Mental Health Clinic Statistics

needs
sources
methods

Lack of uniformity in statistical methods in mental hospitals and clinics was termed an important obstacle to adequate evaluation of procedures and therapies by the National Governors' Conference on Mental Health. Presented is an approach toward uniform reporting.

By ANITA K. BAHN, B.A.

THIS OUTLINE summarizes the needs of different groups or organizations for information on mental health clinics, on the kinds of clinic data which can be gathered to meet these needs, and on the techniques which can be utilized for collecting clinic information on a wide geographic basis. Although the outlined items relate specifically to clinic services, they have wide and general applicability to uses of statistical data for many health department services as well as for services of many other agencies with a need for meaningful statistical data.

If this picture of consumer demand for clinic statistics appears somewhat complex, it is because the situation is complex. This does not mean that the problems of clinic statistics are insoluble. Rather, it is important to recognize realistically both the differences and the similarities in the needs which different agencies have for clinic information and to plan a long-range statistical program accordingly.

Mrs. Bahn has been associated with the Public Health Service since 1948, as biostatistician with the National Cancer Institute from May 1948 through October 1951, and then as chief of the Outpatient Reports and Records Unit, Biometrics Branch, National Institute of Mental Health. She has also been a statistician for the Public Housing Administration, the Census Bureau, and the War Production Board.

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Needs for Clinic Information

There are many similarities in needs for clinic information, but different statistics can be meaningful to different groups and at different levels of operation. This point can be illustrated by listing a few of the actual and potential consumers of clinic statistics according to their function and interest, and next, depending on what level the consumer agency is functioning, by listing some of the factual information needed about clinic operations.

1. Public and nonprofessional groups, such as mental hygiene societies and other voluntary community organizations, which are interested

in or which sponsor mental health programs and clinics, are some of the major consumers of clinic data. Since these are typically community groups, their primary interest is to determine what are the community's mental health needs and how adequately the clinic is helping to meet those needs.

2. Appropriation bodies—local, State, and Federal—and other public or private agencies which provide part or all of the clinic's operating expenses want to know how the clinic's operating funds are being spent and whether the most effective use is being made of clinic resources.

3. Professional organizations, both single-discipline and interdiscipline associations, have a natural and valid interest in data which will indicate the nature of their professional practice or role in clinics and the professional standards that are being followed or that will assist in planning professional training.

4. Research workers, or research groups such as universities and medical schools, may use clinic information for special socioeconomic or etiological research. This type of clinic statistics cannot usually be recorded or collected in a routine manner. In order to obtain valid results, research projects of this nature must be carefully designed in advance of the recording or collecting of data, and their scope must be carefully delineated. Since research interest in clinic statistics requires, typically, a great deal of detailed information on limited and specific areas of investigations, the statistical needs of this group will not be discussed here.

5. Individual clinics, clinic boards, State mental health authorities, and local councils of clinics and social agencies may be included among the operating agencies themselves. Although operating agencies utilize much of the above statistical data, they require, in addition, detailed administrative facts on the clinic's operations which outside agencies do not need but which are essential for personnel supervision, allocation of staff time, and policy decisions. The specific administrative data needed may differ, depending on the kind of clinic—whether it is a children's clinic, an adult clinic, a juvenile court clinic, an alcoholic clinic, or a training clinic.

Levels of Need

There are, then, basic differences in the questions asked about clinics by different groups. The questions also vary somewhat, depending on whether the consumer agency is functioning on the national, regional, State, community, or local level. Sometimes data requested on a national basis, such as age and sex of patients and amount and kind of services received, may seem insignificant to the clinic which has relatively few patients. However, when these pieces of information are added up from each clinic, they provide a significant picture of services in the State, region, and Nation. There are actually both variation and overlapping of statistical needs and interests depending on the type of agency and its level of operation.

1. Thus, national organizations need, typically, broad clinic information to answer some of these basic questions:

How many clinics are there in the United States?

What is the typical staffing pattern for different types of clinics?

How many psychiatrists, psychologists, psychiatric social workers, and psychiatric nurses are employed in mental health clinics?

How many patients are served by mental health clinics in the United States? Is this number increasing or decreasing? What services are given to children? What kind of psychiatric disorders are presented to clinics? What are the trends in the kinds and amount of services received by patients?

2. State agencies and organizations require nationwide data to provide the background from which to view and review the State mental health program. At the same time, they need data relative to the services in each community within the State and to the individual clinics over which they have jurisdiction.

3. In the individual community, clinic councils and their member clinics have found that uniform clinic reporting can be of great help in studying community need, in improving services to patients and the community, and in reviewing clinic administration, through interclinic comparisons of services to patients, waiting lists, workload, and distribution of staff time.

