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PRINCIPLES OF PLANNING II:

DEMOGRAPHIC AND ECONOMIC ASPECTS OF MENTAL HEALTH CARE IN DEVELOPING COUNTRIES

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I. INTRODUCTION*

1. The central theme

One of the crucial issues in the health field is how to assess options for the development of health services. This assessment should ideally be based on a thorough understanding of the implications of such options within a global system perspective. The review of literature shows that such an objective and realistic assessment has rarely been made for developing countries or for the development of mental health services. One of the major omissions is that of relevant demographic and economic factors which are of particular concern in developing countries. This emphasis on demographic and economic factors does not mean that other social factors - such as ethnic and cultural factors, family and community structure, or psychosocial and somatic factors - are not equally relevant.

2. Demographic and economic perspective for assessing options for the development of mental health services

The proposed frame (see page 5) presents one possible model of assessing options for the development of mental health services, especially as regards demographic and economic factors. Among relevant demographic factors influencing the need and demand for mental health services are the following: patterns of population growth and density, life expectancy, migration, urbanization and crowding, and related sex-age structural shifts, occupational and marital status. In addition, various demographic Markovian models of the birth-life-death process can be used for planning and evaluation of health service programmes. Such a model was recently developed to relate input decision variables - such as specific mortality rates by age and group of diseases and specific fertility rates by age - to out-put criteria - such as life expectancy, time dependent structure of mortality by age and cause of death, and other time dependent demographic structures (Ortiz and Parker, 1971).

Mental ill-health is not only bad in itself but it makes it more difficult for countries to achieve their desired socio-economic development. This burden does not only differ with the prevalence and incidence of mental health problems. It differs-even more importantly - with the cultural, demographic and economic context of each particular country. Such factors determine also to what extent particular mental health services programmes are able to improve mental health status, considering dynamic need - demand-coverage relationships.

The question is therefore particular to each country context, namely how much is gained by a given change in the allocation and management of

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of mental health resources considering the health sector as a whole. How much would such a change contribute to diminishing the burden of mental ill-health on socio-economic development (i.e. benefits) compared to the charge it makes to socio-economic development (i.e. costs)?

II. CONTEXT OF PLANNING FOR MENTAL HEALTH SERVICES

3. Priority setting within health programmes and budget Cost of mental health services within the delivery system

3.1. Priority setting

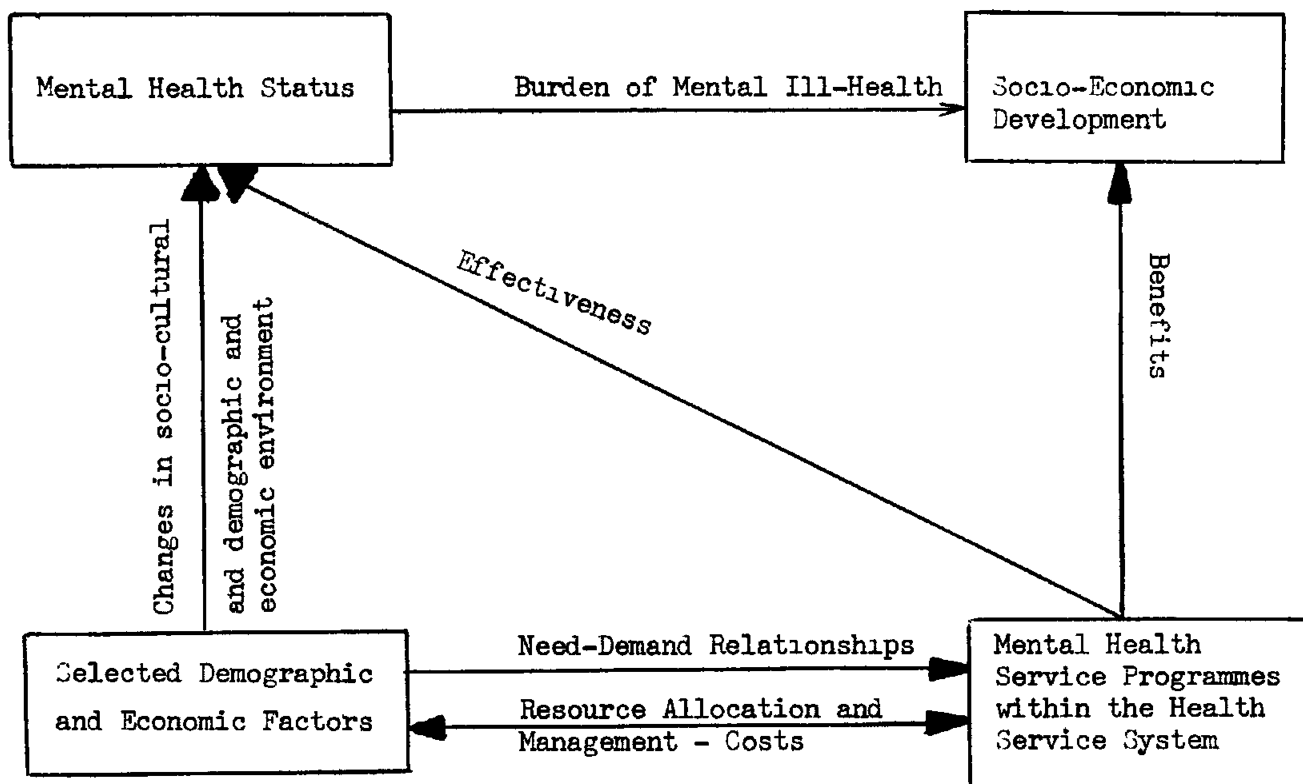
Mental health is a priceless asset. Mental health services, however, are by no means priceless. they use resources for service production and delivery that are scarce in society and especially so in developing countries. People want health services, but they also want food, education, housing, clothing, fuel etc., which may contribute to health and other social and economic needs.

