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MH - 6.1

Research methods in psychiatric epidemiology: economic analyses

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OBJECTIVES

This session sets out to provide increased understanding and new insights into the following areas:

- The rationale for a health economics perspective
  - the social and economic burden of mental disorders
  - policy and practice uses for health economics
- Key economic concepts and principles relevant to health care decision-making
  - economics: the science of scarcity
  - economic objectives: efficiency and equity
- Different modes of economic evaluation
  - cost-minimisation analysis
  - cost-effectiveness analysis
  - cost-utility analysis
  - cost-benefit analysis
- Design and measurement issues in economic evaluation
  - a hierarchy of economic evidence
  - statistical power and sampling size
  - stages of economic evaluation
  - the identification and measurement of resource utilisation and costs
- The uses and limitations of economic analyses

To SJ
Dr CMF -> RN -> TN

Sent by Dr RS Murthy of NIMHANS for 3-10 NSS '98 meeting
TN 3/11

ECONOMIC ANALYSES IN MENTAL HEALTH CARE

The rationale for a health economics perspective

The social and economic burden of mental disorders

An accumulating body of epidemiological evidence has emerged, particularly over the last five years, which points to the massive burden that mental disorders impose upon societies throughout the world. To take a notable example, a recent collaborative report, the *Global Burden of Disease* (GBD), compiled by the Harvard School of Public Health, the WHO and the World Bank, estimated that the proportion of GBD caused by neuropsychiatric disorders was over 10% (Murray & Lopez, 1996). Psychiatric disorders account for five of the ten leading causes of disability - unipolar depression, alcohol abuse, bipolar affective disorder, schizophrenia and obsessive compulsive disorder. This burden is projected to increase to 15% of GBD by the year 2020, largely as a result of demographic trends such as the increased number of elderly individuals and consequent cases of dementia.

The clinical and social burden imposed on individuals, families and communities by mental health problems contains an economic dimension. Mental disorders exact costs - often in a financial and invariably in an economic sense - at all levels of society, either directly through expenditure (or unpaid time spent) on providing health and social care and support, or indirectly in terms of lost opportunities (such as for leisure or work). Other 'intangible' costs include deficits in well-being (for example, the anguish and anxiety experienced by people with mental health problems and their families or carers). Some examples of these costs are given in Figure 1.

Figure 1: The economic burden of mental disorder

Level	*Examples of impact*		
	Direct costs	*Indirect costs*	*Intangible costs*
Patient	Service fees	Lost employment	Quality of life
Family	Travel costs, fees	Lost employment	Carer burden
Service system	Psychiatry	Criminal justice	Staff morale
Wider society	Tax burden	Personal safety	Fear

Policy and practice uses for health economics

The increasing interest and apparent need for health economics contributions to mental health policy and practice stems from a number of sources. Like epidemiology, these contributions are geared towards population-level concerns. Much of the need

for a health economics perspective arises out of the *scarcity of resources* relative to needs, which translates into a requirement to make choices about how these scarce resources should be most appropriately allocated. At the most aggregated level, a government could decide, say, to double its budgetary allocation to mental health care: while this undoubtedly would have many positive impacts, there would in all likelihood remain an outstanding pool of unmet mental health need in the population. Moreover, the decision to allocate a greater volume of resources to mental health care – in a constrained, publicly funded system, at least – impacts on the resources available for other health or welfare programmes that may equally deserve greater investment. At the level of mental health purchasers, resource scarcity prompts the need to gather data or evidence with which to evaluate the clinical and cost effectiveness of new and current therapies, in order to improve or maximise the health gain of their local populations. Finally, there are regulatory requirements for health economics data. For example, pharmaceutical companies in Australia and Canada must provide cost-effectiveness data before licensing new products, a trend that is likely to be increasingly pursued in Europe.

Key economic concepts and principles relevant to health care decision-making

Economics: the science of scarcity

As indicated above, the notion of resource scarcity is key to an understanding of the economic approach towards mental disorder, since this necessarily prompts the requirement to make choices between different courses of possible action or investment. Making a choice implies in turn the sacrifice or foregoing of the alternative action or investment. The economic approach therefore attempts to value the worth of a particular resource, decision or strategy with reference to its 'opportunity cost', namely the value attached to the next best alternative. To give an example, the opportunity cost of an acute psychiatric bed is (theoretically) derived with reference to the alternative use with which those resources could be put to, such as within another medical speciality, outside medicine completely, or even investment into an interest-bearing savings account.

A further important principle of economic analysis is that it takes a broad, societal perspective, such that account is taken of costs falling to all relevant parties. For instance, allowance should be made for inputs of unpaid volunteers/family carers as well as formal care inputs, as should any losses of productivity. (For more detailed elucidation of these evaluative principles, see Knapp, 1995, Hargreaves et al. 1998.)

Economic objectives: efficiency and equity

It is not the aim of health economics to cut health spending or to pare down costs, but to improve both the efficiency with which health care resources are employed and the targeting of those resources on needs and demands (the equity objective).

Efficiency is first and foremost concerned with establishing that health care programmes are worthwhile, in the sense that their benefits exceed their costs

(allocative efficiency); at a technical level, efficiency is concerned with ensuring that best use is made of the scarce resources channelled into these worthwhile programmes. Efficiency therefore provides a framework with which to determine an optimal allocation of resources to various programmes of health care expenditure.

Equity considerations revolve around the ideas that each person must be given their due and equals must be treated as equals. Discussions about justice or equity at a policy level have typically concentrated on the distribution or redistribution of (scarce) resources, which in the context of mental health care is typically determined by need and expressed in terms of access to or utilisation of services.

Different modes of economic evaluation

A core response to the demands for health economics made by decision-makers at a number of levels in the mental health care system is through the conduct of *economic evaluation*. Economic evaluation is specifically concerned with addressing the relationship between the costs and outcomes of an intervention, and there are a number of ways in which these costs and outcomes data can be combined for analytical purposes (see below).

Responding to scarcity, however, does not just mean conducting economic evaluations of alternative treatments, but requires examination of, for example, the patterns of employment, the forces of demand and supply, the roles of markets in resource allocation, and the incentives and disincentives to better practice (Frank and Manning, 1992; Chisholm and Stewart, 1998).

Cost minimisation analysis

The simplest of cost evaluations is commonly referred to as *cost-minimisation analysis*, which either does not take account of treatment outcomes or assumes that they are identical for both alternative interventions under investigation. In other words, the task is merely to establish the least cost method of achieving these (identical) outcomes. Since outcomes are invariably a key concern in mental health care evaluation, yet can rarely be assumed to be the same for two groups, cost-minimisation analysis is seldom used.

Cost-effectiveness analysis

The large majority of economic evaluations in the field of mental health care are examples of *cost-effectiveness analysis*, which assesses not only the costs but also the outcomes of an intervention, expressed in terms of reduced symptoms, improved functioning/quality of life etc. Since clinical evaluations commonly involve a wide range of outcomes, it is necessary to either focus on a primary measure for establishing cost-effectiveness ratios or to analyse the relationships between costs and outcomes using multivariate analyses.

An example of a cost-effectiveness study is that by Knapp et al (1998), who compared home-based versus hospital-based care for serious mental illness. The Daily Living Programme (DLP), as it was called, consisted of intensive home-based care with problem-centred case management for seriously mentally ill people facing crisis admission to the Maudsley Hospital, London. A randomised controlled study examined the cost-effectiveness of the DLP versus standard in/outpatient hospital care over 20 months (phase 1), followed by a randomised controlled withdrawal of half the DLP patients into standard care (months 30-45, phase 2). Over phase 1, the average weekly costs of home-based DLP care (£282) were significantly less costly than standard inpatient-based care (£518) – although this difference narrowed appreciably over this period. Taken together with the significantly improved symptomatology, social adjustment and satisfaction of the DLP group, this indicates the cost-effectiveness of the DLP over the short-term. In phase 2, there were few advantages in symptoms or social adjustment for DLP compared to control patients – although satisfaction continued to be significantly better – and there were no statistically significant cost differences between either the continuing-DLP or ex-DLP controls and the original control group. The authors therefore concluded that whilst the home-based DLP was cost-effective in the short term – and indeed over the full 45 month period as a whole – it appeared to lose its advantage in the final year of the research period.

Cost-utility analysis

A particular form (and extension) of cost-effectiveness analysis is *cost-utility analysis*, developed by health economists in the search to make explicit comparisons *between* interventions or even conditions. This approach has considerable appeal for decision-makers since it generates equivalent and therefore comparable study data ('utilities', expressed by a combined index of the mortality and quality of life effects of an intervention). The end result is a series of cost-utility ratios, which reflect the relative change in costs and outcomes for the alternative interventions under study, and upon which priorities can then be based. However, there are conceptual and technical difficulties with the application of utility measurement to mental health (see Chisholm et al, 1997 for a review), which has restricted its use to date.

An example of cost-utility analysis in mental health is that by Revicki et al (1997), who compared treatment for major depression with i) newer antidepressants (nefazodone and fluoxetine) ii) tricyclics (imipramine) and, for treatment failures, iii) a step approach involving initial treatment with imipramine followed by nefazodone. A clinical decision analysis model was developed to simulate the clinical management pathways and pattern of recurrences of major depression for these alternative treatment strategies in order to estimate lifetime medical costs and health outcomes (expressed as quality adjusted life years or QALYs). There were only minor differences in costs and QALYs between nefazadone and fluoxetine, and both these newer antidepressants were cost-effective compared to imipramine treatment and the imfpramine step approach. The ratios of cost to QALYs gained for these newer antidepressants were deemed to be sufficiently low (below $20,000 per QALY gained) to merit adoption of these treatments into the health care system. For example, the extra lifetime cost of nefazadone over imipramine ($1,321) resulted in 0.32 added

QALYs, giving a ratio of $4,065 per QALY gained. Since decision models and their findings are only as good as their underlying assumptions and the quality of the data used to estimate key model parameters, extensive sensitivity analyses were conducted, but these did not alter the basic findings and conclusions. However, the results did not include indirect costs – important for a societal perspective – and are not readily generalisable to groups other than the targeted population (in this study, 30-year old women with one previous depressive episode).

Cost-benefit analysis

The final mode is *cost-benefit analysis*, which refers to a particular form of evaluation in which *all* costs and outcomes are valued in monetary units, thereby allowing assessment of whether a particular course of action is worthwhile in terms of a simple decision rule that benefits must exceed costs. This approach, whilst the most attractive to economists, is very labour-intensive, beset with valuation difficulties in relation to the quantification of outcomes, and is consequently found very rarely in mental health care evaluation. However, new valuation techniques such as 'willingness to pay' - where an individual states the amount they would be prepared to (hypothetically) pay to achieve a given health state or health gain - suggest a potential rekindling of this mode of analysis.

One notable example of cost benefit analysis, also in the area of hospital diversion, was conducted by Weisbrod, Test and Stein (1980) as part of the Assertive Community Treatment (ACT) programme in Wisconsin, USA (a precursor, in fact, to the DLP). 130 patients were randomly assigned to either the experimental 'Training in Community Living' (TCL) group or a control group that received inpatient hospital treatment and community aftercare. Over a 14 month period, a range of input costs (spanning hospital, social services, criminal justice, social security services, plus informal carers foregone earnings) were compared to the monetarised benefits of care (patient earnings). The authors found that the additional benefits of the experimental programme ($1200 per patient year) were greater than the additional costs incurred ($800 per patient year), providing a clear cost-benefit advantage of $400 (per patient year). Non-monetarised indicators of patients' mental health (symptoms and satisfaction) were also significantly better in the TCL group.

Design, measurement and statistical issues in economic evaluation

A hierarchy of economic evidence

As in clinical evaluation, an important consideration for the review, assessment and interpretation of economic evidence is the *design* of the research study (for example, is it a prospective, controlled trial or a retrospective study with no control group?). Two further features can be added to this for economic studies, namely the *type of economic evaluation*, and the *scope or perspective* of the study (Figure 2). The merit or value of an economic study in terms of its coverage and generalisability is determined to a significant extent by these three parameters.

