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EPIDEMIOLOGY OF MENTAL DISORDERS : WHO PROGRAMME REVIEW IN THE EASTERN MEDITERRANEAN REGION

by

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Since the meeting of the First Expert Committee in 1959, the role of WHO in psychiatric epidemiology at the international level has been steadily growing. Four major areas namely :

(1) provision of consultant services,

(2) support to training courses and award of fellowships,

(3) organization of Regional or Inter-Regional seminars,

(4) arrangement of study groups on special subjects,

have been originally envisaged as the main role of WHO in the field of epidemiology of mental disorders [1].

In 1961, as part of the World Mental Health Year Programme, the issue of the application of epidemiology in the field of mental health was generally discussed and the programme envisaged in EMRO[2] at that time was "proving the possibility of encouraging and promoting the validity of basic public health statistics of all kinds as a prerequisite for the promotion of the studies of epidemiological psychiatric nature in the future". Meanwhile an important observation was made that "where there is lack of most elementary provision of psychiatric care, a programme of epidemiological investigation may not be regarded by national workers as a priority". One administrator, for example, listing the priority problems in the mental health field in his country, dismissed epidemiological studies by quoting the Persian proverb : "When the water reaches your head it makes no difference whether it is one fathom or a hundred fathoms". Fortunately now many of the administrators can keep their heads above water but

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have to steer a rough course amidst defective statistical recording and lack of psychiatric information.

The present Regional Seminar on the Application of Psychiatric Epidemiology enshrines one of the most important WHO programmes for stimulating interest, for providing an international forum for training, for exchange of information and for identifying the problem in this important and complex field. Along with such training programmes, there are continuing efforts to provide fellowships and give support to national activities and research work. A primary goal of WHO in EMR is to develop manpower resources, which will be technically equipped and competently knowledgeable to organize national activities and promote systematic epidemiological studies in their respective countries.

While pursuing these general aims, the attention in EMR has been focussed on two particular programmes, notably :

(a) the assessment of the working of mental health services,

(b) the study of the nature and extent of drug abuse and the evaluation of the treatment programmes of drug-dependent persons.

Both programmes reflect the foremost needs in the countries of EMR.

THE ASSESSMENT OF THE WORKING OF MENTAL HEALTH SERVICES

1. The steps taken

This programme was initiated in 1972 for collecting baseline statistics on the working of the mental health services in countries of EMR. The information was compiled and produced in a basic document[3] for the Group Meeting on Mental Health[4]. This pilot study was conducted through the help of a structured questionnaire which was designed to collect information on the state of organization and administration, the resources, the current research and future plans of mental health services.

The response was generally good and in the assessment of the Group Meeting, despite the serious shortcomings, this preliminary survey yielded valuable information which was summarized in the following :

- the great inequality of provision for mental health care in the Region's Member countries;
- the general insufficiency of trained personnel at all levels;
- the lack of up-to-date mental health legislation in most countries.

An important conclusion which was reached by the same Group was that "the survey also revealed that basic information in this field was not readily available even to the health planners in a majority of countries".

Consequently the Group recommended, as an immediate objective, that the Regional Office continue its efforts to collect information on the existing mental health services and activities in the Region and present the findings to the national governments for discussion and further elaboration.

This was happily taken up, and a more elaborate questionnaire was produced in 1973, after certain modifications for improving the reliability of the data and broadening the scope of information were introduced into the first questionnaire.

The two questionnaires are available as documents EMRO/72/579 and EMRO/73/1245.

The WHO document EMRO/74/362, entitled "National Statistics of Mental Health Services in the Eastern Mediterranean Region", which is included in the background material, gives a comprehensive outline of the objectives, the general setting of the questionnaires and the findings.

2. Problems of data collection

(a) General problems

To collect national mental health statistics by circulating a questionnaire from behind a desk in the Regional Office in EMR, though it may sound a straight-forward and simple process, has its expected limitations and disadvantages. Obviously one has to think of the likely problems and how they can be resolved. Indeed, the problems are several in such an exercise. It has to be remembered that the countries in EMR are quite different in their socio-economic development and consequently in their health resources. Such differences are apt to raise several issues in epidemiological studies.