It has to be emphasized that reduction of mental health service costs in itself would be a mistaken objective for the planners and managers of mental health services. This is easily seen, since the costs of mental health services can be reduced to zero by eliminating all mental health services. The objective is instead to strike a balance between mental health services and all other health services and societal productions. This necessitates the setting of development priorities in the health services and within mental health services. The question is not usually one of "all or nothing" but one of "efficient or inefficient mixes" of mental health services within the entire health service delivery system.

Development planners have often pointed out that the sole development of either industry, agriculture or education are false priorities. In the health field, either basic health services or maternal and child health services, etc. are equally false priorities if health services are not considered in their totality. Nor can we choose between economic development and health services development, since many health services contribute to the productive potential of individuals. Many health services and especially mental health services mitigate the often traumatic impact of development and change on individuals. It should never be forgotten that man is the creator and intended beneficiary of all development. Mental health services should therefore be designed to satisfy national and individual patient goals, i.e. ultimately the daily and holistic welfare needs of the individuals. This impetus cannot come from the medical establishment alone but only from its close cooperation with other disciplines.

Planning can prevent us from putting a priority on heroic efforts that disregard costs and look only forward to the "Ideal" result. The question posed to decision-makers is not one of which mental health service system is better than the present, nor which is the best of all systems. It is rather the question of which developments are efficient within the health service delivery system and other systems as a whole, i.e. achieve satisfactory progress towards health and other socio-economic objectives at reasonable cost to society.

FRAME FOR ASSESSING OPTIONS FOR THE DEVELOPMENT OF MENTAL HEALTH SERVICES



Leading Issue: Which Options for Development of Mental Health Service Programmes?

Costs, which are expected to occur later, burden opportunities at present less than more imminent costs (Prest and Turvey, 1965). On the other hand, present mental health service programme. commitments and developments imply often large expenditures in the future. A training programme for additional mental health service manpower, e.g. implies future expenditures on facilities, complementary manpower and drugs etc., so that this additional manpower can be employed for service delivery. The decision-maker will therefore want to estimate explicitly the financial requirements for a mental health service programme as a whole over several years, even if he should receive budget allocations on a yearly basis (Abel-Smith, 1967). Unpleasant surprises can be minimized in this way.

3.2. Cost

The use of resources for any particular purpose involves social costs or opportunity costs in the sense of lost opportunities elsewhere in society. These social costs are higher the scarcer such resources are relative to the competitive demands placed on them (Abel-Smith, 1972).

Competitive opportunities for many resources are especially high in developing countries while their availability is especially scarce. Developing countries need mental health service developments badly but they can afford only those with very low opportunity costs unless society is prepared to forego other social demands. Resources used to produce and deliver mental health services include staff, building, equipment, materials and supplies, information etc. Certain "budgets" support or procure these resources, such as money or credit funds and legal and political authority. These budgets are sharply limited capacities or constraints that cannot be exceeded.