The ideal type of study upon which to base decisions on cost-effectiveness and resource allocation is one that is conducted prospectively with two (or more) appropriately sized, randomly allocated groups of patients, for whom all conceivable costs and outcomes are measured in a common currency. Such a study, as seen above, is extremely demanding to undertake, largely due to the requirement to convert all costs and consequences into monetary units. Most studies are in fact instances of cost-effectiveness analysis, employing the cost perspective of the formal service sector only.

Figure 2 Economic evaluation - the hierarchy of evidence

Parameter 1	Parameter 2	Parameter 3
Type of clinical data (what ratings are based on)	***Type of economic evaluation*** (how costs & outcomes combined)	***Costing scope/perspective*** (what costs are included)
Non-empirical (e.g administrative database)	*Cost-minimisation analysis (CMA)* (outcomes are the same)	*Direct costs - single agency* (e.g. health service only)
Observational (e.g. cross-sectional study)	*Cost-effectiveness analysis (CEA)* (e.g. change in level of depression)	*Direct costs - all agencies* (e.g. informal care included)
Quasi-experimental (e.g. retrospective study)	*Cost-utility analysis (CUA)* (e.g. quality adjusted life year)	*Direct and indirect costs* (lost productivity included)
Experimental (e.g. RCT)	*Cost-benefit analysis (CBA)* (all costs and outcomes monetised)	*Intangible costs* (e.g. anguish, side-effects)

Statistical power and sampling size

A further requirement for economic evaluation is recruitment and retention of a sufficient sample of patients and/or facilities to show statistically significant changes between groups. Many economic evaluations in the past have been under-powered, mainly due to the skewed distribution of costs among subjects. Gray et al (1997), for example, showed (retrospectively) that at 80% power, their case management study (n=30) was sufficient to detect between-group differences of approximately 30% for total costs, but to detect a 20% difference in health care costs alone over 700 subjects per arm would have been required! This raises a number of questions, including what constitutes a worthwhile difference in costs, and what is the additional research cost of basing sample size estimates on economic (as opposed to clinical) variables. What remains clear, however, is that the uncertainty introduced into economic findings by the variability of costs must be addressed not only by sensitivity analysis but also by the sufficient powering of the study at the design stage.

Stages of economic evaluation

There are a number of stages that typically comprise the conduct of an economic evaluation, all of which need to be pursued in order to obtain a valid and reliable set of findings:

i) definition of the alternative interventions to be evaluated (design);

ii) identification of the costs and outcomes to be included in the study (scope);

iii) quantification of these identified costs and outcomes (valuation);

iv) comparison of costs and outcomes (analysis);

v) revision of findings in the light of uncertainty and sensitivity (qualification);

vi) examination of distributional effects (equity).

The identification and measurement of resource utilisation and costs

The collection of service and other resource utilisation data at the level of the individual service user enables the generation of detailed information on the consumption of a wide range of resources. Opportunity cost estimates can be applied subsequently to these data in order to calculate the overall economic costs associated with an individual's care, or at a more aggregated level, a particular intervention or strategy for a group of individuals.

An initial stage in the recording of resource utilisation data is the identification of relevant components of potential service receipt by users (see Figure 3 for a list of examples). The range of service components to include in a study differs with respect to a number of evaluative concerns, including the scope, objectives and setting of the study, as well as the particular service needs of the client group(s). For example, users with more severe or enduring mental disorder, such as people with schizophrenia, are likely to need a much wider range of services than people with common mental disorders such as depression and anxiety.

Figure 2 Examples of service utilisation items

Hospital services	*Ambulatory services*
inpatient - psychiatric	primary care doctor / GP
inpatient - general medical	primary care nurse
outpatient - psychiatric	psychiatric nurse
outpatient - other speciality	social worker
day care - medical/surgical	psychiatrist

Resource utilisation data relating to identified service components can be collected [illegible] coverage/extent of service components and the access to service provider databases:

- *study design*: economic analysis carried out alongside clinical evaluations offers a number of assessment points for the collection of individual service utilisation data. Individual profiles of service use can be constructed over a defined retrospective period via the administration of a service receipt schedule. Prospective studies offer the potential to collect resource utilisation data through the keeping of a diary of any contacts made, rather than the completion of a formal interview-based schedule.

- *service provider databases*: an alternative method for eliciting data on individual service contacts is through the examination of patient records kept by service providers - particularly if these records are computerised - including hospitals, primary care providers and social services. Sole reliance on these data sources is made difficult by the multiplicity of databases on which an individual's service contact(s) may appear and the potential for non-completeness and under-reporting.

- *service coverage*: the extensive range of services that people with mental health problems may take up means that most evaluations need to adopt a wide coverage, which again points to the usefulness of an instrument or schedule that pulls these disparate service components together in a single form.

For each item of resource utilisation, a unit cost estimate is required, such as a cost per inpatient day, day care attendance or GP contact. In some countries and for certain services, these data may already have been calculated (in the UK, for example, see Netten and Dennett (1998) *Unit Costs of Health and Social Care)*. Otherwise, it will be necessary to compute these estimates using a range of data sources, including national/local government statistics, health authority figures and specific facility or organisation revenue accounts. In practical terms, the main categories of cost that typically need to be quantified for each service are:

- Salaries / wages of staff employed in the direct care and management of patients
- Facility operating costs where the service is provided (cleaning, catering etc.)
- Any overhead costs relating to the service (personnel, finance etc.)
- The capital costs of the facility where the service is provided (land, buildings etc.)

The uses and limitations of economic analyses

Economic evaluation provides a means of comparing the costs and outcomes of a mental health care intervention or programme together in an explicit framework. This in turn enables decision-makers to assess the extent to which the intervention or strategy offers a good use of (scarce) resources. An analysis of costs alone, or indeed of outcomes alone, does not provide such information. The results of well-conducted

economic evaluations can be channelled into decision-making processes at a succession of levels:

- *users and carers*: economic evidence can complement clinical decision-making at this level in terms of comparison of the costs and consequences of alternative treatment strategies, particularly in relation to new psychotropic drugs. For example, are the additional acquisition costs (to GPs and others) associated with the newer anti-depressants or atypical anti-psychotics worth it in terms of the potential for reduced side-effects, enhanced compliance and less hospitalisation? In the absence of prospective, controlled cost-effectiveness trials, decision modelling techniques have been employed to explore these complex inter-relationships (Revicki et al, 1997).

- *purchasers and providers*: as well as specific therapies, purchasers need data on mental health strategies for their local populations. A core element of local needs assessment and strategic service development concerns the resource implications of changes to, for example, the hospital:community balance or the statutory:independent sector interface. An extensive literature on the cost-effectiveness issues surrounding these concerns now exists (Knapp, 1995).

- *government and society*: at the most aggregated level of mental health policy, decisions, for example with respect to the reprovision of care for the long-term mentally ill from hospital to community settings (Hallam et al, 1994).

[illegible] an extra dimension that offers a wider assessment of the implications of new or existing courses of action, it is important to mention some of the limitations of the [illegible] of sample size, or comprehensiveness of cost and outcome measurement. Conclusions based on a small RCT with less than 50 subjects per arm can often only be tentative, while the failure to measure the indirect costs associated with two alternative treatments may give rise to misleading results. There are also a number of ongoing methodological debates with respect to certain aspects of economic evaluation, such as the alternative techniques available for measuring health state preferences (essential for both cost-utility and cost-benefit analysis). In this context, it is worth noting that economic evaluation is no panacea for making difficult allocative and policy decisions; rather, it is one additional tool that together with clinical and social dimensions can facilitate explicit, evidence-based decision-making.

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dermatitis after taking calcium cyclamate but not after taking saccharin. The skin reaction was eczematous, and histology showed subacute dermatitis with mild œdema of the epidermis and a moderate mononuclear cell infiltrate in the dermis. A month after stopping the cyclamate, post-inflammatory hypopigmentation appeared in the affected skin.

Renal and myocardial damage have been reported by Bajusz [10] who injected 0·2 g. of calcium cyclamate a day into hamsters for 6 days. Histological examination showed cortical nephrocalcinosis in most of the animals, but an equivalent amount of calcium chloride, acetate, aspartate, or ascorbate did not produce these lesions. With calcium cyclamate there was also myocardial degeneration, focal calcification, and coronary-artery calcification. The lesions resembled those seen in hypervitaminosis D in man. Nees and Derse [11] observed similar but less striking effects on rats given calcium cyclamate by mouth. The acute tubular acidosis seen in our patient is thus analogous to the tubular damage seen in these animals. Of interest is the high serum-calcium (taking in to account the severe acidosis) which fell with recovery and the very low serum-inorganic-phosphate probably indicates failure of tubular reabsorption. Another unusual feature was the hypokalæmia in the presence of hyperchloræmic acidosis.

Constipation may have caused an increase in absorption of cyclamate. Normally, increasing the cyclamate intake to 12 g. per day causes diarrhœa,[8] thus limiting absorption. Three bottles of soft drink can contain a total of 4 g. of cyclamate [11] so our patient was probably consuming 12 g. daily. Almost all the ingested dose is excreted in the fæces or urine.[12,13] In Britain, one person in eight excretes cyclohexylamine [7] in the urine after taking cyclamates but 100%, of Japanese subjects excrete this cyclamate metabolite.[8] Cyclohexylamine and dicyclohexylamine are both very toxic; both are strongly alkaline and cause skin necrosis when applied locally.[8,14] Cyclohexylamine also causes degenerative changes in the heart and kidneys and may produce methæmoglobinæmia.

No cyclohexylamine was found in our patient's urine, but this was 3 days after stopping the intake of cyclamate. It is possible that the relative frequency of photoallergy in Japan may be related to the production of cyclohexylamine and to the abundance of strong sunlight.

We thank Dr. G. L. F. Pawan for estimating cyclohexylamine, Prof. A. C. Dornhorst for helpful advice, and Dr. M. I. A. Hunter for giving us the opportunity of investigating this patient.

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Preliminary Communications

MENTAL-HOSPITAL ADMISSIONS AND AIRCRAFT NOISE

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Summary A retrospective study covering two years of admissions to a psychiatric hospital shows that there is a significantly higher rate of admission, especially in certain diagnostic categories, from inside an area of maximum noise arising from Heathrow Airport than from outside this area.

INTRODUCTION

THE effect of aircraft noise on health is continually being discussed as a result of controversy over the siting of new major airports. Atherley [1] has stated that, despite much popular feeling associating noise with mental breakdown, it is very difficult to find good scientific evidence of adverse effects of aircraft noise on mental health. In 1963, the Wilson report [2] concluded that it was extremely unlikely that an investigation into the effects that noise might have on people living near Heathrow Airport would produce meaningful results.

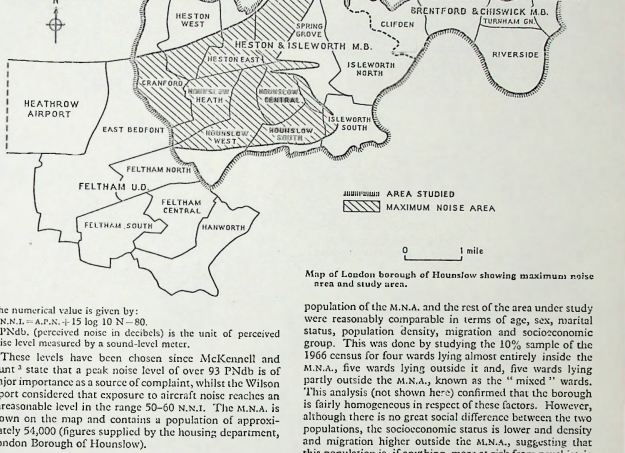
Since the London Borough of Hounslow is particularly exposed to aircraft noise from Heathrow, and since it was possible to obtain full details of admissions to one psychiatric hospital from a major part of that borough, we decided to see if a retrospective study of admissions over a two-year period would reveal any differences between populations exposed to two different levels of aircraft noise.

