooling

and after the completion of formal education. It is generally believed today that a physician should refresh his knowledge every five or six years to catch up with developments that have taken place since he left medical school. Similar proposals have been made for other types of professional personnel. Among those who occupy an important place in the work with alcoholics are the alcoholics themselves and members of their families. The Register will indicate the needs for the education and training of this paraprofessional group as well.

Physicians specializing in occupational medicine should learn the basic concepts of alcohology during their undergraduate and postgraduate studies which will enable them to combat alcoholism at the very workplaces of alcoholics.

Research in alcoholism

Practical medical work is unthinkable without scientific research to support it. Besides, participation in research work is the best, simplest, most effective, and cheapest form of education.

Scientific research into the different aspects of alcoholism is hardly possible without the use of data such as those contained in the Register of Treated Alcoholics. The data offered by the Register open up a whole range of questions that deserve further study. This is particularly true of questions of interest to specialists in occupational medicine, and to industrial medicine in general.

Evaluation of treatment and rehabilitation procedures

Until quite recently, the most frequent objection raised against psychiatry was that its results were not subject to objective evaluation. Indeed, even today good evaluative studies are still rare in psychiatry. Epidemiological studies are made and statistical reports issued on the number of hospitalizations, but reports evaluating the results of treatment are rather meagre. In this respect, too, the Register may prove extremely valuable as has been proven in recent years when we experimentally evaluated our efforts in the treatment of alcoholics.

In the group of relapsed patients, the average length of abstinence was about five months. About 50 per cent of those continuing to drink did not abstain after discharge from hospital. The average number of hospitalizations for alcoholics in our sample is 2.5 over the last five years. On the average, an alcoholic is hospitalized once every two years. However, further examination of our data showed that 50 per cent of the alcoholics in our sample were hospitalized only once in five years. Compare this with the case of an alcoholic who was hospitalized 17 times during the same period of five years spending 543 days in hospital during that time.

As much as 52.2 per cent of the checked alcoholics were in full-time employment. For them, we obtained data on absenteeism from their firms and found that in 1972 the average rate of absenteeism was 82 days.

The Register of Treated Alcoholics has also made it possible for us to evaluate the currently dominant medical model in dealing with alcoholism. It is indicative that, despite successful therapeutic programmes, the number of

alcoholics is growing, the percentage of relapses is still high, and the consumption of alcohol is on the increase, as is also a wide range of other, non--medical, alcohol-related problems. All this shows that the medical model in dealing with alcoholism needs to be replaced by the social model.

Legislation needed to regulate issues connected with alcoholism

By affecting individuals and their behaviour, alcoholism causes various social problems. There is an understandable need, therefore, for legislation to regulate behaviour in society. Apart from disciplinary regulations, measures to regulate prevention, treatment and rehabilitation are also needed. In this respect too, data from the Register may play a very useful role.

Medical ethics and the Alcoholics' Register

Medical registers of any kind are often rejected on grounds of privacy. It is said, namely, that a register violates the traditional principles of medical ethics and destroys the relationship of trust that exists between the physican and the patient. However this objection can be easily refuted. Medicine is becoming increasingly socialized, and the socialized medical and welfare service already has a variety of data on individual patients and types of disease. But these data are not systematized and cannot be usefully exploited. At the same time, it is very probable that socialized medicine will have to call for a formal change of ethical principles, which have already been changed in practice anyway. Finally, Alcoholic Register data remain in the hands of the medical service (which possesses them anyway) and are not released for other uses.

Proposals for narrowing and simplifiying the Register

There have been proposals to narrow the range of data coverage in the Register and to simplify its maintenance. Such attempts are clearly justified and it is to be hoped that some of the proposals currently under discussion will be applied in the future. In any case, only with the help of the Register can further investigations and studies be made, and these are indispensable if progress is to be achieved in this field. Obviously, research can be simplified either by using representative samples or in some other ways.

DIFFICULTIES IN WORKING WITH THE REGISTER

The major problem in working with the Register is the need to obtain the most useful data within the shortest possible time, so that planning can be done in time and changes in operative procedures introduced as needed. This requirement causes the greatest difficulty. Data are often several years out-of--date, and at the moment when they become available their practical value is rather limited despite their intrinsic interest.

Financing of the Register

The national Register of Treated Alcoholics serves the needs of a number of institutions and services. Its maintenance is quite costly, and it is therefore

important that provisions are made for its regular financing. In our opinion, the basic cost of Register maintenance should be borne by the Republican Secretariat for Health and Social Welfare. Additional activities, including research, should be funded through special projects. An alternative mode of financing could be through the Republican Community Funds (i.e. Communities of Interest, as they are called in Yugoslavia) which are, or should be, interested in problems of alcoholism. What is quite clear is that the Register cannot remain the financial responsibility of one single medical institution.

Register data processing

Register data can serve their purpose only if they are promptly and continually processed. They cannot, for instance, be used for planning purposes if they are two years out-of-date. Promptness can only be insured through the co-operation of all the institutions which supply data for the Register. The basic processing of the data must be done by computer. The Register already contains over 60 000 cards and manual processing is no longer possible. What we need is a system that will make the Register a dynamic instrument which is continuously updated with new information. The data in the Register must be such that they can meet the needs at any given moment and they must be adaptable to changing needs. The motivation for the institutions which co-operate on the maintenance of the Register should come from the benefits that these institutions can derive from the Register.

Regular flow of information from the Register

Interest in the Register will survive only if there is a continuous flow of information from the Register to institutions, services and society in general. Information from the Register should be supplied automatically, without waiting for it to be asked for first. In an attempt to achieve this, we have started a regular Bulletin which brings information about new data in the Register and operational difficulties or problems.

Professional problems

A very serious difficulty in working on the Register is caused by the lack of standard terminology. For practical purposes, the terminology should be uniform and standardized. The Alcoholics' Register Bulletin should publish information on standard terminology in the field of addictions.

The diagnostic criteria for different alcoholic states should be standardized for practical purposes. The lack of standard diagnostic criteria poses great difficulties in working on the Register. The situation in this respect has not been appreciably improved with the latest revision of the International Classification of Diseases and Causes of Death. In the future issues of our Bulletin we shall try to examine in detail the terminological and diagnostic problems in alcoholism.

Successful study of alcoholism and effective practical work are impossible without a continuous, scientifically-based evaluation. This is precisely one of the main tasks for the Register. A series of projects are to be undertaken in co-operation with the institutions which supply data for the Register.

The Register will be a living organism only if it is co-ordinated with other sources of data on alcoholism and alcoholics, which implies the setting up of a number of sub-registers within the master Register. The assessment of working ability, or of the degree of disability for work, is an important aspect of the work of modern specialized medicine. Data on working ability assessment should be included in the Register, so that a suitable system of assessment and rehabilitation procedures could be worked out.

The value and usefulness of the Register will be greatly enhanced by including in it data on the alcoholics' driving ability, traffic accidents, crimes, etc.

Despite the highly unfavourable conditions in which the Register has been maintained over the last ten years, the difficulties encountered in the collection of data, and the technical problems of their processing, the data contained in the Register have proved very useful.

We may conclude that the Register of Hospital Treated Alcoholics represents a necessary instrument in the organized struggle against alcoholism. In the future, the Register will also have to include data on alcoholics treated as out-patients, as well as on those treated in non-psychiatric institutions to which alcoholics are frequently admitted (surgical, casualty, internal medicine department, etc.). With the data it already contains, the Register is particularly valuable for occupational health specialists.

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