Hence at the initial stage the point was made that the pilot questionnaire should be simple and comprehensible and that the questions should aim at obtaining answers to the essential elements in the organization, administration and resources of the mental health services.

In the light of the available information, it was known that in several countries there were no central organizational bodies dealing with mental health services. On the other hand it was not feasible to visit all the countries and collect the necessary information on the spot.

Hence the second issue which had to be resolved was : to whom should the questionnaire be addressed ? For practical reasons the questionnaires were sent to the following :

- The leading psychiatrists or the psychiatrists designated to attend the Group Meeting or the participants in the WHO Inter-Regional Seminar on the Organization of Mental Health Services in Developing Countries[5]. Both meetings offered a good opportunity to check the national statistics with representatives of some countries.
- The WHO Representative (WR), who collaborated with the national health authorities in providing the relevant information.
- In countries where there were no professionals responsible for mental health care and no WRs, the questionnaires were sent directly to the governments.

(b) Specific problems

The most important specific issue raised was the problem of definition. The following examples demonstrate some of the problems :

(i) Counting of hospitals and beds :

In one country where forensic institutions dealing with abnormal mental offenders come under the penal authority and as such are not counted as hospitals, the respondent was in a dilemma whether to include them as psychiatric hospitals or not. On the other hand, in another country there were mentally-ill patients in a prison, and there were no beds as such nor were there psychiatric hospitals. Nevertheless, in the submitted data the number of patients were counted as psychiatric beds.

Again,the same problem presented itself in another form, when in countries the number of patients in mental hospitals or psychiatric units exceeds the number of allocated beds. Yet the number counted was that of the patients and not the beds. Statistically, it is worthy of note that in some psychiatric units the bed occupancy rate may be as high as 129.8 per cent[6].

(ii) Categories of manpower resources

The commonest problems were encountered in connection with the definition of a nurse, auxiliary nursing personnel, mental health assistant and therapist. Due to differences in administrative concepts and cultural background, the categories of manpower resources may be conceived differently. It was found helpful to invite the respondents to set their own definitions, otherwise the data might appear confusing.

(iii) Private clinics and their attendants

In a number of countries the number of patients attending private clinics was omitted, and this naturally led to misleading information. Similarly private clinics were often not included in the number of out-patient services, though the majority of ambulatory patients, especially the neurotic, seem to be commonly reporting to these clinics.

3. Findings

The compiled data and the comparative resources of the twenty respondent countries are included in tables 1 to 9 of the background document. Relevant to the theme of this Seminar and without going into the particular details of these findings, it seems important to point out that :

(a) Due to the deficiencies in the recording system of the mental health services psychiatric data are not readily available in the majority of the countries in EMR

(b) The findings clearly indicate the general limitations of the mental health resources.

(c) Operational research for assessing psychiatric morbidity and establishing reliable data on the incidence and prevalence rates of mental disorders are very limited. In this respect one would like to concur with the conclusions reached by the WHO Regional Office for Europe that "even very detailed epidemiological studies in the general population, defining the true prevalence of mental disorder, may be only of limited value if they cannot be set against the resources available for treating the disorders." [7]

(d) In several countries the mental health services are handicapped by the existence of large size hospitals which are difficult to manage and generally poor in their statistical information. The absence of such valuable data seriously impedes intelligent action and interferes with the proper improvement of psychiatric care.

(e) As previously reported [8], available data indicate that the majority of neurotic disorders, which commonly report to out-patient clinics, are mostly anxiety and depressive episodes and that schizophrenic reactions constitute from forty to seventy per cent of psychiatric hospital inmates. In general, half the mental hospital population has been found to be formed of schizophrenic reactions and the other half of heterogenous groups composed of manic/depressive states, organic psychoses, mental retardation, epilepsy, personality and neurotic disorders and psychogeriatric conditions.

(f) No studies have been conducted on the chronic mentally-ill persons who form approximately two thirds of the inmates of the majority of the psychiatric hospitals. Similarly, no studies have been carried out on the rehabilitation programmes for improving their effectiveness and developing innovative approaches in this difficult area.