METHOD

Most patients requiring inpatient treatment for psychiatric illness and living in the Borough of Hounslow are admitted to Springfield Hospital, which lies several miles to the south-east of the borough. A number are admitted to general and teaching-hospital units, and those from the Feltham area are admitted to another psychiatric hospital. This area has not been considered, since figures are not available; and such checking as was possible indicated that admissions to the other units are uniform from throughout the borough.

The population under study consists of some 124,000 persons over the age of fourteen. These people live either inside or outside a maximum noise area (M.N.A.) caused by aircraft movement at Heathrow or by aircraft approaching to land. The M.N.A. is defined as that where sound levels are above 100 PNdb (Board of Trade figures) or where the N.N.I. (Wilson report) is over 55:

The N.N.I. (noise and number index) is a composite measure, defined for purposes of the Wilson report, taking into account the average peak noise level (A.P.N.) as well as the number of aircraft (N) heard in a specific period (e.g., one day or one night).



Map of London borough of Hounslow showing maximum noise area and study area.

The numerical value is given by:

N.N.I. = A.P.N. + 15 log 10 N − 80.

PNdb, (perceived noise in decibels) is the unit of perceived noise level measured by a sound-level meter.

These levels have been chosen since McKennell and Hunt [3] state that a peak noise level of over 93 PNdb is of major importance as a source of complaint, whilst the Wilson report considered that exposure to aircraft noise reaches an unreasonable level in the range 50–60 N.N.I. The M.N.A. is shown on the map and contains a population of approximately 54,000 (figures supplied by the housing department, London Borough of Hounslow).

A demographic analysis was carried out to ensure that the population of the M.N.A. and the rest of the area under study were reasonably comparable in terms of age, sex, marital status, population density, migration and socioeconomic group. This was done by studying the 10% sample of the 1966 census for four wards lying almost entirely inside the M.N.A., five wards lying outside it and, five wards lying partly outside the M.N.A., known as the "mixed" wards. This analysis (not shown here) confirmed that the borough is fairly homogeneous in respect of these factors. However, although there is no great social difference between the two populations, the socioeconomic status is lower and density and migration higher outside the M.N.A., suggesting that this population is, if anything, more at risk from psychiatric illness than that living inside the M.N.A.[1–6] Since admissions are largely channelled through one of us (C. F. H.), it is probably safe to say that, in the relevant part of Hounslow, the policy of inpatient or community treatment is fairly uniform over all the N.H.S. practices in the area.

TABLE I—TABLES OF SIGNIFICANCE

Category*	M.N.A. O	M.N.A. E	Non-M.N.A. O	Non-M.N.A. E	χ^2	Significance
All admissions:						
Total	245	212·9	213	275·1	8·58	0·005>P>0·001
First	96	78·1	83	100·9	7·28	0·01>P>0·005
Female admissions:						
Total	147	125·7	143	164·3	6·37	0·025>P>0·01
First	54	41·2	41	53·8	7·02	0·01>P>0·005
Male admissions:						
Total	98	87·1	100	110·9	2·44	N.S.
First	42	36·9	42	47·1	1·30	N.S.
Females aged ⩾ 45:						
Total	96	75·4	79	99·6	9·98	0·005>P>0·001
First	36	22·8	17	30·2	13·42	P<0·0005
Females (married):						
Total	68	61·5	69	75·5	1·30	N.S.
First	24	19·8	20	24·2	1·70	N.S.
Females (other†):						
Total	79	62·3	74	90·7	7·55	0·01>P>0·005
First	30	20·75	21	30·25	6·92	0·01>P>0·005
Females (widows, separated, divorced):						
Total	44	38·5	33	38·5	1·57	N.S.
First	21	15·5	10	15·5	3·90	0·05>P>0·01
Females (widows):						
Total	36	27·5	19	27·5	5·26	0·05>P>0·01
First	19	13·0	7	13·0	5·60	0·05>P>0·01

* The following categories were also analysed but nothing significant was found: males <45, males ⩾45, females <45, males married, males other.

† Single, widowed, separated, or divorced.

O=observed. E=expected.

TABLE II—DIAGNOSTIC CATEGORIES (FEMALES ONLY)*

Category	M.N.A. O	M.N.A. E	Non-M.N.A. O	Non-M.N.A. E	χ^2	Significance
"*Neurotic*":						
Total	26	18·6	17	24·4	5·19	0·05>P>0·01
First	9	6·9	7	9·1	1·02	N.S.
Organic mental illness:						
Total	35	24·3	21	31·7	8·33	0·005>P>0·001
First	22	12·1	6	15·9	13·94	P<0·0005

* Affective, schizophrenic, "psychopathic", and "epileptic, alcoholic, &c." groups were analysed for females and all six diagnostic categories were analysed for males, but in all instances either P was >0·05 or the numbers were too few for analysis.

We examined the records of all patients admitted to Springfield Hospital from the area of study from July 1, 1966, to June 30, 1968. Admissions were divided into "first admissions" (those patients who had apparently never had inpatient psychiatric treatment before) and "total person admissions" (all patients who had one or more admissions during the period). Details of age, sex, marital status, and diagnosis were recorded, and the patient's address was plotted on a large-scale map. All persons of no fixed abode who happened to be admitted from the area were excluded.

RESULTS

These are presented in detail in tables I and II. It should be noted that populations at risk have had to be estimated from 1966 Census data for everything but total person admissions because the exact distribution in terms of age, sex, and marital status of the populations in the M.N.A. and non M.N.A. areas is unknown. In all, 42 tests of significance were done on the data; not all the negative results are shown in the tables. 14 χ^2 values were significant at the 5% level compared with 2 positives which would be expected by chance alone.

CONCLUSIONS

This is a retrospective study, which measures only admissions to a psychiatric hospital, and makes no attempt at exploring mental illness in the community. A further more detailed prospective study is planned.

Several factors can govern whether a patient is admitted to hospital or treated in the community, and we do not suggest that aircraft noise itself can *cause* mental illness. The results clearly show, however, that admission-rates to Springfield Hospital are significantly higher from the M.N.A. than from outside it, both for total person admissions and for first admissions. Furthermore, the type of person most affected is the older woman who is not living with her husband and who suffers from neurotic or organic mental illness.

We conclude that the high intermittent noise levels from aircraft using Heathrow Airport may be a factor in increased rates of admission to Springfield Hospital.

We thank the London Borough of Hounslow for a grant towards this study, and some of its officers, in particular Mr. M. W. Langford and Mr. K. J. Rowlands, for their valuable help.

Requests for reprints should be addressed to C. F. H., Springfield Hospital, London S.W.17.

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IN-UTERO DETECTION OF TYPE-II GLYCOGENOSIS (POMPE'S DISEASE)

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Summary α-1,4-glucosidase activity was determined in amniotic fluid, amniotic-fluid cells, and cultivated amniotic-fluid cells obtained between the 14th and 16th week of pregnancy. Eight pregnancies were monitored for women who had previously delivered children with glycogen-storage disease type II (Pompe's disease). In one case, amniotic fluid, amniotic-fluid cells, and cultivated amniotic-fluid cells were found to be deficient of α-1,4-glucosidase activity. The pregnancy was terminated and examination of the fetus revealed an absence of α-1,4-glucosidase activity in all organs and cultivated fibroblasts, confirming the in-utero diagnosis of type-II glycogenosis.

INTRODUCTION

TYPE-II glycogenosis (Pompe's disease) is inherited as an autosomal recessive disorder characterised by intractable cardiac failure progressing to death within the first year of life.[1] α-1,4-glucosidase activity is deficient in the liver,[2] and leucocytes and cultivated fibroblasts[3] of patients with this disorder. Since this enzyme can be detected in cultivated[4] and non-cultivated[5] amniotic-fluid cells and since in a number of other heritable disorders in-utero detection of an affected fetus has been accomplished using cultivated amniotic-fluid cells,[6-11] we set out to evaluate amniotic-fluid analysis in the management of pregnancies of women who had previously delivered children with type-II glycogenosis.

METHODS

Amniotic fluid was obtained by transabdominal amniocentesis performed between the fourteenth and sixteenth week of pregnancy from five women (eight pregnancies) who had previously delivered children with type-II glycogenosis and from twenty controls. 10–15 ml. of amniotic fluid was divided into roughly equal parts and centrifuged, and the supernatant was removed for analysis of α-1,4-glucosidase activity. One cell pellet was used for enzyme analysis (non-cultured amniotic-fluid cells). The remaining cell pellet was suspended in 100% fetal calf serum, placed in two Falcon petri dishes, immobilised under coverslips, F-10 medium supplemented with 15% fetal calf serum was added and placed in 5% carbon-dioxide atmosphere at 37°C. The cultures were fed every other day until the time of subculture (10–25 days). 4–7 days after subculture, the cells were removed by trypsinisation (0·25% trypsin), rinsed with Hanks' balanced salt solution, suspended in 0·5 ml. of 0·25 *M* sucrose and mechanically disrupted. α-1,4-glucosidase activity was determined by the method of Nitowsky and Grunfeld.[3]

RESULTS

The activity of α-1,4-glucosidase in amniotic fluid, non-cultured amniotic-fluid cells, and cultivated amniotic-fluid cells are shown in the table.

In six cases (1, 2, 3, 5, 6, and 7) healthy children were delivered at term and in the first 8 months of life, none has any evidence of type-II glycogenosis. In babies 1, 3, 5, and 7 α-1,4-glucosidase activity

α-1,4-GLUCOSIDASE ACTIVITY IN AMNIOTIC FLUID* AND OUTCOME OF PREGNANCY

Case	Amniotic fluid	Amniotic-fluid cells	Cultivated amniotic fluid cells	Outcome of pregnancy	Enzyme level in infant (or fetus)
1	7·8	4·0	8·1	Normal	Normal
2	3·7	2·4	3·7	Normal	3·7
3	11·2	4·1	8·2	Normal	Normal
4	0·4	0	0·3	Therapeutic abortion	Absent
5	12·3	5·1	9·1	Normal	Normal
6	13·2	3·7	6·5	Normal	4·7
7	5·6	3·6	3·2	Normal	Normal
8	9·7	4·3	8·1	Spontaneous abortion	..
Control (normal) values (mean ± S.D.)	11·9 ± 3·6	4·2 ± 1·6	7·8 ± 2·3	..	7·6 ± 2·0

* μmoles maltose hydrolysed per minute per g. protein.

was normal while in babies 2 and 6 reduced levels were found. In amniotic-fluid analyses α-1,4-glucosidase activity has been readily demonstrable in cell-free amniotic fluid, non-cultured and cultured amniotic-fluid cells.

In case 8, the pregnancy ended one month after amniocentesis in a spontaneous abortion, presumably related to the development of an incompetent cervix. Pathological examination (Dr. Kurt Benirschke) revealed minimal and recent chorioamnionitis with no apparent relationship between the amniocentesis and the abortion. α-1,4-glucosidase had been detectable in all amniotic-fluid analyses.

In case 4, α-1,4-glucosidase activity could not be detected in non-cultured amniotic-fluid cells and was barely detectable in amniotic fluid and cultivated amniotic-fluid cells. On the basis of these findings, the parents elected to terminate the pregnancy. Abdominal hysterotomy was done at 19 weeks of pregnancy. The fetus had no α-1,4-glucosidase activity in liver, spleen, kidney, or cultivated fibroblasts, confirming the diagnosis of type-II glycogenosis.

DISCUSSION

We suggest that examination of amniotic fluid obtained between the 14th and 16th weeks of pregnancy can be reliably utilised for the in-utero detection of type-II glycogenosis.

