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ADDICTION RESEARCH AND TREATMENT CORPORATION EVALUATION TEAM, PROGRESS REPORT, SEPT, 30, 1970

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PROGRESS REPORT

SUBMITTED TO: U.S. Department of Justice
Law Enforcement Assistance Administration
National Institute of Law Enforcement and Criminal Justice

SUBMITTED BY: Addiction Research and Treatment Corporation
Evaluation Team
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Previous Progress Reports have described a series of research activities that will be up-dated in this report.

Since the last Progress Report, the Addiction Research and Treatment Corporation has succeeded in retaining the services of a medical evaluation team from Yale University under the direction of Dr. Charles Riordan. Many of the medical evaluation team's activities are only germane to the medical program. Other of their interests, however, dovetail with the criminal and social evaluation, and in these areas a cooperative research program has been developed, with important implications for the overall evaluation.

The major activity that has been set in motion is a carefully designed experiment to supplement the overall evaluation program in significant ways by directly dealing with a set of issues that are subject to controversy in the field of treatment for heroin addiction. The activities currently under way at

A.R.T.C. will provide answers about the overall impact of the treatment program, an urgent and significant activity. However, the experimental program described below will permit a careful evaluation of the impact of two variables: methadone dosage levels and psychosocial supports. Firm answers concerning these two variables can help to direct treatment programs in informed ways that now depend on undocumented personal convictions or piecemeal research with lacunae that allow for various interpretations.

EXPERIMENTAL DESIGN

Methadone programs vary in the dosage levels administered to patients. Some programs administer maintenance levels of about 40-60 mg. daily while others favor blockage doses of about 91-100 mg. The former generally forestalls withdrawal symptoms for most patients; however, if they should take heroin they can feel its effects. Blockage levels, on the other hand, preclude any gratification from administration of heroin and patients presumably cease taking it when they fail to respond. At A.R.T.C. different levels are prescribed for patients depending on their previous habit, and clinical assessments of the patients ongoing performance in the course of treatment.

The use of higher dose levels is predicated on the assumption that since it forestalls experimentation with heroin it is safer. Others argue that the long-term effects of methadone are still unknown and smaller doses ought to be resorted to if they succeed in keeping addicts from returning to heroin and anti-social behavior. Programs around the country presently prescribe different dose levels so that it is important to assess the impact this may have on patients in carefully matched groups who are in the same program setting.

Another dimension on which programs vary is in the provision of psycho-social services. A.R.T.C. provides a full panoply of services, including medical treatment, counselors with small case loads, several varieties of group therapy, medical treatment, a job development program, and a psychiatrist for patient evaluation and, where necessary, consultation. All of these services are made available to patients in order to help them in their adaptation to the world of work, and to help resocialize them away from deviant forms of behavior. These services represent a substantial investment, and are a major part of the cost of maintaining the program. Other methadone programs have only a few of the services while many have no program, aside from the administration of methadone.

The experiment will simultaneously assess the impact of the psycho-social services and different dosage levels of methadone on groups of patients randomly assigned to clinics where they have access to the full program, while others will only be provided medical services and methadone for the duration of the experiment.

As patients enter the program who meet agency criteria they will be assigned to four treatment groups by a process that ensures complete random assignment. Between 25-30 patients will be assigned to each group for a total of 100-120 patients. Two groups will be administered maintenance dosage levels of methadone (between 40-60 mg.) and two groups will be given blockage levels (between 90-110 mg.) of methadone. Within each of the methadone levels one group will be assigned to a clinic where all of the psycho-social services will be made available, while the remaining groups will be assigned to a "holding pattern." They will receive methadone and, if needed, medical care and a counselor will be available to this group. All other services will be withheld for the duration of the experiment.

The groups will be monitored from the moment they enter the program. Careful physical examinations will be conducted, as well as a variety of psychometric

scales administered that have been especially adapted for drug addicts. The criminal and social and personality inventories developed for the other patients will also be given to this group.

The methadone levels administered to patients will only be known to the evaluation team and the chief pharmacist. Neither the patient nor those who administer the methadone will know how much methadone a patient is given. This is necessary in order to avoid confounding of the experiment. The chief physician will have access to the records where this is deemed necessary for medical reasons.