4. The outcome of the programme

An interesting outcome of the questionnaire is that it had stimulated one of the countries where there were no existing psychiatric facilities to submit a formal request for WHO assistance for the development of such services.

Furthermore, the comparative findings between the various countries incited some of the national authorities to update their statistical information and to make attempts to present a better image of their psychiatric services.

Though the collected data are still defective in so many ways and far from complete, the preliminary results are encouraging and the general response is very promising.

On the whole the available information, despite its limitations, has been found helpful in order to advise on the improvement of mental health services and make suggestions for future programming. It will be generally helpful too in monitoring future progress.

PROGRAMME FOR DRUG DEPENDENCE

1. General

Over the last quarter century WHO has been increasingly concerned with the problems of drug abuse and various activities have been developed. Historically, it is interesting to note that the early efforts in this field were mainly directed towards the following problems :

(1) identification of psycho-active drugs liable to abuse and still not under international control;

(2) the development of concepts

(3) and the specification of more valid terms.

The substitute, for example, of the term "drug dependence" which since the last decade has come into common use for "addiction" and "habituation" indicates the evolution of these trends [9]. Indeed, this is clearly reflected in the names of the various committees : Expert Committee on Habit-Forming Drugs (1949); Expert Committee on Drugs Liable to Produce Addiction (1950 - 1955); Expert Committee on Addiction-Producing Drugs (1956 -1963); Expert Committee on Dependence-Producing Drugs (1963 - 1966), and the present Expert Committee on Drug Dependence.

More recently attention has been focussed on the international collection of data[10] and the epidemiological study of drug dependence [11].

2. The role of EMRO

An important landmark in the history of drug abuse in EMR was the banning of opium production by the Government of Iran in 1955.

In the same year, "having heard the report of the Iranian Delegation on the question of drug addiction" the Regional Committee (R.C.) requested the Regional Director "to include the problem of drug addiction and its control among the activities of Eastern Mediterranean Region" [12].

In the following year the R.C. requested the Regional Director inter alia "to continue his studies of this important subject"[13]. The collection of the necessary data and the interchange of information between the countries were considered most helpful in the planning of effective control programmes[14].

It is also interesting to note that in the same year the Secretariat General of the League of Arab States formed a Permanent Anti-Narcotic Bureau (PANB) with established official relations with EMRO. Though its main work has been on legal and administrative matters, the PANB has been instrumental in compiling the relevant data on drug dependence in the Arab States and in co-ordinating their control activities.

3. Nature and extent of drug dependence

Drug dependence constitutes a special problem in the mental health field, which necessitates the study of the drug, the user and the environment.

Opium dependence, hashish-smoking, Khat-chewing, alcoholism, and the abuse of chemical drugs are known to occur with varying degrees in the various countries of EMR. However, the lack of systematic data regarding their nature and extent preclude the development of effective preventive, therapeutic and restorative programmes. WHO has therefore been engaged in various activities to pursue the study of these problems and provide assistance to the interested countries in this complex field. An attempt will be made here to outline some of these activities.

(a) Epidemiological studies on Khat

The UN Commission on Narcotic Drugs (1956)[15] and the PANB of the League of Arab States (1956)[16] were among the first international organizations to show interest in the study of the harmful effects of Khat. The document on "The Question of Khat" [17], submitted in 1959 to the Regional Committee, gives an all-round statement from the international and national viewpoint

and covers the attempts made to resolve this issue. Detailed information on the Khat plant (Catha edulis Forskal) and its medical aspects can be found in other WHO documentations[18, 19].

Preliminary studies on the socio-cultural aspects and the extent of Khat-chewing in Yemen were initiated in 1973 [20]. More elaborate data were collected by an interdisciplinary team who visited the same country for three weeks[21]. Though it was not possible within such a short time to conduct a proper collection of systematic epidemiological data, the study explored the feasibility for epidemiological research and outlined the possibilities and limitations of this important work. Furthermore, the findings gave rough estimates of the magnitude of the problem and demonstrated that the prevalence of Khat-chewing among adult males may reach 80 per cent in major cities and 90 per cent in the villages where Khat is produced. It is clear that such studies open the way for more organized epidemiological research which should lead to realistic and practical approaches in the prevention and management of the multisided problems of Khat-chewing

(b) Studies on opium dependence

As in the case of other drug abuse there are no systematic studies on the incidence and prevalence of opium dependence in countries of EMR. Only rough estimates are generally available and preliminary reports indicate the vital need for organized operational research and the development of better recording systems for all-round data collection.