Examination of non-cultured amniotic-fluid cells permits rapid identification of the affected fetus, strikingly reduces the interval between amniocentesis and diagnosis, and obviates the need for highly specialised tissue-culture techniques. Amniotic fluid should be obtained before the 20th week of pregnancy, since enzyme activity in non-cultured amniotic-fluid cells tends to be extremely low or absent after this period.[5] Direct enzyme assay of non-cultured amniotic-fluid cells has permitted the in-utero identification of a presumed heterozygote of Tay-Sachs disease.[12]

In our experience, neither maternal nor infant mortality has been observed in over 150 cases in which transabdominal amniocentesis has been done between the 12th and 20th week, as part of the management of genetic " high-risk " pregnancies.[13]

We thank Elvira Shannon and Marilyn Swae for technical assistance, Dr. Kurt Hirschhorn (case 3) and Dr. Richard Waters (case 8), for permitting us to study their patients, and Dr. Albert Gerbie and other obstetricians for performing the amniocenteses. These studies were supported by U.S. Public Health Service National Institutes of Health grants 7 R01 HD00339 and 1 R01 HD04252, and the National Foundation March of Dimes.

Requests for reprints should be addressed to H. L. N.

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EFFECT OF CORTICOTROPHIN ON PLASMA LEVELS OF HUMAN GROWTH HORMONE

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Summary Plasma concentrations of human growth hormone (H.G.H.) were measured after acute administration of corticotrophin (A.C.T.H.) and insulin to normal subjects. Both stimuli evoked an equally significant secretory response of H.G.H. It seems that corticotrophin may be a physiological mediator of stress-induced H.G.H. release.

INTRODUCTION

HUMAN-GROWTH-HORMONE (H.G.H.) secretion may be elicited during states of deficient glucose metabolism in the brain,[1-2] by aminoacid infusions [3-5] as well as by a number of stressful conditions.[6-8] Absolute or relative hypoglycæmia is generally considered to act specifically on the mechanisms controlling the pituitary release of H.G.H. Noxious stimuli including anxiety, physical trauma, or acute administration of agents such as pyrogen or vasopressin are suspected of promoting elevation of plasma-H.G.H. through non-specific pathways attributed to " stress ".

This investigation was undertaken in an attempt to assess the possible role of corticotrophin (A.C.T.H.) in the regulatory control of H.G.H. secretion.

SUBJECTS AND METHODS

Six healthy volunteers (five males, one female) of normal body-weight, aged 24–27, were investigated after an overnight fast. The subjects were allowed to rest for half an hour prior to the test procedure. A needle was then inserted in an antecubital vein and kept permeable with a slow drip of physiological saline solution. After collection of three basal blood-samples, 1·0 mg. of lyophilised synthetic β^{1-24} corticotrophin ('Synacthen', Ciba) dissolved in 5 ml. of saline was injected intravenously. 90 minutes later the subjects received a short-acting insulin ('Actrapid', Novo), in a dose of 0·1 unit per kg., by the same route. Blood-samples were obtained every 15 minutes during a total period 210 minutes. After each blood-sampling 2 ml. of saline solution was injected, the subjects being in most instances unaware of the moment when corticotrophin or insulin were administered. Particular care was taken to avoid any exterior cause of distress for the volunteers throughout the test.

H.G.H. in the plasma was measured by a modification of the solid-phase radioimmunoassay,[9] using antibody-coated polystyrene tubes and an immunochemical grade H.G.H. preparation of A. E. Wilhelmi ('HS 1182B') for labelling with ^{125}I and for standards. Blood-sugar was estimated by the method of Nelson-Somogyi,[10] plasma-cortical colorimetrically.[11]

RESULTS

Three subjects described a slight and transient abdominal discomfort shortly after the injection of corticotrophin, whereas all of them developed mild symptoms and signs of hypoglycæmia after insulin administration. A more profound reaction was observed in one (no. 2).

Individual plasma H.G.H. and glucose responses to corticotrophin and insulin administration are shown in the accompanying figure. The accompanying table

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Bhopal

On the night of 2/3 December, 1984, about 40 tons of methyl iso cyanate (MIC) from tank 610 of the Union Carbide India Limited factory at Bhopal (central India) leaked into the surrounding environment. This leak of an "extremely hazardous chemical," which occurred over a short span of a few hours, covered the city of Bhopal in a cloud of poisonous gas. Following the gas leakage, at around midnight, people living in the direction of the gas leakage woke up with feelings of suffocation, intense irritation, and vomiting.

Initially most people thought that a neighbor had "burnt chillies." However, as they realized the real cause of their symptoms, panic struck the population. People ran to escape from the gas, often without concern for their family members. Many died on the spot; others fell while running to escape; and many others reached safe places only after hours of running. The number of dead has been estimated to be around 2,500. Of the total population of Bhopal (0.7 million), about 0.3 million were exposed to the poisonous gas [1].

The Bhopal disaster is of importance in the relevant literature for a number of reasons. First, it is one of the largest man-made disasters in a developing country. Second, the disaster effects were a combination of both the chemical substances inhaled and the psychological effects. Third, no formal mental health infrastructure was available to provide postdisaster mental health care, and this led to the development of innovative approaches to care. Fourth, this disaster has been the subject of intense study, both cross-sectionally and longitudinally, from physical and mental health viewpoints.

This report deals with the magnitude of the mental health problems and the mechanisms developed to provide mental health care.

Magnitude of the mental health problems

Information is available about the mental health problems from a number of sources. The initial assessments were made in the first week of February 1985 (about eight weeks after the disaster) by Professor R. Srinivasa Murthy, of the National Institute of Mental Health and Neuro Sciences (NIMHANS), Bangalore, and Professor B. B. Sethi, of K. G. Medical Collegee (KGMC), Lucknow. Their observations, over a week's time, were based on visits to affected people at home and examinations of those attending the medical facilities. These initial observations placed the magnitude at 50% of those in the community and about 20% of those attending medical facilities [1].

Following these observations, systematic studies were carried out by a KGMC team [2]. As a first step, ten general medical clinics in the disaster-affected area were chosen. A team consisting of a psychiatrist, a clinical psychologist, and a social worker visited one clinic a day, by rotation in a randomized fashion, on three occasions and screened all the newly registered adult patients with the help of a self-reporting questionnaire (SRQ) [3]. Subjects identified as probable psychiatric patients were then evaluated in detail by the psychiatrist with the help of a standardized psychiatric interview, the Present State Examination (PSE) [4]. Clinical diagnoses were based on the International Classification of Diseases (9th revision) (ICD–9).

During a period of 3 months (February-May 1985), of the 855 patients screened at the 10 clinics, 259 were identified, on the basis of their SRQ scores, as having a mental disorder. Of these potentially mentally ill people, 44 could not be evaluated, and 215 were given the PSE. The final number of psychiatric patients was 193, yielding a prevalence rate of 22.6%. Most of the patients were females (81.1%) under 45 years of age (74%). The main diagnostic categories were anxiety neurosis (25%), depressive neurosis (37%), adjustment reaction with prolonged depression (20%), and adjustment reaction with predominant disturbance of emotions (16%). Cases of psychosis were rare, and they were not related to the disaster.

Subsequently, the same team conducted a detailed community-level epidemiological study, beginning in June 1986. The results of the first-year survey involved 4,098 adults from 1,201 households. A total of 387 patients were diagnosed to be suffering from mental disorders, giving a prevalence rate of 94/1,000 population. Most of the population consisted of females (71%); 83% were in the age group 16–45 years. Ninety-four percent of the patients received a diagnosis of neurosis (neurotic depression, 51%; anxiety state, 41%; and hysteria, 2%) and had a temporal correlation with the disaster [1]. For the last three years, the KGMC team has repeated annual surveys and follow-up of the initial patients identified by the community survey. Detailed case vignettes and descriptive accounts of the patients from the Bhopal disaster are also available [1].

Training in mental health care

The initial visit of two psychiatrists eight weeks after the disaster revealed a large number of people with emotional reactions and a lack of mental health services to care for them. The team therefore recommended rapid organization of mental health services utilizing the existing medical personnel.

In April 1985, a second visit was made to develop a training program, including instructional audio and video materials, and to finalize the arrangements for the training. The actual training was given from 22 April to 4 May 1985.

About fifty medical officers were working in the various health facilities in the

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gas-affected area. Most of these doctors had had no training in mental health as part of their initial medical education, and this was reflected in their poor perception of the emotional needs of the disaster victims. The basic orientation of these doctors was highly medical/biological. In pretraining interviews, most of them expressed the view that distribution of monetary compensation would solve the physical complaints of many of their patients. Some thought that the free rations provided by the state were the reason for the weaknesses and inability to work of which most patients complained. The medical officers believed that the "lethargy" of their patients would disappear not thanks to medical care or the use of drugs, but by stopping the distribution of free rations and compensation money.

The basic aim of the training was to enhance the sensitivity of the medical officers to their patients' emotional needs and their skill in recognizing, diagnosing, treating, and referring (when required) people with mental health problems. The period of initial training was six working days. It was decided that the training should be as practical as possible, and should be imparted to groups consisting of no more than twenty persons. The training methods took into account principles of "adult learning," viz., an open learning environment in which participants were free to share their needs and experiences, with considerable stress on interactive learning. A predominantly lecture approach was changed to one consisting of case studies and group discussions, facilitated by audiovisual, taped material of the affected population, with maximum learner involvement [5].

The actual training was carried out in two groups by two consultant psychiatrists. A manual was prepared for this training on the basis of our experience in training medical officers at NIMHANS, Bangalore [1].

Each morning, the two faculty members visited the different health facilities and worked with the medical officers in order to help them learn interview techniques and counseling methods. This "hands-on" experience was considered very useful by the medical officers, 38 of whom took part in the training.

Day 1: The main objectives of the first session were to form the group, facilitate interaction of the faculty and the participants, and enable all to become well acquainted with each other. The trainee doctors were asked to share their expectations concerning the program. The pretraining views of all the doctors were obtained on a structured response sheet.

Day 2: The aim of the second session was to give the doctors an understanding of normal and abnormal behavior. Patients with different symptoms and presentations were shown via videotapes. Types, features, and causes of mental illnesses were outlined.

Day 3: Discussion centered on the approach to patients with emotional disturbances, recording the history of such patients, and the mental examination (interviewing) of patients. This was facilitated by audiotaped and videotaped interviews.

Day 4: This session was considered to be a crucial one, as the problems faced by the trainee doctors daily in their outpatient clinics were discussed. The training during the first three days provided the basic background required to understand the psychological nature of many of the patients' complaints. Various clinical presentations of the gas-affected patients were discussed. In this session all the audio and video material used pertained to the patients seen in the various clinics in Bhopal.

Since the emotional reactions of people to disasters, irrespective of the nature of the disaster or where it occurs, follow a similar pattern, some of the classic documents on psychological sequelae of disasters were reviewed and discussed. Many children were brought for consultation for various kinds of compliants, and some time was therefore devoted to discussion of the emotional reactions of children to sudden, severe stress. Many interviews with children, both on audiotape and videotape, were presented.

Assessment of people with varying degrees of physical disability due to proven gas-related physical illnesses (such as fibrosis of the lungs) posed a problem for many doctors; hence, emotional responses to physical disability and chronic physical illnesses were covered. The availability of patients (on videotape) from the local clinics for discussion greatly enhanced the interest and involvement of the participants. The emotional dimension of patients' complaints was completely new to most of the participant doctors.

Day 5: By the 5th day of training, most of the participants were able to recognize and appreciate the emotional disturbances in a great many of the patients attending their clinics. The participants were able to elicit, in many patients, various mental/emotional symptoms. At this stage of training, we considered it appropriate to discuss the approaches to management of such patients. This session therefore emphasized the importance of psychological management.

After an initial introduction by the faculty, the session proceeded with a role-play exercise in which interviewing a patient was simulated. The basic principles of psychological management, the importance of appropriate interview techniques in establishing a satisfactory doctor–patient relationship, and the methods of reassurance, suggestion, and psychological help were discussed. Audio recordings of psychotherapy by the faculty with some of the local patients were used to illustrate the techniques.