4. The clinic's primary need is probably for

data on its own operations. However, the clinic also requires data on comparable clinics to serve as a yardstick for measuring its activities. Where the clinic is part of a community or State group of clinics, data on other clinics in the group are needed to complete the picture of the clinic's role.

Types of Clinic Data

Enumeration of some of the types of clinic data which can be collected may be helpful in determining how factual information is needed in the broad review and planning of mental health programs.

1. Data on the availability of clinic services would include number and location of clinics, geographic areas served, and special groups of persons served. Indexes on the availability of clinic services in the community can be computed by determining the number of clinics and the number of clinic hours for each 100,000 persons, and also, the number of clinic professional man-hours for each 100,000 persons. Much more service is available to the community, for example, from clinic A, in which there are 500 professional man-hours of service each week, than from clinic B, which provides only 100 man-hours, although both may be full-time clinics.

2. Data on the services provided by clinics are among the most important clinic statistics. Among the ways in which clinic services to patients can be measured is the count which can be made of the number of services provided over a given time period; that is, so many interviews—so many psychological interviews, so many treatment interviews—in 1 month, in 6 months. This service count can be broken down into as much detail by type of service and by type of personnel performing the service as is needed.

But how much detail is actually needed?

For example, before establishing a routine record system that would burden each professional worker with the task of reporting daily auxiliary patient services such as telephone calls and the writing of letters, it should first be decided whether this minute and often "defensive" kind of reporting is worth while. Where it is necessary for management analysis to know how much time is spent on such activities, it may be more economical to obtain this information through occasional time or workload studies.

3. Is a tally of services the only way to analyze the services of a clinic to the community and to the clinic's patients?

The work of the public health agencies may also be viewed in terms of the individuals or community agencies who receive the service, rather than primarily in terms of the number of services performed or in terms of the clinic personnel who perform the services. This focus has been found very useful for providing information to public and legislative groups, as well as for programing purposes.

This point of view is supported by the Working Group on Service Statistics of the Public Health Conference on Records and Statistics (*1*), which in April 1951 outlined 10 basic principles governing service statistics in public health. Two of these principles are quoted:

"The most important concept concerning service statistics is that such statistics should, generally speaking, measure services directed to individuals and their environmental hazards and not attempt to measure staff activities. . . .

"The gravest criticism of utilizing activity counts for service statistics is the fact that a false sense of accomplishment may be engendered in health department personnel. . . ."

At the same conference, it was noted that one State in its reporting plan follows the first quoted principle, by placing major emphasis on number of persons served and type and amount of service received rather than on numbers of visits and inspections made or other such measures of volume of staff activity. In reference to the second principle, the working group observed (*1*):

"When so many activities are recorded, there is severe temptation to think that every minute of the working time should be tabulated as evidence that full time and attention have been accorded the job. This leads to the desire to account for every letter answered, telephone call made, and even the time spent in preparing the activities report itself. . . . "

In terms of these two principles of public health service statistics, some pertinent ques-

tions can be asked about the individuals who received mental health clinic services. Answers to such questions will help to show how clinic resources are being utilized and will help in the evaluation of patient services. For example: How many patients of each age and sex group in the population visit a clinic during a year? In other words, are services for different segments of the population keeping up with evidences of needs by these groups?

How much service do patients receive? The amount of service received by individual patients can vary from 1 interview to well over 200 interviews. Because of differences in types of clinics, one clinic may see annually 1,000 patients for 1 or 2 visits each, whereas another clinic may see 100 patients from 5 to 75 visits each. It is important, therefore, to have some factual information on the amount of service received as well as on the number of patients.

For different age groups represented at the clinic, what are the problems uncovered or diagnoses made?

How many patients does the clinic treat?

What is the average amount and duration of the therapy?

Who gives treatment to various kinds of patients?

How does the outcome of therapy relate to diagnosis and to type, duration, and amount of therapy?

How many cases are terminated before planned services have been completed?

What are the reasons for the unsatisfactory termination of the case?

What is the probability of readmission?

In the area of patient services, the kinds of useful statistical questions that can be asked are almost limitless. So also are the kinds of useful cross-tabulations that can be made from data such as age, sex, amount of service, and outcome of therapy, particularly if punchcards pertaining to a large number of patients are available.

4. Data on the extent to which clinic activities are directed to the general community and community agencies, rather than to registered clinic patients, are valuable because of the increasing emphasis on community-oriented services, such as public mental health education, inservice mental health training of professional groups, and consultation services to other community agencies, in public mental health programs. Here again, there may be interest in several facets of the subject:

What community agencies make use of this type of clinic service?

What kinds of services are given?

Who in the clinic provides the services?

Is there any way of determining whether these services are of value other than from the fact that they are in demand?

In counting community services, either the number of different kinds of activities or the number of man-hours used for such activities might be recorded. The latter method is preferable because it provides a valid method for adding up different kinds of activities.