The social costs of employing resources do not have to be the same as the money expenditures on them. Resource expenditures may, for example, be high relative to social costs because of high taxes or profits, or they may be relatively low because of subsidies and grants (such as volunteer or draft labor).

Planners and managers of mental health services have therefore to consider a) whether money expenditures on mental health services production and delivery are within the budgetary constraints and b) the social costs of the resources employed. Similarly, they have to consider how the resources used for certain mental health services could have been used for other types of health services. This means that mental health services have to be seen within the delivery of all health services and indeed within the total demographic and socio-economic system (WHO, 1973).

In countries with an exhaustive resource and service accounting system it would be feasible to compute in detail such opportunity costs of mental health services and other health services. In developing countries, by contrast, relevant information would first have to be collected in a laborious and costly way. Some method has

therefore to be found to go beyond money expenditure estimates for mental health services in developing countries. Such a method has to be based on the economic rationale of social opportunity costs but should require only a minimum of additional information collection and be easy to understand by decision-makers. One such method would be to establish a list of crucial resources for mental health service delivery and developments, to rank them by their rough magnitudes and the importance of their other employment opportunities in society. Modern psychiatrists may for instance turn out to be a luxury for most rural populations in developing countries, while much lower skilled mental health services manpower may be more efficient.

Even an estimate of money expenditures alone is not an easy task. Firstly, it involves often the pooling of accounts from a multitude of agencies and the private sector. Secondly, mental health services are not only delivered by specialized mental health agents and institutions but also within the general health services, not to speak of folk and self provided mental health care. Experts in the United States, for example, debate whether 10% or as much as 50% of health services by general practitioners and specialists in internal medicine are mental health services (Fein, 1958). A sample survey based on voluntary service accounting by diagnosis during a limited time could establish at low cost which proportion of general health services are in fact mental health cares.

The literature gives expenditures on mental health services only for few countries. For the United States, Fein (1958) calculated expenditures on mental health care in 1954 of more than 1,700 million dollars, whereas Rice (1967) calculated that little less than 11% of all health service expenditures were on mental health care in 1963.

4. <u>Impact of mental health services: Reduction in the burden of mental ill-health on socio-economic development</u>

Ill-health and therefore mental ill-health impair human welfare. Mental health services are social interventions in order to prevent the risk of mental ill-health, to cure mental ill-health or to keep such conditions from worsening, or to relieve the mentally ill in a symptomatic way.

Assessments of mental health services have in the past been mainly in terms of their procedural quality or impact on mental status. Even for this limited evaluation, it cannot be neglected that services and developments outside the health sector as well as other health services have an impact on the prevalence and incidence of mental health problems (See III. 7 below). It would therefore be wrong to measure mental health problems at different points in time and to ascribe the change in mental health status exclusively or primarily to mental health services.

Mental ill-health is not only undesirable in itself but also because it constitutes a burden on national socio-economic development by its mere existence. The burden arises inasfar as the mentally ill differ from the mentally healthy in having a smaller chance to participate in a wide range of

socio-economic roles and to achieve a satisfactory role productivity. The emphasis in this paper is on economic roles, i.e. roles in the production and distribution of economic goods and services. The mental requirements of a man behind a plough are different from those of a psychiatrist; the impact of a given mental illness on the role performance of both will differ correspondingly.

The assessment of the burden of mental ill-health is therefore the comparison of the actual situation with a hypothetical one, namely with the situation that would prevail - other things unchanged - if the mentally sick were healthy. In that hypothetical situation one imputes to the mentally sick the same labor force, employment and productivity opportunities which the mentally healthy really have.

As an example, Fein (1958) calculated that the first admissions of mentally ill to institutions in 1954 lose about 38% of their productive work years in the U.S. Similarly, Rice (1967) calculated that mental ill-health in 1963 was responsible in 1963 for almost one fifth of the total economic burden due to all ill-health in the U.S. No such estimates appear to exist for developing countries. It is however likely that the economic burden of mental ill-health is lower than in developed countries, simply because the mentally healthy have lower labor force, employment and productivity opportunities.