The patients will be followed up at six months and at one year. The criteria will include: a) patient retention; b) drug abuse as measured by urine analysis; c) criminal activity; d) employment status; e) alterations in psychological status; f) physical health.

Contrasts between the four groups, using appropriate statistical analysis, will permit an evaluation of the effectiveness of both different levels of methadone and access to psycho-social services on patient adaptation. The several criteria will also contribute to clarification of the nature of the impact of these two experimental variables on different aspects of adjustment.

The extensive psychological and social data that will be collected will also permit more careful analysis of the interaction between various characteristics of patients and the profile of adjustment variables. Although rates of "success" may differ, depending on methadone levels and types of services, it can be expected that there will be successful patients in all four groups. Appropriate analysis of the successes and failures will permit the extraction of important clues that can materially contribute to sound program planning on the basis of differential diagnoses. Thus, certain types of patients may be good risks for lower methadone levels, others might need supportive services, even if aggregate differences favor alternate service mixes.

Administrative support has been given to the program which is now in the advanced stages of planning and will commence in the middle of October, 1970.

PERSONALITY AND SOCIAL INVENTORY

During the past three months, ideas for the Personality and Social Inventory have been explored and developed, culminating in the completion of the instrument. (Attached) It was pre-tested with patients in the methadone treatment program of Bronx State Hospital, and is now ready for administration to patients in the Addiction Research and Treatment Corporation.

The purposes of this questionnaire are three-fold. First, to provide concrete measures of social adjustment, e.g. type and stability of employment, stability of living arrangements, participation in community or political activities, and friendship with non-addicts. Since the Inventory will be administered when patients first enter the program, and again after they have been in the program for one, two and three years, it will be possible to have dependable "before" and "after" measures of adjustment in the areas mentioned, based on self-reports at the four different time periods. (Of course, adjustment in the area of criminal activity is also being studied, through the collection of official arrest records, and self-reported criminal behavior as measured by the Criminological Questionnaire.)

A second major objective of the Personality and Social Inventory is to identify what types of life experiences or personality attributes are most likely to lead to success in the program. To this end, a variety of questions and scales have been included, e.g., questions that are expected to lead to a typology of reasons for seeking treatment, questions about who took care of the patient during his childhood, an index of cohesion of the family, while the patient was growing up, indices of conventional family norms and conventional

work norms, and indices measuring psychological attributes such as feelings of personal control, and self-esteem. In addition, the "lie scale" questions from the Minnesota Multiphasic Personality Inventory have been included, in order to provide some guide to the honesty of response of each patient.

Finally, we have sought to include some questions that will add to the general knowledge about the biographies of heroin addicts. Examples of these items are those that ask about drink and drug use in the family of origin, about reasons for own use of heroin, and about use of drugs besides heroin.

Our procedure in developing the Inventory was to first compose a draft based on general reading and a priori expectations about the variables that could be expected to be critical. This draft was submitted to several experts in the area of addiction, to the staff of the A.R.T.C., and was compared with questionnaires used in other studies of drug use. On the basis of suggestions from these sources, a substantially revised draft was then developed.

This draft was then pre-tested at Bronx State Hospital. Patients were asked to not only answer the questions, but also to indicate what questions were unclear to them, and if there were any areas of

importance to addicts which had been excluded. As a result of the pre-testing, it was possible to see what changes should be made in the interest of a smoothly flowing interview. We decided that certain items should be omitted on the basis that there was little or no deviation in response to them. Certain failures due to a "middle class bias" in the original composition of the questionnaire were detected, and altered accordingly. Finally, as a result of all these considerations, a third major revision of the questionnaire was produced, and this is the version which will form the basis of the social evaluation.

The P & S Inventory will be administered at intake to all patients as well as to patients already in the program. With some deletions it will be readministered annually to all patients in order to document alterations in behavior and in selected attitudes that accompany withdrawal from deviant behavior patterns.

ARREST HISTORIES

Official police records (BCI's) have been obtained for all patients presently in the ARTC program. This includes, besides Clinics 1-4, a Holding Pattern control group which receives methadone maintenance but no additional services.