5. Or, the clinic might be looked at from a different focus, and questions might be asked about its administration—utilization of staff time, workload, or cost, such as:

How many professional persons are employed in mental health clinics?

What were the employment trends during the last 5 years?

To what extent are clinic staffs interdiscipline groups or composed of the basic clinic team?

Given the most desirable interdiscipline ratios of psychiatrists, psychologists, and psychiatric social workers for clinic teams in different types of clinics, how many additional persons of each profession would be needed to complete the staff of existing clinics or to staff clinics that may be planned for the next few years?

What training activities for the various professions are under way in the different clinics?

During a given month, how much professional time is used for patient services, community services, training, staff conferences, dictation, and other administrative work?

How many patients are there in active status on a given day?

How many of these patients are undergoing long-term treatment on a weekly basis? Semiweekly basis?

How many patients are on the treatment waiting list for 1 month? Six months?

Information is needed which shows how professional man-hours for different disciplines are

distributed by activity and by case. Comparable, and perhaps nationwide, data are needed in this area so that clinics can review their experience with that of similar clinics and determine whether their staffs are being used in the most efficient manner. However, this workload information is of less interest to public, community, and supporting agencies than are data that will indicate the kinds of services provided, who are the recipients of such services, and how much the services cost.

There appears to be an increasing interest on the part of appropriation agencies in obtaining data on the cost of clinic services:

What is the mental health clinic cost per capita population in the country and in different communities?

What is the clinic cost for each interview hour? For each community service hour? For each professional man-hour? For each type of patient?

6. Data on the referral source of patients are another type of information which may be quite valuable to the clinic or local council of clinics. These data may indicate the extent to which different community agencies are being served by the clinic or are cognizant of the mental health clinic as a resource. These data may also indicate patient or family awareness of a psychiatric problem.

In the collection and interpretation of referral data on a national scale, however, there are some difficulties. Knowledge of the local mechanism of referral and of clinic policy is essential for interpretation of referral data. Some clinics connected with schools, for example, do not accept patients without school referral. Families are therefore automatically referred through the school and counted as school referrals, although their attendance at the clinic is actually self-motivated. Several other types of clinics accept patients only through agency referrals. Also, where there is both self- and agency-direction to the clinic, "self-referral" and "agency-referral" are not defined in the same way by different clinics.

7. Data on applications pending or waiting lists can also be useful to the clinic and community, as indications of immediate demand for services. However, here again, knowledge of the local situation is necessary for careful interpretation of the data, particularly if they are to be used as indexes of the community's unmet needs.

The community's referral mechanism and the clinic's application policy will have a marked influence on the number of applications pending at a clinic. Some clinics may not accept applications for temporary periods of time. Also, where the clinic has a long waiting list of applications, this becomes known to referral agencies and persons who are seeking clinic services, and applications are not made. Some other method must be found, therefore, to obtain reliable data on the need for clinic services, if this information is desired.

Collecting Uniform Data

Several methods that may be used for collecting comparable clinic information on a national or wide geographic basis are: the use of a national report form for collecting minimum basic data from all clinics; the development of a model reporting area in clinic statistics and the use of sample surveys for the collection of more extensive information. These methods are not contradictory but can be used to supplement each other to get meaningful clinic information; it is necessary, however, to fit the method to the need and to the type of data to be collected. All three methods may be considered pieces of a long-range clinic statistical program that must be developed on a cooperative basis.

It is expected that, in addition to any plans that might be made for collection of data on a broad geographic base, individual clinics, councils, and State agencies will want to collect, either routinely or occasionally, some information to meet their own particular needs or interests.

1. The use of a national summary report form is geared primarily for the routine collection of a minimum of basic information from all clinics. Such is the annual report form for psychiatric outpatient clinics proposed at the Second Conference of Mental Hospital Administrators and Statisticians in 1952 (*2*) and subsequently developed by the National Institute of Mental Health of the Public Health Service in cooperation with State mental health authorities and professional organizations. Now that

the preliminary revisions and some trial experience have been completed, the report form was to be used voluntarily on a nationwide basis beginning July 1, 1954 (*3*).

The principal advantage of a uniform summary report for all clinics is that it can provide a nucleus of comparable basic information on nationwide clinic services. This information can then be used as a point of departure for further investigations or as the "universe" for sample studies on clinic activities.

Frequently overlooked, however, is the fact that a routine reporting system can be somewhat flexible. As a result of experience with the uniform report form or because of changes in clinic emphasis or policy, new items can be added to the form, and other items can be deleted, or classifications can be changed. Also, where there is little change in some of the data from year to year, the information requested can be put on a cyclical basis.