This does not mean that the economic burden of mental ill-health is negligible in developing countries. On the other hand, it would be quite costly to calculate such burden in detail since this would require a lot of new information. An alternative and less costly approach is to make calculations only by rough order of magnitude and only for major economic development schemes where there is sufficient reason to believe that mental ill-health will be a major limitation on their implementation. A high prevalence of toximania, e.g. would be a major concern for schemes to promote trucking business. This approach would first list which specific human functional abilities are required by particular economic development schemes and identify then existing or likely mental health problems which would impair such functional abilities. These burdens would then be ranked by rough order of magnitude. Finally service opportunities would be identified to deal with the priority mental health problems.

It is now possible to define the benefits of mental health services in terms of socio-economic development: mental health services benefits are the amounts by which mental health services lower the burden of mental ill-health on socio-economic development. These benefits will be higher, the more mental health problems can be prevented, the higher a percentage of mental health risks can be covered with effective services and the speedier the rehabilitation of the mentally ill is proceeding.

No such calculations appear to exist for any country. While exact calculations of benefits would be too costly in developing countries, the decision-makers could find pertinent information from questions such as the following: in which direction will developments in other sectors influence priority mental health problems? will the mental health service programmes attack such priority problems? how extensively and adequately will it cover such priority problems?

5. Learning from the experiences in developing countries

Available literature on the experience in developing countries does not appear to offer the relevant information which would be required to follow the above approach. The context of planning for mental health services is often well described (Baasher, 1973 - Kuwait; Diop, 1973 - Senegal: WHO/EMRO, 1972; Carstairs, 1973 - Indonesia; Nigerian Report, 1972) but does not specifically discuss the costs and benefits of mental health services delivery and their development.

Although the demographic dynamics and the health situations present many similarities in most of the developing countries, generalizations are only possible if and when the wide range of socio-economic contexts is fully considered (Bryant, 1971; Banerji, 1967).

If during the discussion at the Seminar account is taken of such varying socio-economic contexts, some general principles for developments of mental health services programme based on the experience of the participants could emerge.

III. PLANNING THE DEVELOPMENT OF MENTAL HEALTH SERVICES

6. Basic options for the development of mental health services

The term "options" for mental health services development is treated here in a broad sense. It comprises for the developing countries a substantive redirection of the present mental health services programmes and of the health systems in general (Lambo, 1972) as well as a mere expansion or contraction of certain mental health service types or a change in its management and supporting (such as drug inventory) systems.

The search for options will be different in each socio-economic context but will in developing countries be motivated by a desire to make rapid progress toward the following general goals for mental health services and indeed health services in general (WHO, 1973; Newell, 1973):

First, peripheral primary mental health services which are accessible to the total population.

Second, a referral system with efficient forward and backward channels for those persons with special mental health service needs.

Third, an allocation of mental health service resources which is based upon overall national and social priorities.

Fourth, a mental health service programme which is designed and administered in a way that is consistent with national values and acceptable to the population and responsive to its expectations.

Fifth, a management system for mental health service resource use and utilization which is able to promote efficiency.

Sixth, a standard national mental health service technology that is simple and appropriate for the priority mental health service problems.

Seventh, an improvement in mental health status (including also development and disability) not only through health service action but also through induced change in other sectors.

Eighth, the ability of the mental health services to adapt flexibly to changes in needs, demands and resources.

It cannot be said a priori which mental health service development options are more efficient than others. This has to derive from a comparison of the additional benefits and costs which each option is expected to generate within the country context. It is desirable, e.g. to shorten the length of inpatient stay for mentally ill: it would however be countereffective when no complementary community or home services exist for required follow-up care. The principle of graduated patient care requires therefore that the services of lower-grade intensities of care are in fact existing opportunities.

Prevention of mental health problems is often less costly and more effective than letting mental health problems develop and then trying to cure or relief them. Again, it is not always true. Mental health problems increase with the conflicts and contradictions inherent in rapid social change such as urbanization and modernization (Diop, Collomb and Sankalé, 1973), but it would be too costly to stop social change (See III. 7). The burden of social change on mental health has to be recognized e.g. by associating mental health workers with all major economic and social development projects. An effort has to be made to cushion the harmful impact on mental health without jeopardizing socio-economic development as a whole.