WHO assistance in the form of fellowships, consultation, assessment of the problem and evaluation of the treatment programmes, has been provided to three countries, namely : Egypt, Iran and Pakistan. Relevant to the subject under discussion, the preliminary findings on the magnitude of opium dependence will be briefly described here.

(i) Egypt

The data collected in Egypt were mainly obtained from the already available sources. To assess the magnitude of the problem among the general population two separate approaches were taken [22] viz., (a) Twelve clinical psychiatrists with long experience were asked for their estimate of the problem; (b) official figures on the annual amounts of opium seized by the Narcotics Control Administration of the Egyptian police were used as a basis for estimating the number of regular users.

The consensus of medical opinion estimated the chronic use of opium to be in the range of 25 - 33 thousand persons, mostly in certain areas in Cairo and major cities, among older males and in lower socio-economic groups of the population. Estimates worked out on the supplies

of opium and based on a consumption rate average of 1.5 - 2 grms per day per individual use also seem to indicate that there were approximately 25 - 30 thousand persons suffering from opium dependence.

(ii) Iran

The use of opium in Iran shows a unique social and cultural background, and it is not easy to draw a distinction between occasional use and common dependence. This is clearly one of the problems in case-finding and proper assessment. Early reports estimated the incidence of opium-dependent persons in Iran as one per cent of the population (more than 300 000)[23, 24]. Official records based on ration cards show that the number of registered opium-dependent persons in 1974 was 153 613, and included all socio-economic groups.

The use of heroin, which is believed to have started in 1955 following the suppression of opium production, is forming a new sub-culture. Though the estimated number of heroin users in the general population (20 - 30 000) is relatively small compared to that of opium-users, those admitted into Vanak Hospital for dependents formed 55 per cent of the total admission in 1973 and indicated a younger age group. These figures should be judged in the general context of the problem and are obviously not representative of the total population.

(iii) Pakistan

Here again there are no valid data on the extent of opium dependence in the general population. Following a recent visit to Pakistan, a UN Mission reported [25] that in certain villages within the opium producing areas more than twenty per cent of the male population were dependent. This work, which aims at a total approach for dealing with this intricate problem, is still in its early stage; WHO assistance has also been provided for another project in Lahore which has just been launched and is too early to report on.

4. Evaluation of treatment programme

Despite the fact that drug abuse constitutes a major health problem in EMR, there is no satisfactory model for effective treatment in any country in the Region. In Iran, for example, where organized treatment programmes have been developed since 1955, the current therapeutic modalities are far from being satisfactory [26, 27]. The main emphasis of treatment in the great majority of the Moutadin (drug dependence) centres is placed on detoxification measures by means of a short course of methadone-withdrawal cover, with hardly any maintenance therapy or due attention to the social and psychological needs of the patients. Further details on the existing

facilities, therapeutic programmes, recommendations for new approaches in treatment and suggestions for better recording systems can be found in other WHO documents [28].

An interesting project with promising potentialities in the evaluation of treatment programmes has been in operation for the last two years in Iran. The project is based on the hypothesis that depressive disturbance is a common underlying factor in drug dependence. In a double-blind and controlled trial three groups are being compared and treated respectively with methadone, mutabon (an amitriptyline - perphenazine mixture) and a placebo. Of 90 patients sixty have completed one year's treatment and follow-up and thirty are still undergoing the treatment programme. Hence the collected data have not been finally analysed.

Despite the project's being on a small scale, its findings may be helpful in the development of a better therapeutic model, in future research and in training programmes.

Another project of interest is the evaluation of the treatment programme currently applied at the Ataba Clinic, Cairo, Egypt, and which was recommended in 1972 [29]. The preliminary work, which has been recently carried out, pointed out the feasibility of systematic investigations and the need for a prospective controlled study of the specific services provided and the follow-up of results.

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