Day 6: During the last session, pharmacological management and other approaches to patient care were covered. A good part of the time was taken up by discussion of "implementation of the mental health care program" among the affected population in Bhopal. The last 30 minutes were devoted to obtaining post-training responses from the participants.

Some of the comments of the participants in the post-training evaluation confirmed the utility of the training. Most of them felt that with this training, they would be able to provide much more help to patients with mental illness and to others with physical problems as well. Some doctors confessed that earlier they had been accustomed to giving their patients only symptomatic treatment, but that after the training, they were able to consider and diagnose conditions also in terms of a psychiatric approach. Some mentioned that they had not been aware of any mental problems and had thought that patients were malingering and presenting vague symptoms to evoke a sympathetic response and get more medicines. All the doctors who took part in the training agreed that there were needs for privacy for interviews,

support from a psychiatrist for difficult cases, and psychotropic drugs.

Discussion

The studies of the Bhopal disaster population illustrate both the needs for mental health care and the scope for utilizing existing resources. In most developing countries, formal mental health resources are extremely limited, and the focus has to be on including mental health components in the training of the "helping groups" working with a disaster population.

Kinston & Rosser [6] in 1974 expressed the view that the general field of inquiry loosely encompassed by the term *disaster* has not yet found an established position in the psychiatric canon. There seem to be theoretical, practical, and emotional reasons for this. The situation has been gradually changing in the last 15 years. There is a vast literature on the mental health aspects of disasters [7], but experience from developing countries is limited [8,9]. Still more limited is experience in intervening to provide mental health care by utilizing the resources available.

The Bhopal disaster, being a major man-made disaster, provides an opportunity for understanding mental health needs and developing culture-specific interventions in such situations.

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SEVERE MENTAL MORBIDITY

Mental health and care of the mentally ill have generally been neglected areas in the field of health care. Ignorance and widely prevalent misconceptions about various aspects of mental illnesses have contributed to this neglect, poor demand for modern services and underutilisation of the available services. Health planners, administrators and medical professional also have no access to data on the prevalence and suffering caused by mental illnesses. Most of the currently available, limited services are institution-based and situated in urban areas, either in large custodial mental hospitals or in psychiatric units attached to general hospitals.

As service, training and research in the field of mental health have steadily grown during the past three decades in our country, many psychiatrists have selected epidemiology of mental illness as a research area. In the earliest account of mental illness in India by Overbeck-Wright[1] a prevalence figure of 0.26 per thousand is mentioned, based on the census report of 1911. Dube[2] refers to an effort by Govindaswamy (the first Director of the then All India Institute of Mental Health—now known as the National Institute of Mental Health & Neurosciences-NIMHANS) in Bangalore, who conducted a survey through questionnaire but his results were inconclusive. In the earliest reported field survey of mental morbidity in India, Surya *et al*[3] surveyed a population of 2731 from 510 households in the Kurchikuppam locality of Pondicherry during June to September 1962 using a simple screening questionnaire with one informant per household. All these informants were asked if they knew anyone with any of the listed 25 symptoms. All the reported persons were identified and clinical interviews were carried out by Surya himself. Twenty six persons were found to be suffering from neuropsychiatric illness, and the rate was 9.5 per thousand. Epilepsy accounted for 2.2, schizophrenia 1.5, alcoholism 3.6 and mental defect 0.7 per thousand respectively. Depression was not represented and no one appeared to be in need of institutional care.

Subsequently, several mental morbidity surveys in the general population were carried out in different parts of the country. These surveys demonstrated that all types of mental illness are common in India as elsewhere in the world and are equally common in rural areas. Notable amongst these are surveys by Dube[2] in Agra (23.7 per thousand), Verghese *et al*[4] in Vellore (66.5 per thousand), Sethi *et al*[5,6] in Lucknow (39 per thousand and 72.7 per thousand), Elnager *et al*[7] in Hooghly district, West Bengal (27 per thousand), Carstairs and Kapur[8] in Kota village of South Kanara district, Karnataka (369 per thousand) and Nandi *et al*[9] in villages near Calcutta (102.8 per thousand). The wide range of prevalence rates of mental illnesses found by these workers in different parts of the country is probably because of a number of reasons *viz* diversities of the scope of the surveys, variations in methodology, differences in statistical manipulation of the data, lack of uniformity in classification of the data, prob-

lems of population definition and sampling procedures and problems of case definition, identification and classification.

The Present Study

In June 1976 a collaborative study on severe mental morbidity was initiated by the Indian Council of Medical Research (ICMR) and the Department of Science and Technology (DST) as the first major multicentric study in this field. Although the ICMR had earlier supported a few major psychiatric epidemiological researches[3,4,5,6] to estimate the prevalence of mental disorders in the country, their rates and results were not comparable as they used different methodologies. The present study was aimed to estimate the prevalence of psychiatric morbidity at different selected centres in the country and to investigate the socio-demographic correlates of this morbidity. It was generally felt that the information that would accrue from the study should be such, as to help in improving the delivery of mental health care to the people through the existing channels of welfare, keeping in mind the paucity of resources in the country. Therefore it was decided to limit the scope of the study to 'severe mental morbidity', and to couple it with an intervention programme for this morbidity and also to evaluate the efficacy of the intervention. It was decided to carry out the study at 4 centres in the country *viz* Bangalore, Baroda, Calcutta and Patiala.

At about the time, experiments on various methods of extending mental health services to the community were being carried out at the Community Psychiatry Unit at NIMHANS, Bangalore. A WHO multinational project on 'Strategies for extending Mental Health Care' was also ongoing in several developing countries with a centre at the Department of Psychiatry, Postgraduate Institute of Medical Education and Research, Chandigarh. Isaac and Kapur[10] at Bangalore showed that all the adult epileptics and all but one of the adult psychotics in a population of roughly 5000 were picked out by a method which in terms of effort, time and funds, cost one-fifteenth of that necessary to carry out a full survey of the adults in that population. Pilot programmes to train primary health centre doctors and multipurpose health workers to carry out simple mental health care tasks along with their routine activities were also being carried out at Bangalore[11,12].

Earlier, in 1975, a WHO expert committee on mental health[13] made specific recommendations on organisation of mental health services in developing countries. The Committee advocated the policy of decentralization and integration of basic mental health care with existing general health care infrastructure and provision of this care by primary health workers following a short term task oriented training. The Committee specifically recommended that "countries should, in the first instance, carry out one or more pilot programmes to test the practicability of including basic mental health care in an already established programme of health care in a defined rural or urban population" and that "training programmes, including a simple manual for the training of health workers should be devised and evaluated".

In planning the ICMR study, these national and international developments in the field of Mental Health were taken into account.

Objectives

The specific objectives of the collaborative study were the following:

1. To determine the prevalence of severe mental illness in the community with focus on psychosis and epilepsy—at 4 different centres in the country.
2. To study the feasibility and effectiveness of involving the multipurpose workers (MPWs) and primary health centre (PHC) doctors:
   (i) for detection and management of all psychotics and epileptics in rural areas.
   (ii) for bringing changes in attitudes towards mental health in the rural community.
3. To estimate the cost of training and management of the programme in rural areas.

Study Design

The essential core of the study was the training and intervention by the primary health care personnel (*ie* identification and management of severe mental illness and epilepsy) and the evaluation of the intervention by a final field survey. During the intervention phase, initially, the study areas had to be identified at all the 4 centres—preferably, rural areas around a primary health centre, covering roughly a population of 40,000. Following the selection of the study areas

and population to be covered, the personnel delivering primary health care to this population had to be given in-service training in basic mental health care, without disturbing their routine tasks and activities, after which, for a year, they would be expected to identify and manage severely mentally ill persons and epileptics in their respective catchment areas and maintain simple case records. During this period the research staff would examine every patient identified and managed by the PHC team and in addition, also carry out an attitude survey, interviewing one adult member of every twentieth household in the study areas. At the end of a year of intervention by the PHC team, the research team would carry out a survey of severe mental morbidity and all patients on treatment assessed in detail again. The survey would be a two stage procedure, wherein initially, one adult member of every household would be interviewed using a questionnaire to detect 'possible cases' following which all the nominated suspects would be assessed in detail. The attitude survey would be repeated during the final field survey. A simple costing of the training as well as management of the programme was also to be carried out. For the purpose of training, intervention and survey, several research instruments had to be selected, modified or developed and translated into the vernacular. Inter-investigator and inter-centre reliability of the tools had to be checked too. Instruments for measuring psychiatric symptomatology, social functioning, and attitude towards mental illness had to be either selected from existing available ones or newly developed. Training manuals, schedules for evaluation of the training and simple case records and follow up sheets had to be developed.

Instruments used

Two kinds of instruments were required for the study, one for survey *ie* measuring psychiatric morbidity, social functioning and attitudes and another, for the intervention phase *ie* training of personnel, evaluation of training and simple case records to be maintained by the PHC personnel.

For measuring psychiatric morbidity, the Indian Psychiatric Survey Schedule (IPSS) was used[14]. This is a structured interview schedule developed and standardized in India and had already been successfully used in a major field survey in the country[8]. It is an exhaustive instrument designed to enquire about the presence of 124 psychiatric symptoms and 10 items of historical information through a multistage procedure and using multiple sources of information.

The IPSS was used for the detailed assessment, of all the patients who were detected and regularly managed at the PHC by the PHC team, both initially as well as at the end of the intervention phase. It was also used in the final two stage field survey for the assessment of the nominated cases. The IPSS was already available only in one of the Indian languages – Kannada, and hence had to be translated into various other Indian languages for use in the different centres.

To measure the social dysfunctioning of those assessed in detail with the IPSS, a complementary instrument *viz.* Katz's Social Adjustment Scale (KAS Behaviour Inventories: R2 Form) was used[15]. This instrument was suitably modified for use in the Indian setting.

A subsection of the preliminary section of the Indian Psychiatric Survey Schedule termed the 'Symptoms in others' questionnaire was used as the initial proforma for screening the population. After getting the socio-demographic details of every family on a household card from either the head of the family or one adult male, this questionnaire was administered to the same person. This questionnaire with 15 questions was designed to elicit from the respondent information which might indicate serious psychiatric illness or epilepsy in members of his family or neighbourhood. This simple questionnaire takes only a few minutes to complete and can be easily administered by any trained non-professional. The usefulness of this instrument in picking up serious psychiatric illness like psychosis and epilepsy had been validated in an earlier Indian field survey[10].

To find a suitable instrument for measuring attitudes towards mental illness and epilepsy, several attitude questionnaires were examined in detail. The investigators of the study jointly developed a short 15 item questionnaire which was simple enough to be used with the villagers. Since this was a simple questionnaire with 'Yes' and 'No' response, the face validity was considered sufficient.

Training programmes and separate manuals of instruction in mental health care for PHC doctors and multipurpose workers developed by the Community Psychiatry Unit at NIMHANS were used for the training of PHC personnel. These manuals were prepared

by the staff of the Unit based on the broad recommendations of WHO[13] and the objectives of the ongoing work of the Unit primarily aimed at integrating mental health with primary health care. These manuals were pilot tested earlier[11,12].

The training for the PHC doctors consisted of 15 sessions of 2 hours each, in the form of lectures, discussions, examples of cases and actual demonstration of cases. Flexibility was permitted to suit the local situation. The training for the health worker was carried out in the vernacular and in 11 sessions of two hours each in the form of lectures, discussions, examples of cases and actual demonstration of cases.