Some developments may cost little but be quite effective, such as introducing the notion of mental health hygiene into school and manpower training programmes, fostering the establishment of mental health benevolent societies and - most important - tapping the existing resources of local populations. In the past, the imposition of huge institutions (such as psychiatric hospitals with hundreds of beds) from the top down have rarely been successful in developing countries. They often cost too much, monopolize skilled health services manpower, specialize in treating "fancy" mental health problems of low priority, pose too high demands on little developed management capacities, separate the inpatients from their normal socio-cultural environment and other health services opportunities, have difficulty in controlling inpatient therapy, have little or no referral system in the sense of graduated or follow-up patient care, cover only an insignificant proportion of the population at risk and can be afiordered financially only by a small part of the population because of high travel expenditures even where the services themselves are "free of charge". While such psychiatric hospital system may be justified in exceptional instances in developing countries, it is equally evident that a mental health services programme cannot be based upon them in any such country.

Given that population is growing fast in the almost all regions of the developing world, that highly skilled medical manpower in general is very scarce, that the population expects satisfactory health services as a whole at low cost, a more promising approach has to be found. Such an approach will be based on a multiplication of small health services delivery points in the different regions of each country. Small mental health services units can be established and promoted in such a way that they are fully part and parcel of the local socio-economic fabric of life. Adoption of local architecture saves construction costs and provides local employment opportunities. Such units belong to the local communities and these will be more motivated to accept them, to participate constructively in their management and to volunteer

help in feeding, clothing and also socially and economically rehabilitating the mentally ill. Within such community mental health services there is also place for traditional methods of treatment and rehabilitation, which can diminish necessary drug consumption. In this connexion, the experience of "psychiatric villages" developed recently in Senegal (Collomb, 1972) - Psychiatries sans psychiatres - may prove to be one feasible option by offering a new form of community-based therapy.

It may be sufficient in many cases to incorporate mental health services into the basic general health services. Mobile communicable disease teams e.g. could - as soon as their task changes to "maintainance" - aid in the prevention, detection and treatment of certain mental health problems. All non-specialized agents in curative health services delivery could be taught a few well-defined procedures in order to be able to deal with simple mental health cases. Where special mental health services are necessary they may gain by being located within or close to health centers. They can in this way jointly utilize laboratory, pharmacy, logistics, administration, and general health service manpower.

The above discussion of "options" does not imply that the decision-maker can consider alternative interventions in different areas separately. The assessment of options needs to consider intervention packages in the sense of comprehensive plan proposals for the development of health services as a whole. Alternative proposals can, e.g. be compared when each proposal would approximately exhaust expected budget allocations.

7. Some dynamic demographic and economic factors influencing the need and demand for mental health services

A relatively limited literature on mental health services and related demographic and socio-economic aspects has developed in the United States and other developed countries (Lin and Standley, 1962). However, information concerning these aspects in developing countries is very rare (Lambo, 1969). From available studies and reports three generalizations can be drawn for most developing countries: a) availability of health services in developing countries tends to be sharply limited in terms of both facilities and manpower; b) although the distribution of mental health services is often spotty, health facilities and manpower are least available to the rural populations which comprise the majority of most developing countries (Banerji, 1967); c) their need for services is regularly high but numerous demographic, economic and socio-cultural factors often act to inhibit the traditionalistic and rural populations of developing countries from using those few available health facilities - including mental health services (Collomb, 1972 - Le besoin et la demande pour une assistance psychiatrique).

In the absence of specific studies on the use of mental health services in the developing world, one has to refer to studies on the utilization of health services in general. Thus from one study carried out in Tunisia (WHO, 1972 and related papers by Benyoussef and Wessen) it was demonstrated that some of the determinants of utilization were demographic and economic in nature and related both to the population and the services used.

The analysis of the Tunisian data (WHO, 1972) suggested that need and availability are controlled by individual "predisposing" or "enabling" factors. Thus it was demonstrated that the rates of utilization vary according to such parameters as sex and age, occupational status, urban/rural differences and education. In addition they vary according to a number of culturally determined attitudes towards personal health (e.g. doctor's treatment better than old recipes; preference given to old recipes; need for treatment) and health services (e.g. health services sufficient; services well organized; consultation hours convenient: working time no longer than hoped for; doctor-patient understanding satisfactory). These parameters reflect the relative modernization of the population. This suggests a general hypothesis, namely that the utilization of health services in developing countries is a function of the relative modernization of the population and the relative quality of available health services.