The official police records for Clinics 1 and 2, totaling 219 patients, have been transferred to a coding sheet and are now on computer tapes and are ready for analysis. We have previously sent you a copy of our Arrest History code book and coding instructions, along with the coding instrument being used in recording each patient's individual arrest history.

We have found that many BCI's received from the police are incomplete. Since final disposition of cases is essential to our criminal evaluation, this has meant that considerable time has been spent perusing docket books for incomplete dispositions. These docket books are located in the Criminal Court Buildings of Brooklyn and Manhattan and we have been highly successful in finding most of the dispositions. We have also received kind cooperation from the various departments dealing with these records.

Currently we are coding arrest histories for Clinics 3, 4, and the Holding Pattern. This information will also be computerized and put on tapes. Shortly we will be requesting follow-up BCI information on those patients who first entered the program in October, 1969. Our research design stipulates that we make yearly requests for criminal information on all patients, in order to accurately gauge the increase or decrease

of criminal activity before and after entrance into the program. Eventually we hope to have sufficient criminological data on our patient population to sort out meaningful variables in assessing the relationship between drug addiction and criminal activity.

Other information contained in the Criminal Evaluation Questionnaire and the Personality Social Inventory, will also be utilized in corroborating and defining more precisely the nature and dimensions of criminal activity within the drug culture.

NARCOTICS REGISTER CONTRAST GROUPS

In a study of a particular patient group, such as the A.R.T.C. patient population, an important question is how representative this group is of a larger population, in this case the adult heroin addict population in the same geographical area. An additional question is whether the behavior observed in the treatment center population might have occurred in this same population without treatment. As described in previous reports, we will attempt to deal with these two questions by comparing both the characteristics and the reported criminal behavior of a group of patients in the A.R.T.C. program with heroin addicts living in the same area who are not in the program.

The New York City Health Code requires that any agency or health professional who treats an addict reports this to the New York City Narcotics Register even if the medical problem treated is unrelated to his addiction. We have reached agreement with the staff of the Narcotics Register on a cooperative research strategy utilizing their records as a source from which a comparison group will be drawn, as well as a source from which to determine the distribution of certain characteristics of the A.R.T.C. patient population in relation to the distribution of these characteristics in the general adult addict population. This information is now available for 1967-68 and is being assembled for 1968-69 by the Narcotics Register.

We will first compare the patients in Clinics 1 and 2, who entered the A.R.T.C. treatment program in late 1969 or early 1970, with the total population of heroin and mixed heroin addicts reported to the Register as living at an address within the A.R.T.C. catchment area as of 1969. The populations will be compared as to sex, ethnicity, age and birthplace. These characteristics are those which the Narcotics Register staff has found to be most consistently reported to the Narcotics Register over time. The

purpose of this comparison will be to determine whether the treatment population of A.R.T.C. differs in terms of the distribution of these characteristics from their distribution in the general adult addict population in the same area.

Next we will draw a comparison group from the Narcotics Register records matched with the patients in the first two clinics at A.R.T.C., on the basis of age, sex, ethnicity, place of birth, and whether their address is listed as being in one of the nine health areas which supplied about eighty per cent of the patient population in Clinics 1 and 2, or in another health area. The procedure will be to randomly select patients from the Narcotics Register files until the necessary number of individuals with the required characteristics have been drawn.

We will then obtain police records on the comparison group at regular intervals as we do with the patients in the A.R.T.C. program. We will compare the reported criminal activity of these individuals who have been matched with those in our patient population to that of the patient population over time.

A.R.T.C. FIELD STAFF

The bulk of research activities carried out at the Center depend upon the skill and perseverance of the field staff. The field staff is now headed by

Mrs. Julia Bates who has extensive experience in field operations and in training interview staff. Any research in an ongoing service program faces many difficult administrative problems. They must integrate their data collection program with other demands on patient time from counselor, therapist and medical staff.

Procedures have been developed so that patients, as they proceed through intake, are funneled to the research staff in order that they administer the Criminological Questionnaire and the Personality and Social Inventory. By working closely with the Social Service Department the research staff has been able to locate patients who entered the program prior to the installation of the research program and this activity is well under way.