The training was evaluated by an assessment of the theoretical knowledge gained by the trainees and enquiring into any attitudinal change which occurred due to the training. This was achieved by comparing a simple post-training assessment of the health personnel's attitudes and knowledge regarding mental health with their pre-training performance. The schedules consist of two parts. The first part is a questionnaire which inquires into the health personnel's knowledge and attitude regarding causation and management of severe mental illness and epilepsy. This part is identical for both doctors and health workers but the doctors questionnaire contained in addition a section on investigations needed for the diagnosis and management of mental illness and epilepsy. The second part of the assessment for doctors consists of presenting them with a series of simple clinical histories of different neuro-psychiatric conditions. They were then required to answer certain questions based on these clinical histories on diagnosis, and management of the condition. Definite answers for all the questions on all the clinical stories were formulated and the credit for each correct answer determined. The second part of the assessment for MPWs consists of seven open-ended questions on types and management of mental illness and epilepsy.

Simple case history and follow up records to be maintained by the PHC doctors and MPWs, during the intervention phase, developed by the Community Psychiatry Unit at NIMHANS and modified by the investigators, were used in the study.

The Initial Phse of the Study

The various activities completed during the initial phase of the study in preparation of the actual work of training and intervention by PHC personnel and final field survey were—

(i) Translation of IPSS into different Indian languages: The IPSS was translated into Tamil and Telugu at the Bangalore centre, into Punjabi at Delhi initially, and later at the Patiala centre, into Bengali at Calcutta centre, and Gujarati at Baroda centre. These translations were made by either mental health professionals who were well-versed with the colloquial use of the language concerned or those who were well-versed in the languages, in consultation with mental health professionals who knew the respective languages. Translation of all these vernacular versions into English was done, again by people who were well-versed in the colloquial use of these languages but different from those who took part in the original translation.

(ii) Inter-investigator reliability studies of vernacular versions of the IPSS.

(iii) Validation of the modified version of Katz's Social Adjustment Scale: The Katz's Social Adjustment Scale (KAS Behaviour inventories: Form R2)[15] lists 16 items of activities which a normal individual is expected to perform. These activities are fairly basic and would be expected in any culture. Katz's scale modified by the investigators, was validated for grading severity of the illness[16].

(iv) Inter-centre reliability check of IPSS and Katz's Social functioning scale.

(v) Pilot training programme for PHC personnel: Pilot training programmes for PHC personnel were carried out at the Bangalore and Calcutta centres. At Bangalore, 2 doctors and 11 MPWs of the Anekal PHC (a PHC situated about 40 km away from Bangalore) were trained in mental health care[17].

Training of PHC Personnel and Intervention by Trained Personnel

Delineation of study areas and population

Primary health centres which were typical of the large number of PHCs in the country, were selected for the intervention phase of the study. In all 4 centres, PHCs situated not very far away from the participating institution were selected. Efforts were made to

ensure that medical officers and multipurpose health workers of the PHC, who were to undergo the training in basic mental health care would not be transferred from the PHC for a minimum period of 1½ years. A predominantly rural area of the PHC comprising about 40,000 population was designated as the 'study area' in each of the PHCs and the health workers in these areas were given the training. Solur, Padra, Amdanga and Ajnanda were the PHCs thus selected in Bangalore, Baroda, Calcutta and Patiala centres, respectively. The various general characteristics of these study areas are given in Table I.

in Baroda and Patiala, respectively and hence had teams of specialists visiting them regularly, every week. A large part of Padra population was semiurban and easily reachable. The study population was typically rural in Amdanga (Calcutta) and Solur (Bangalore). In Amdanga, the population was predominantly Muslim and in Ajnanda, Sikh. Ajnanda PHC had a dental surgeon working and Padra had 5 doctors in the PHC. The average daily attendance in the PHC was maximum in Amdanga. All the PHCs had inpatient facilities as well as quarters for the doctors and in two of them the MPWs scheme had not started yet.

Table I. General characteristics of the study areas

		Bangalore	Baroda	Calcutta	Patiala
1.	Name of the PHC	Solur	Padra	Amdanga	Ajnanda
2.	Location	50 Km. from Bangalore	22 Km. from Baroda	45 Km. from Calcutta	25 Km. from Patiala
3.	Total population coverage of the PHC	80,000 (approx)	Over 150,000	Over 100,000	56, 000
4.	Study area	8 Blocks—124 villages about 40,000	2 sections—6 villages each, about 40,000	3 Anchals—33 villages about 40,000	51 villages about 43,000
5.	General characteristics of the population	Rural	Semiurban	Rural	Rural
6.	Major religion	Hindu	Hindu	Predominantly Muslim	Sikh
7.	Special activities, if any, conducted in the PHC	Nil	—Weekly psychiatric clinic by specialist for few years. —regular visit by Medical College teams.	Nil	—One of the PHCs adopted by Medical college. —Weekly visit by specialists.
8.	Economic activities	Farming, rearing silkworms, beedi rolling	Farming	Farming—rice, jute, sugercane, mango, coconut.	Farming, Farm labourers
9.	No. of doctors in the PHC	2	5.	2	3+1 dentist
10.	Inpatient facilities	Available (12 beds)	Available	Available (15 beds)	Available (12 beds)
11.	Whether MPW scheme has started.	Yes	Yes	No	No
12.	No. of health workers	11	9	20 (+27 CHVs)	10

CHV - Community health volunteer
MPW - Multipurpose worker

While there were several similarities in these PHCs there were few striking differences too. The total population coverage of the PHCs varied from a low 56,000 in Ajnanda to over 1½ lakhs in Padra. Padra and Ajnanda were PHCs attached to medical colleges

Training of the PHC personnel in basic mental health care

The training for the medical officers of the PHCs and the health workers working in the designated

study area at all the 4 centres was carried out by the investigators and the research officers (1-medical and 1-non medical) appointed at each centre. At all the centres, the doctors and MPWs were trained separately. The training was carried out as far as possible without disturbing the existing routine of the PHC. The details of the time-table for the training were worked out at each centre in consultation with the medical officers and other staff of the PHC. The actual training was carried out in the premises of the PHC in all the centres. The doctors were taught in English, while the health workers were taught in the vernacular. For the training of health workers the 'Manual of instructions in mental health for health workers' was translated into the local languages and used as a guideline. In addition to the lectures on various topics, based on the manuals of instructions, group discussion and case demonstration were important components of the training. At Baroda and Patiala, simple flow charts were developed and used for the training. Active participation by all the trainees was sought. The sessions were informal and good rapport was established between the trainers and trainees.

The interest shown by the health staff in the training at all the centres was satisfactory. The doctors realized that while mental health care was never taught to them during their undergraduate courses, it was an important component of general health care which was grossly neglected. The range and variety of questions asked by the health workers was an indication of their ignorance as well as interest in mental health. At all the centres, the health workers would have liked to know more than what was taught to them.

Evaluation of the training

The results of evaluation of the training for health workers in the two parts of the pre - and post- training assessment are shown in Table II. It was found that the attitudes and knowledge of health workers with regard to mental health is far from satisfactory before the training, as assessed by the schedules. They showed a satisfactory change in the positive direction after the training. Average pre-assessment scores which ranged from 30 to 50 per cent improved after training to over 70 per cent at all centres. In Baroda, since the post-assessment scores were not satisfactory initially, the training period was extended. Those portions of the curriculum found to be deficient in the trainees were covered again and the assessment repeated. At the Calcutta centre, the chief investigator was forced to impart the training to the community health workers as he found the MPWs were leaving most of their peripheral work to the community health workers.

At all the centres, the pre-training assessment of the doctors showed that they had poor knowledge of the clinical features, diagnosis and management of common psychiatric conditions and epilepsy. Their basic knowledge and attitudes towards mental illness was reasonably satisfactory even before the training. Hence there were no marked changes in the scores for part I between the post - and pre - training assessments. There was remarkable improvement in their post-training performance in part II of the assessment. This meant that the doctors ability to correctly diagnose and manage common psychiatric conditions had improved considerably.

Table II. Evaluation of training—health workers

	Bangalore		Baroda			Calcutta		Patiala	
	Pre-training	Post-training	Pre-training	Post - training I	Post - training II	Pre-training	Post-training	Pre-training	Post-training
Mean score obtained by HW for Part I	77	94	49	78	92	53	85	72	88
for Part II	33	63	8	39	71	33	72	20	58
Parts I & II	55	78	29	58	82	43	78	46	73

HW - Health worker

Intervention by PHC team of doctors and MPWs

The intervention period was 12 months from the completion of training for the PHC personnel. During this period, the health workers were expected to detect priority disorders like psychosis and epilepsy in their respective areas of work during their field visits, fill up a short case record, refer the detected patients to the PHC doctors, carry out the follow up of these patients as per the instruction of the doctors and maintain a short follow up record. The doctors were expected to examine the patients, diagnose and initiate the management. In addition, they were also expected to maintain simple case records and follow up information for every patient from the study area, managed at the PHC during the intervention period. During the initial part of the intervention period, the research team at all the 4 centres carried out an attitude survey using the simple 15 items attitude questionnaire on one adult member from every twentieth household in the study area. The research team also examined every case detected and managed by the PHC team, in detail using the IPSS. Such cases were examined in detail again during the final survey.

The pre- and post- training assessments had shown that the knowledge gain of doctors and health workers after the brief training at all the 4 centres was satisfactory. The intervention by them was indeed a test of their ability to translate the new knowledge into action. It is quite well known that in regard to health related problems and with health personnel, 'knowing more' did not necessarily mean 'behaving differently'. Table III shows that 72, 36, 58 and 66 patients suffering from severe mental illnesses (schizophrenia, mania, depressive psychosis, organic brain syndrome) and epilepsy from the respective study areas in Bangalore, Baroda, Calcutta and Patiala centres were on management by the PHC teams. Of these while 41, 28, 0 and 8 cases were identified and referred to the PHCs by the trained health workers, the remaining cases came to the PHCs directly after hearing about the mental health care services in the PHC through others in that village. If one includes all the patients on management at the 4 study centres (*ie* in addition to patients of severe mental morbidity, other types of psychiatric patients also) then the numbers are 107, 117, 75 and 96 respectively at Bangalore, Baroda, Calcutta and Patiala.

At all the 4 centres, the intervention phase helped the investigators to gain an understanding of the functioning of the general health care infrastructure, the performance of the health care services in general and the various national programmes in particular. It also clarified issues related to the background, training and morale of the PHC personnel, both doctors and health workers and the target oriented approach of the health care administration. It was noted that the main thrust of the health care administration and hierarchy was for performance in the family welfare programme. The PHCs and staff were assigned targets as well as incentives for performance. This emphasis on the family welfare programme influenced the entire health care services, often at the cost of other programmes. Next to the family welfare programme, priority was assigned to the malaria control programme. In comparison, however, various other programmes like tuberculosis and leprosy control programmes, expanded programme of immunization, prevention of blindness programme *etc*, were accorded lower priority. It was doubtful whether the original unipurpose workers in a vertical subsystem had truly become multipurpose workers in areas where the scheme was introduced. There was absence of a well-knit back-up of referral services. The

Table III. Cases detected and managed at the PHCs during the intervention phases

	Bangalore	Baroda	Calcutta	Patiala
No. of patients of severe mental morbidity detected and referred by the health workers to the PHC	41	28	—	8
No. of patients of severe mental morbidity (from the study areas) on management at the PHCs	72	36	58	66
Total number of patients managed at the PHCs (includes patients from outside study area)	107	117	75	96

absence of community support and participation in the various health programmes was most striking. There was suggestion of underutilization of the PHC services which primarily appeared to arise out of a lack of faith and confidence in the system. The mental health care programme inherited all these inherent qualities of the primary health care infrastructure.