The assessment of health problems cannot by itself indicate the need for general and mental health care. Social change as regards migration and urbanization has to be considered as well (Benyoussef, 1972). One collaborative study recently carried out in Senegal illustrates some important health effects of migration and urbanization (WHO/ORSTOM/University of Dakar, 1972 and related papers by Benyoussef, Cutler, Baylet, Diop, Collomb and others).

The analysis shows that sex, age, marital and educational status lead to important differences in the health problems of rural non-migrants and rural immigrants into the city of Dakar. Many of the mental health problems derive from difficulties to adapt to urban life. Similarly, problems related to diet, clothing, unemployment and housing are due to such difficulties in acculturation to the urban style of life. Duration of residence, interpersonal relationships and leisure activities are additional determinants of urban adaptability.

IV. SELECTED ISSUES IN THE MANAGEMENT OF MENTAL HEALTH SERVICES

8. Better utilization of mental health service resources

Management means different things to different people. Its minimum functions are planning, supervising and controlling (Miner, 1971). The difference between supervising and controlling is similar to that between prevention and treatment. This section deals with selected issues of supervising and controlling mental health service resources, namely with management efforts to decrease inefficiencies in resource utilization. Only some aspects of management are economic, others are behavioural, technical and operational and cannot really be separated from the economic ones (Kleczkowski, 1973; Brown, 1973; WHO/AFRO, 1970). The reasons why some selected economic aspects are presented here is that management ability appears to be one of the skills which is still in extremely limited supply in most developing countries.

The utilization of available resources is inefficient if resources are not or not fully utilized in line with their skill and time capacity. One reason may be that there is deficient demand for the health services of a given provider, provider team or facility because the type, quality (including aspects of service in its original meaning of "serving a client") or terms of availability of health services are not acceptable to the population (see III, 7). The manager has in this case to find out what the population

expects and how these expectations could best be met. Where such expectations are illogical or unrealistic, the manager may consider the reorientation of such expectations by community health education efforts or, where this is not feasible, he may consider to coopt them by advertising his health services in line with those expectations. It may be objected that these old and proven marketing principles are not applicable where mentally ill are the clients, but the demand for mental health services is more likely to come from their families, friends, employers, in short the mentally healthy local community. It may also be objected that mental health services can often be made compulsory - and are indeed in some developing countries linked with prisons (Nigeria Report, 1972) - but the population finds means and ways to avoid compulsory services when it is not convinced of their usefulness, as is shown in the much less controversial area of tax collection.

A second reason for inefficient utilization of resources may be that complementary resources are not available in the required proportions. Examples are mental health service facilities without staff, mobile staff without means of mobility, more institutional beds that can be serviced by the staff, and training of more staff than can be employed. This means either that realistic resource planning was lacking or that the implementation of planning was not sufficiently supervised and controlled. Concentrating on the latter, the root cause lies often in an insufficient maintenance of resource inventories in the required proportions. Each resource system (staff training, staff employment, equipment, drugs, etc.) may be managed independently from each other. Equipment and drug inventories may not be maintained properly but are allowed to fall to crisis levels until proper action is taken. Staff may not be sufficiently motivated because it is insufficiently or not at all prepared by training to deal with the on-job demands or is not properly guided by supervision and in-team service training or has few opportunities for professional and salary advancement (WHO, 1970 - Evaluation of Effectiveness ...).

A third reason for inefficient utilization of resources may be waste due to carelessness or intention. These aspects are often discussed as moral or criminal issues with the implication that the only policy option is to change the moral attitudes of the staff and punish corruption. The economic aspect is more detached and consists in identifying root causes in the incentive system facing the staff: as long as vice "pays" more than virtue, people will tend toward vice. There is, e.g. an incentive for mental health service staff to sell on the black market drugs and equipment, which are intended for service delivery, when this means doubling their regular income. The remedy is not necessarily doubling staff income. There exist other options as well, such as motivating staff for service delivery, inducing the community to finance such drugs etc. and giving them therefore an incentive for controlling the staff, making one of the staff directly responsible for such inventories and paying him success bonuses, have an account of drug use made for each service encounter, etc. Similar changes in the incentive structures have to be considered where staff pocket patient charges or spend part of their contracted time on private practice. The art of incentives consists in bringing individual self-interest into line with the social interest.