The meaning of "cyclical" reporting may be illustrated by examples of the data on terminated patients requested in the annual report form for psychiatric outpatient clinics. The assumption is made that 5 or 6 basic facts about each patient and the services he receives will be recorded on each case record, analogous to the information recorded on all patients in other medical institutions. The national report form requests that these patient data be cross-tabulated in certain ways. After experience with the new form has been accumulated over a number of years, it may be evident that there is little change in some of the data from year to year and that it is worth while to request, one year, data on age by sex, and, in alternate years, data on age by amount of service received. Or, in one year, data might be requested on amount of service for all terminated patients, and in alternate years, for terminated treated patients only. If advance notice is given and the number of cross-tabulations in any one year is kept to a minimum, the clerical work in the clinic would not be augmented by modifying the kind of cross-tabulation requested.

Where the information on a national report form is not requested retroactively, clinics can make provision to include such information on their own record forms and to transcribe it on the national form in a routine manner.

Data on terminated patients requested in the new national form may be prepared in a number of ways—from punchcards which are tabulated mechanically, from cards tabulated manually, or from listings and worksheets. When more clinics, clinic councils, and State mental health authorities are cognizant of the advantages of punchcards, attempts will undoubtedly be made to explore all possible resources in order to utilize punchcard equipment which may be readily available.

2. Experience with a model reporting area in the field of mental hospital statistics may be cited as an example of how more extensive information can be obtained in a large-scale collection of clinic data, particularly through punchcard methods. A model reporting area of the mental hospitals in 15 States has developed as a result of the three recent Conferences of Mental Hospital Administrators and Statisticians. The 15 States composing the area are Arkansas, California, Illinois, Indiana, Kansas, Louisiana, Michigan, Nebraska, New Jersey, New York, Ohio, Pennsylvania, Texas, Virginia, and Wisconsin (*2–4*). Representatives of the States meet annually, and have since 1951, to arrive at uniform definitions, minimum number of basic tabulations, and appropriate methods of statistical analyses. By mutual agreement, these States collect and tabulate data in addition to those requested in connection with the mental hospital census conducted by the National Institute of Mental Health of the Public Health Service. The use of machine tabulation methods in these States has made feasible such additional tabulations.

A model reporting area in the field of mental health clinic statistics, composed of State mental health authorities and possibly community councils, which utilize punchcard procedures for tabulating patient reports, could operate in a similar fashion. For example, additional items of information could be collected on terminated patients if desired, or the group might decide to cooperate in a 1- or 2-year special study on a subject in which there is mutual interest. If a definitive study were desired on some particular type of patient or disorder presented at the clinic, it might be more readily accomplished as a cooperative project among all clinics represented in a model report-

ing area in a 1-year study than if an attempt were made to collect this information in a single clinic or single State. In order to have enough cases for valid deductions, a small clinic might find it necessary to collect this information over a number of years.

3. The use of sampling techniques is another method of collecting clinic information on a broad scale. To illustrate how this method would work, imagine, at some designated location, a national file of punchcards summarizing the data reported on the new annual clinic report form for each outpatient psychiatric clinic in the United States. The clinics represented by these punchcards would be readily classified into homogeneous groups or strata, according to such factors as type of clinic, auspices, number and type of employees, number and kind of patients served, average amount of service received by patients, and community and training activities. From each group or stratum of clinics, 5, 10, or x percent of clinics could be selected at random to represent that particular stratum of clinics. Together, all such randomly selected clinics would represent an unbiased stratified sample of clinics in the United States that might agree to participate in an occasional survey.

Workload studies, such as census of patients in active status on a particular day, staff time studies, and cost analyses, are well adapted to sample studies, particularly if these data are not needed for small geographic units.

The obvious advantage of sample surveys is that only a relatively small proportion of the clinics are called on to supply the extra data. Yet, sample data, if properly collected, weighted, and interpreted, yield inferences applicable to the universe sampled. For each new study, samples of clinics can be reselected so that no single clinic would tend to be overburdened with supplying special data. However, it is desirable first to have basic data which describes the universe of clinics so that a sample can be properly selected.

Any data that would be available in a national file of punchcards, as the result of the collection of information on the new national report form, would certainly be made available to any accredited agency for the selection of clinics for sample or other studies. For example, if it were desired to study psychiatric social work services in mental health clinics throughout the United States, it would be possible to select a representative sample of clinics for query instead of querying all clinics in the country, and there would be a resultant saving of time and money to the clinics and to the group making the study. Thus, the use of sampling techniques makes accessible, in an economical manner, a rich reservoir of clinic information.

REFERENCES

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The Biometrics Branch of the National Institute of Mental Health of the Public Health Service is interested in learning of statistical projects and experiences which could serve as pilot studies for similar studies on a larger geographic scale. Copies of the new summary report form mentioned in the outline are available on request.