Against the foregoing background, the mental health care programme appeared too peripheral to the health personnel. Poor performance in this programme did not encounter any admonition from their superiors. At all the centres, it was the impression of the Investigators that the morale at the PHC was poor and the health workers did not make field visits as frequently as they were expected to. Many of the workers accepted this and stated that they found it difficult to visit the families which demanded medicines for the illnesses and which the health workers were unable to provide. Some of them even said that they were called as 'fever doctors' as all that they could do in villages was to distribute chloroquin tablets for reported cases of fever. Many who had not carried out satisfactory work complained of a heavy work load, while a few others raised the issue of lack of incentives for additional work. Some of the health workers frankly stated that they had no 'prestige' amongst the villages they worked with and that the villagers had little faith and confidence in them. This lack of confidence was observed not only in case of the health workers but also in the entire PHC system. While the workers knew of "patients" or cases in their own areas of work, they were unable to convince the family members to seek help from the PHC. Thus, it was found that the poor rate of detection and management during the intervention phase was due to several reasons. It was a general observation that most health workers who performed well in any one programme tended to do well in all other programmes, including mental health care. These workers were also quite popular with the villagers amongst whom they worked.

For a programme like the mental health care programme, a period of 1 year is too short for evaluating the efficacy, as the positive aspects of the programme are more likely to be cumulative. Considering the overall efficiency of the health care infrastructure and the performance of the health personnel in the various national programmes which have been in existence for longer periods of time, the performance of the PHC teams at the 4 centres in mental health care intervention has been, by and large, encouraging. In considering their effectiveness in mental health care work, it should also be borne in mind that the inputs for this programme have been quite minimal (short training for doctors and health workers in basic mental health care) and these did not interfere with their existing work.

Field Survey

Prevalence of severe mental morbidity

At the end of the intervention phase, a field survey was carried out by the research team at all the 4 centres to estimate the prevalence of severe mental morbidity. It was a two stage survey. During the initial stage, trained research investigators administered a simple 15 questions screening proforma to one adult member of every household in the study areas after collecting certain basic socio-demographic information about the household. This 'symptoms in others' questionnaire asked them if they knew anybody who suffered from one or more of the 15 symptoms either in their families or in their villages. During the second stage, all such nominated probable cases were assessed in detail using the IPSS based on the symptoms recorded by the IPSS, and the patients were diagnosed. The 'symptoms in others' questionnaire is essentially an instrument which detects severe mental morbidity particularly different forms of psychoses and epilepsy. Table IV gives the overall results of the survey *ie* the prevalence of severe mental morbidity at the 4 centres while their diagnostic categorization is given in Table V.

There are certain interesting differences in the characteristics of the population studied at the 4 centres. While at all the centres, males outnumbered females and the age structure was largely similar, the Patiala centre had only about 3 per cent population at income of less than Rs.300/- per month, the percentage for the same at the other centres being 26.2, 74 and 73 per cent at Bangalore, Baroda and Calcutta, respectively. Calcutta has predominantly Muslim population and Patiala has over 70 per cent Sikh population. Although the survey has used similar methodology at the 4 centres, there are striking differences in the prevalence rates. While Baroda and Calcutta have low rates of epilepsy (1.28 and 1.71 per thousand), it is higher in Patiala (3.17 per thousand) and highest in Bangalore (7.82 per thousand). Epilepsy constitutes 70 per cent of all the cases detected during the survey at

Table IV. Prevalence of severe mental morbidity and mental health care by primary health care personnel

	Bangalore	Baroda	Calcutta	Patiala	Total
Population studied	35,548	39,655	34,582	36,595	146,380
Total number of patients (severe mental morbidity)	395	181	287	517	1,380
Rate per 1000 population	11.1	4.6	8.3	14.1	9.4
No. of patients identified and managed by the PHC team during the intervention phase	72	36	58	66	232
Percentage of patients managed by the PHC team	18.2	19.9	20.2	12.8	16.8

Table V. Prevalence of severe mental morbidity—diagnosed categorization (based on IPSS)

Sl. No.	Diagnosis	Bangalore		Baroda		Calcutta		Patiala	
		No. of patients	Rate/ 1000	No. of patients	Rate/ 1000	No. of patients	Rate/ 1000	No. of patients	Rate/ 1000
1.	Epilepsy	278	7.82	51	1.28	59	1.71	116	3.17
2.	Organic brain syndrome	4	0.11	24	0.61	22	0.64	88	2.40
3.	Schizophrenia	65	1.83	70	1.77	71	2.05	113	3.09
4.	Mania	20	0.56	14	0.35	8	0.23	50	1.37
5.	Depressive psychosis	28	0.79	22	0.55	127	3.67	150	4.10
	Total	395	11.1	181	4.6	287	8.3	517	14.1
	Population studied	35,548		39,655		34,582		36,595	

Bangalore while similar percentages at Baroda, Calcutta and Patiala are 28, 20 and 22 respectively. Most of these cases are in the younger age group of upto 14 years of age and most of the patients on management at the PHC in Bangalore have epilepsy. Similarly, the rates for depressive psychosis are higher in Calcutta and Patiala (3.67 and 4.10) compared to Bangalore and Baroda (0.79 and 0.55).

The health worker - doctor team of the PHC was about 20 per cent effective in identifying and managing the epileptics and psychotics in the community, following a short term training in basic mental health care.

Improvement in social functioning

All the patients detected and managed by the PHC team were also assessed by the research staff using the IPSS during the intervention phase. The same patients were reassessed by the research staff during the final survey. Thus their improvement could be evaluated by comparing the two IPSS. While the changes in the social discrepancy score indicate improvement in all the patients managed by the PHC team, these changes have not been very marked. It must indeed be remembered that the large majority of these patients were chronically disabled with several years history of illnesses. It is well known that chronic

psychosis and epilepsy need long-term and regular medication to show satisfactory improvement in symptomatology and social functioning.

Attitude survey

During the final survey, the attitude questionnaire was again administered to those who had responded to it earlier, during the beginning of the intervention phase, with the aim of finding out if the attitudes towards mental health had changed favourably as a result of the intervention by the PHC personnel. The results of the attitude survey, before and after the intervention phase show that at all the 4 centres there was an overall change in the attitudes in the positive direction as measured by the simple 15 items attitude questionnaire before and after the intervention. While the overall changes are satisfactory, item-wise analysis showed that, certain crucial items like suitability of the local health centre for treatment of most of the mental illnesses had not changed considerably. There appears to be doubt regarding the causation of mental illness too as items on caution like blackmagic, evil spirits, masturbation, excessive sex and bad deeds of past and present life had not changed satisfactorily. These items elicited very few correct answers not only in the initial survey but during the repeat survey also.

Cost of the programme

The simple and crude costing exercise carried out ('Pure cost analysis') estimated the cost of training and intervention *ie* case finding and case holding by PHC personnel, cost of monitoring and cost of the final survey to evaluate the performance of the PHC personnel. The cost of records, drugs, training material and other incidentals involved in the training, wages of the research staff and the cost of travel were the main costs taken into consideration. The wages of the PHC personnel were not considered as they were already in employment for carrying out various health care activities. The total cost of the programme for training and intervention, monitoring and final survey amounts to about a lakh of rupees at each centre.

Consideration of costs will have to take into account the fact that the study was carried out as a research project with specific goals and with research staff specifically appointed for the purpose. A major portion of the total costs was constituted by the salaries, for the research staff. For larger scale replication of the intervention programme, the costs are likely to be less.

Comments

The design of the study aimed to integrate mental health into primary health care by training the existing primary care personnel and evaluate this integration in a methodical way. It prioritized mental health problems and attempted an intervention strategy keeping in mind the limited resources. In other words the study was in the nature of Health Services Research aimed to systematically study the means by which relevant biomedical knowledge is brought to bear on the health of individuals and communities under a given set of conditions.

Training for PHC personnel

The quality of the training would have been enhanced, by making it oriented towards more practical and field work with the use of more audio visual material. It is known that while conducting in-service training programmes for persons whose motivation is at best average, the use of certain principles of adult interactive learning adds to the overall usefulness of the programme (These include the use of techniques like role play and simulation games and some activity in which all the participants are involved in every training session). Simulation exercises of identifying cases in the community, referring them to a PHC, convincing unwilling family members, health education of the community, follow up visits to patients *etc.* could have made the training more interesting. They would have contributed to the development of skills in addition to gaining knowledge.

The training in mental health was offered only to the medical officers and health workers, although there are several other important functionaries who contribute to the team at every PHC. Such as the supervisors of health workers *viz* health inspectors and lady health visitors, block health educators and the pharmacist. Involvement of these personnel after appropriate training would have contributed to the performance of the personnel as a team. Lack of a built-in mechanism in the study design for continuous, on the job training probably contributed to the poor performance of the personnel, during the intervention phase. Continuous refresher inputs are known to contribute to the quality of work of health personnel.

Evaluation of the training

The training for PHC personnel evaluated by the pre - and post- training assessments showed that the knowledge gain of doctors and health workers at all 4

centres was satisfactory and there were changes in their attitudes in the right direction. However, when they were required to use this knowledge in their practical work, their performance was not satisfactory. This shows that knowledge gain alone does not always lead to working differently. There are several other factors in addition to new knowledge gained and skills developed, which contribute to the effectiveness of a training programme. It was found during the intervention phase that the doctors' ability to correctly diagnose and manage the detected cases which came to them in the PHC was reasonably adequate.

Intervention by the PHC personnel

It was found that the PHC personnel were able to detect and manage less than 20 per cent of the actual severe mental morbidity from their catchment areas, during the intervention phase. Evaluation of any programme, should identify, in addition to successful aspects of the programme, deficiencies that are amenable to corrective action.

There are several specific factors which may have contributed to the poor performance of the PHC team. Many of these factors came to light as the investigators gained an understanding of the functioning of the primary health care structure. It was assumed that if health workers and doctors of PHCs were trained in mental health care, this component would easily get integrated with the PHC system. The various other functionaries in the system like the supervisory staff of the health workers, the block health educators and most important the administrative supervisors of the PHC doctors, (such as the District Health Officer,) were not taken into consideration. The integration was attempted only from the lower end of the health care hierarchy, while experience has shown that integration occurs only when it is attempted at all levels of the hierarchy. In the present study, the intervention was carried out only in a portion of the PHC with an approximate population of 40,000, involving only those health workers who worked in these areas. The health workers from the non-study areas of the PHC did not have anything to do with the mental health care programme. Review discussions, at monthly meetings of the PHC with health workers did not involve the whole group with the result that the discussion tended to be less intensive. The operationalization could have been better, if the total population of the PHC had been covered by the intervention programme. Staff vacancies were also an impediment in this programme.

It was clear that the records to be maintained by PHC personnel should be very simple and easy to fill up and maintain. The records for the health workers, as a rule, should be in the local languages. In the present study, even though the case history and follow up records were simple, there was scope for further simplification and improvement. Recording and reporting can become an integral component of the activities of the health workers, only if they are regularly scrutinized, reviewed and feedback given to them by their own superiors month to month. Thus, a hierarchial systems of regular recording, reporting, review and feedback has to be established for mental health care too. In the present study, as the monitoring was carried out by the research staff, the superior officers were not actively involved, thus resulting in loss of seriousness and intensity.

The attitudinal changes in the community were expected to occur by the work of the PHC team (*ie* detection, referral and management of cases and mental health education). The health personnel were not particularly equipped in the task of mental health education. They were not given any health education aids like posters, pamphlets, charts *etc*, for this activity. However, additional inputs need to be provided if wide ranging attitudinal changes are expected of the community. It is generally agreed that if health care programmes are to succeed, it is essential to ensure of the involvement and participation of the community for whom the programme is delivered. In the present study, the intervention phase did not plan for any organised programme or activity to seek the involvement of the community. Active community participation would have enhanced the effectiveness of the coverage of the programme. It was observed that a 'team-approach' was lacking in the PHCs. The doctors and health workers did not trust each other in general, there seemed to be mutual distrust and disrespect between them. In all the study areas, the performance of the PHCs in various national programmes was far below targets and expectations. The absence of a team spirit and well coordinated work amongst the personnel in the PHC, certainly contributed to the quality of performance of the health personnel.