A fourth reason for inefficient utilization of resources may be that a continuous search for ingenious and more efficient technologies, organizational arrangements etc. is lacking (Abel-Smith, 1972). Yet the magnitude o health and other development needs is so great in developing countries relative to their resources that they cannot afford inefficiencies in the same way as highly developed countries can (WHO/AFRO, 1970: Torís, 1972). Some of the innovative options for the development of mental health services were discussed in III.6. If these principles are followed, one mental health specialist could probably provide satisfactory mental health services for half a million people with the aid of nurses and auxiliaries and not more than 30 beds for mental health care. A detailed calculation would of course have to take account of the degree of population dispersion, the accessibility of the population, the available means of mobility, the incidence of mental problems in the population and so forth

A fifth reason for inefficient utilization of resources may be that different administrative levels and organizations with the mental health service delivery system are not sufficiently coordinated and duplicate functions. Economic reasoning in the abstract would favor an efficient division of labor with clear linkages in the sense of a regionalized system of health service delivery. Many alternative models of apparently efficient structures of organization could be given but all are worthless in the real world situation if they fail to account for politics, pressure groups and personalities. A rational organization and administration pattern can probably only result from the interaction of two countervailing pressures, namely pressures from above (central government) and below (local communities).

9. Implications for an information system in mental health services

Information is required for planning, including the cost and benefit assessment of development options for mental health services, supervising and controlling. The question in each context is which and how much information when and for whom is efficient. This decision is not purely scientific or technical, nor merely political and administrative, but economic as well. the collection, tabulation, analysis and retrieval of information uses scarce social resources. On the benefit side, information has no value in itself but only if it actually helps the client - in this case the decision-maker, planner and manager - to expand his range of policy opportunities, to define such opportunities sharply , to assess such opportunities from the relevant angles, and to put him therefore in a position to make more informed, timely and efficient decisions. Each investment into information has to be justified by its expected outcome and its low burden on social opportunities.

An effort has already been made in II.4 and 5. to show how the cost and benefit assessment of mental health services development options can be adapted to the context of developing countries, where requirements for new information have to be kept at a minimum. Special purpose one-shot surveys, e.g. of the prevalence and incidence of mental health problems are very costly. While they may be justified in certain circumstances, it would not be feasible to base an information system on them. Where such costly surveys have been made, one can take advantage of them. this "baseline" information can be continuously updated in a rough way by considering relevant dynamic factors (See III.7.) and potential service impact. Information is least costly

when it is an account of mental health service delivery and made simultaneously with it. Similarly, surveys to ascertain how the population is satisfied with their consumption of mental health services are very costly. It costs little to ask the consumers at the end of the service or at the beginning of follow-up visits which service aspects they liked and which ones not for what reasons.

An information system geared to decreasing inefficiencies in a particular resource, e.g. drug, system at a facility level (See IV.9) would have two functions, namely to "flag" inefficiencies which are not known and to trace the root causes of those inefficiencies which are known. Suppose for instance that the inventory of a particular type of drug appears always to be exhausted before procurement day. The first check would be whether the problem could be due to service delivery or not. If yes, then the problem may be due either to a large share of patients requiring high medication or over-medication of patients. If not, then the problem may be either natural storage loss, e.g. due to inadequate temperature control or loss to the black market. If over-medication, then the problem may be either patient pressure, deficiency of staff knowledge or staff intention to keep the patients from "making troubles", etc.

There is therefore a whole "tree" of successive problem conditions and therefore considerations which have to be investigated in a certain order and with certain degrees of urgency. The corresponding information system will have to follow the same groping or learning approach until root causes amenable to management intervention are found. Such a process-specific and outcome-oriented information system is obviously more economical than an "in-depth" survey of all possible contingencies.

V. POSSIBLE POINTS FOR DISCUSSION

This paper raises a number of planning issues. Others will no doubt be brought up during the discussion. As an example, the following points are offered for an exchange of views:

a) Which options as to the development of mental health services have recently been under discussion in the participants' countries? What are the pros and cons for these various proposals especially taking into account demographic and economic factors? Which recent or latest developments in mental health services have been implemented?

b) Was there anywhere a success of "coordination" or "integration" of mental health services with the general health services?

c) Were some of the selected issues in the management of mental health services given serious consideration and implemented in the participants' countries?

d) How have local communities been able to participate in mental health care development at the most peripheral level?

e) Is any official information - collected now - used for assessing options for the development of mental health services?

ANNEX

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