The staff also played a key role in pre-testing the Personality and Social Inventory at Bronx State Hospital, where they contributed to the process of refinement of the questionnaire, and gained experience in its administration.

An important activity has been the development of a patient monitoring system which enables the research staff to constantly up-date data on each patient's status, a difficult endeavor. Under Mrs. Bates' direction,

IBM cards have been prepared that identify each patient, along with basic demographic information, and provide locations where a patient's status can be entered. They can identify all patients who still need to be contacted for interviews, patients who have been discharged or have left the program for other reasons, or who may have been reassigned to other clinics.

The research staff at the Center has been trained in interview procedures, and under the direction of the field coordinator, has been editing the instruments prior to their transference to IBM cards. The staff has also been working closely with the Medical Evaluation Team in preparation for the joint experimental program described earlier.

Constant liaison is maintained with the Director and Assistant Director in order to provide important feed-back on various issues that require attention. These include: problems encountered in the administration of schedules, so that they can be redesigned to expedite administration; administrative problems that may require intervention; and, program developments that can influence research strategies.

BIBLIOGRAPHIC RECOVERY

Work on a method of bibliographic recovery has continued. This program was originally conceived of as a means of "linking up" reports of A.R.T.C. with

with the literature on drug addiction and treatment. However, even prior to any report writing the perusal of the literature has been of value for instrument development and in answering queries put to the A.R.T.C. research staff.

The format to be utilized minimizes the amount of hand and eye labor to the greatest extent possible. This requirement was a necessity as the literature involved is already quite large, has been diversely published, and is constantly growing. The person hired to prepare, plan, and initiate the recovery method, a doctoral candidate at Columbia with a background in and knowledge of the field, discussed the requirements with the project director and others. The decision was made that utilizing IBM equipment (already available at the Research Center and at Columbia and Harvard's Computer Centers) would be the most efficient and ultimately the cheapest method. In addition this would provide great capacity.

After an initial reading of a limited number of abstracts of the recent literature in drug abuse and addiction, criminology, and corrections supplied by N.I.M.H. a method of recovery was constructed specifically for our use. The coding schema was tentatively applied, using several thousand of these abstracts, as well as some books and articles in

selected journals. Of course, much of the extant literature is of little or no use to us. When material has no foreseeable project use, it is discarded (i.e., not coded) unless it pertains to drugs. With items that touch upon the drug field, though of no project use, an abbreviated IBM entry is made. This allows for future re-evaluation as well as realizing our objective of a comprehensive review of the literature.

This "trial run," as it were, provided the data to allow the schema to be reworked. That has been completed and is circulating among the research staff for comment and final revision. The coding of the literature already reviewed is quickly up-dated with the revised format and does not require a substantive reinvestment of time.

The schema allows any staff member to code what has been read so that any other staff person can "recover" that item as needed.

OTHER DEVELOPMENTS

(1) At the request of L.E.A.A., a special report is being prepared for submission by January 31, 1971. This report will describe the experience of the first 200 patients during their first six-months in the program. These data are now being assembled, and will include information on program retention, drug use, employment experience, and involvement in program. This will be an interim report, as the time span is too short for a full-scale evaluation. Activities associated with this activity will be described in the next Progress Report.

(2) Preliminary design work is under way for the Community Study, described in the request for a renewal grant to L.E.A.A. This study will also be discussed in greater detail in subsequent reports.

(3) The processing of the data obtained from official arrest records of patients, as well as the Criminological Questionnaire, will also be described in subsequent reports. Computer programs are presently being developed to facilitate the processing of the information from these two sources of data.

(4) The development of reporting forms that monitor patient utilization of program facilities has already been implemented for the Counselor staff, and the first returns are now being processed. This and other related activities will also be described in future reports.

(5) Computer tapes containing data on each patient are being forwarded to the research staff from Texas Christian University, where a data bank is maintained on methadone programs receiving N.I.M.H. funds. Although of limited use, important identifying information is contained and will be especially useful for the interim report referred to above.

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