Prevalence of severe mental morbidity

This study estimated the prevalence rates of severe mental illnesses and epilepsy at 4 different centres in the country using an uniform method of case identification, assessment and diagnostic categorization. A

simple method of identifying the priority conditions of psychoses and epilepsy was used. This method designed for use by multipurpose health workers of PHCs for identifying the severely mentally ill, had been already cross validated with the ideal method of a door-to-door survey using a standardised tool[10].

The method employed in the present study may be criticized as an oversimplification of psychiatric case finding. It must be emphasized, however, that this method is intended for identifying the most severe forms of morbidity such as psychosis and epilepsy in the community. A method like this may be useful only in close-knit society of a small or medium sized village, and it may not yield similar results in urban or semi-urban communities.

Although the morbidity rates of mental disorders obtained by various epidemiological studies are highly variable, the range is very narrow when one considers the rates of only psychosis or only schizophrenia. The rates of all psychoses, schizophrenia and epilepsy estimated from this study are comparable to what is reported by most other authors. The rates for all cases are highly variable and they range from less than 10 per thousand to over 300 per thousand. The rates for 'all cases' estimated by the present study are, as expected, lower than most other reports as the present study aimed to estimate only the severe mental morbidity.

There were certain interesting variations in the prevalence at the 4 study areas (Table V). While the prevalence of epilepsy was 7.82 per thousand at Bangalore it was only 1.28 at Baroda and 1.71 at Calcutta. The rate for all psychoses was higher in Patiala and Calcutta, compared to Baroda and Bangalore and mainly contributed by the larger numbers of depressive psychosis at both these centres. The rates 'all cases' ranged from 4.6 in Baroda to 14.1 in Patiala.

The 'case definition and categorization', and the 'case finding' methods employed in an epidemiological exercise should be primarily chosen depending on the purpose of the inquiry. An important use of any epidemiological data is 'planning, organizing, delivering and evaluating' services. As early as in 1977, Sartorius[18] cautioned that exercises in epidemiology aimed only at estimating the prevalence and speculating on the etiology of mental illnesses needing considerable time, money and trained personnel, are not any more justified particularly in developing countries. However, if their purpose is essentially operational—*ie* for planning, organizing and evaluating services—they may be considered worthwhile. In spite of several psychiatric epidemiological studies in our country, as noted by Wig & Murthy[19], "none of these have ultimately resulted in a well organized plan to demonstrate the usefulness of the available psychiatric skills to help the identified patients".

This ICMR/DST collaborative study on severe mental morbidity represents an important milestone in the development of the mental health policy in India. The study has also played a pioneering role in launching community-based mental health care programmes and health services research in the field of mental health. The primary aim of this multicentric study was to assist in better planning, organization and evaluation of mental health services in the country. These aims have been fulfilled, to a large extent, by the study, which has yielded certain interesting leads on the feasibility of the improvement of the existing PHC personnel in mental health care, with certain additional inputs (organizational and managerial) and under proper supervision.

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This write-up by Dr. M.K. Isaac, NIMHANS, Bangalore, is based on the final report of the Collaborative Study on Severe Mental Morbidity.

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MH-6.5

National Workshop on Rehabilitation of the Mentally Disabled - by NIMHANS Bangalore - March 12 - 14, 1981

Paper on Social Security Measures for the Welfare of the Mentally Disabled

By

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It is a happy co-incidence that the NIMHANS are celebrating their Silver Jubilee during the International Year of the Disabled and in the month of March which has the World Disabled Day on the 22nd this year. This augurs well for greater care, concern and understanding of the problems of the Mentally Disabled that can bring about necessary changes in social attitudes that will help integration of the Mentally Disabled with the main stream of the society and give them a quality of life worth living.

The magnitude of disability in India

The United Nation's surveys have shown that 10 out of every 100 persons have some kind of disability. It is also believed that 1.5% of the world population will fall in the category of mentally or intellectually disabled persons. While in itself this proportion of disabled persons is large, the problem is aggravated further in populous countries like India which account for 14% of the world population making for one out of every seven persons an Indian. It has been found that a baby is born every $1\frac{1}{2}$ second, 55,000 babies everyday and 21 million a year in the world, while India adds 13 million to her population every year ! The United Nations survey also refers to 4 to 7% of the births being of abnormals. Even after birth, 3% of the world's population suffers from mal-nutrition.

The poorer the country, the greater the impact of mal-nutrition and disabilities consequent on mal-nutrition. The data mentioned above adds up to a very very large number of persons that need special care in an economically poor populous countries like India and highlight the astounding proportion of the problem looming before us and hence our great concern for the care of this large number.

Social Security and Social Welfare

I have been asked to discuss social security measures for the welfare of the mentally disabled. I was slightly intrigued as to how I should treat the subject - whether limit it to 'social security' or consider the gamet of social welfare measures for the mentally disabled. I make this distinction, because, technically, 'social security' in its widest sense would cover only catering to 'economic risks' of each category of people and the discussion would limit us to subjects like pensions, doles or insurance. It would certainly not cover even general economic or infrastructural or developmental factors. 'Social Welfare' on the other hand would have a very wide coverage of physical, economic, emotional, attitudinal and organisational factors. I have chosen to adopt the latter concept for discussion in this paper and not to restrict the discussion to only 'social security' measures.

The Mentally disabled - definition

Mentally disabled again is a wide term embracing persons who are mentally ill or intellectually handicapped. Intellectually handicapped could be either slow learners due to some deficiency or mentally retarded persons. In this paper I do not wish to discuss these different categories in detail

and bring out finer distinctions amongst them and their problems in coping up with the demands of the society but treat the mentally disabled as one group while being very conscious of the fact that each category requires specialised treatment.

The promise

The United Nations have made special emphasis on the world's least privileged and most vulnerable "silent minorities" i.e. estimated at 40 million mentally retarded men, women and children in 1971.. The General Assembly of the United Nations endorsed "A bill of Rights" specifying economic, community and family safeguards for the intellectually handicapped.

The basic steps

The most important thing for us in India is that the 1981 Census has included a detailed counting of the disabled persons which is the pre-requisite of basic planning. Secondly, the preparatory meetings at the United Nations experts level has realised the importance of preventive measures through a comprehensive medical check-up for early diagnosis and treatment and nutrition intervention to deserving persons to combat disabilities. These basic steps are very essential though these facilities do cost a great deal and poor countries are not able to meet the demands completely and cry a halt to deterioration and disabilities. While tackling the problems of the mentally disabled from prevention to rehabilitation would be an area of priority for attention and expenditure, from the human angle, from the developmental angle it gets relegated as

unproductive, for the whole sector of social service is of low priority, and within the sector, may be the mentally disabled are lower priority. This is because we have all along focussed so strongly on their disabilities, and considered them as a burden on Society, and we have not been able to see their abilities and channelise those abilities into productive processes and treat them as partners of progress in Society.

Problems and Solutions

Having laid down the magnitude of the problem and the para-meters of the discussions and the realisation of the need to take concrete action for the benefit of the mentally disabled persons, I would identify the basic problems as social attitudes and paucity of infrastructural facilities for the prevention, diagnosis, care, and rehabilitation of this unfortunate group and the solution a steady untiring effort at building up this infrastructure mobilising material and manpower resources for their benefit.

Social attitude

The greatest problem, in my view, is the social attitude towards disabledin general and the mentally disabled in particular. The family, the community, and the society consider that the mentally disabled person is just to be condemned as a useless piece of furniture occupying space or using resources without any benefits. Either such a person is jeered at as a laughing stock or pitied as a wet cat ! Unfortunately even our legislations treat them as enemies of Society as though the Society is to be protected against them - they being condemned, if anything, as

harmful elements. Rarely one thinks of concern or love for such persons. They are not to be blamed for their condition and more than sympathy they need love and the social attitude towards them and as to transform into one of love. The mentally disabled persons should feel that they are wanted. Mind you, a majority of them are really not useless vegetative beings incapable of giving anything to the family, community and the society in return for care and attention. In fact a large proportion of them in the I Q range of 60 - 80 are capable of assuming a dignified and productive role in society provided they are given the facilities, education and opportunities. Such a social attitude towards them would certainly change the world for them and make it worth living. I think it is the primary concern of the International Year of the Disabled Persons to create this awareness in the people to treat their /fortunate less /brethern with sympathy and love and create opportunities for them to improve their quality of life.

Who is to Care?

Families in general do not consider it their responsibility, (though there may be exceptions to this) to care for the mentally disabled persons and just allow them to attain a vegetative growth, or think it is the responsibility of the State or the philanthrophists to look after these unwanted persons. It is very necessary that the families have to be educated on the care of the mentally disabled persons, as it is neither feasible nor desirable to relegate this responsibility to the State. This is not to say that institutional care is not essential at all. It is necessary

and has to be developed for taking care of very bad cases while those that can be tackled outside the institutions should be dealt with accordingly.

Infrastructure

In the whole country, there are just less than a couple of 100 institutions spread very thinly over the different parts of the country that have special facilities for educating, training and rehabilitating the mentally disabled persons. It is very necessary that this infrastructure be built up systematically in larger numbers to take in the large numbers that are left outside. Simultaneously, as is the theme of the IYDP, it is necessary to integrate the disabled persons with normal persons wherever it is feasible to do so. Building up of this organisational net work calls for sensitisation of the people to the needs of the disabled persons and awakening social consciousness to this problem. It does call for mobilisation of material and man-power resources. Here we do face great scarcity not only of funds for buildings, medicines, materials, nutrition etc. but also dearth of qualified technicians both to deal with the disability and training and education of the disabled in various aspects. It is very essential that a lot of attention is paid to creating the technical man-power required to handle this massive problem of the disabled persons in every aspect. The Government and the Central Social Welfare Board have schemes of grant-in-aid to build this most required infrastructure. But the support may not have been equal to the enormity of the need. Since it is Government's policy not to take up the task on

itself but to support voluntary agencies to take up the task, more and more agencies have to come up to build up a strong infrastructure.

Rehabilitation

The mentally disabled in particular require rehabilitation in the form of work experience, not only for making a livelihood, but as a process of treatment of their disability itself. A great deal of aptitude test, and vocational training is necessary, and calls for a net work of*sheltered workshops, as a process of rehabilitation of the mentally disabled persons. A whole range of other problems can be visualised in achieving this - like hostels and accommodation for their staying, transportation, identification of jobs, products, markets which alone can guarantee regular and sustained work for them. This becomes more serious in a general situation of unemployment even for normal and able bodied persons. This again would become a great social responsibility and not a mere Government responsibility and needs an awakening of social consciousness. I think it would be healthy both for them and for the society to take this positive attitude towards the mentally disabled persons.

Diagnosis & Prevention

Many disabilities including mental retardation can be arrested if diagnised in time and treated adequately. May be such timely treatment may even prevent acceleration of the disability, provided such preventive and diagnostic services are available. This calls for constant vigilance to trace

*A sheltered workshop is a work-oriented rehabilitation facility with controlled working environment and individualized vocational goals, which utilizes work experience and related services for assisting the handicapped person to progress towards normal living and a productive vocational status.

any signs of disability by health check-up and health care not to mention Pre-natal, natal and post-natal care. This also requires education and guidance for the parents and others interested in the handicapped children. It also requires coordination of health, education, training and employment facilities. Most of all, a net work of counselling services have to be established both to tackle the disabled persons and to educate their relatives who have to help them get on in life. All these services are sadly absent today on a country-wide basis, though there may be small cases of excellent services in some Metropolitan areas in the country.

Intensive care - lack of facilities

The problem of the ineducable who require greater care and attention and may be institutional care is really appalling. These are more costly services and therefore more difficult to create. The services now available are very poor and need more organisational efforts on the part of all concerned - individuals, organisations and the Government.

The Group Insurance for the mentally disabled

It would be interesting to understand the efforts made by Government to create a group insurance for the mentally disabled persons. The Life Insurance Corporation of India announced a group Insurance Annuity Scheme in 1978 for the Mentally Disabled persons. The important aspect of this scheme is that it should be operated by institutions dealing with Mentally Disabled persons for groups of more than 25 parents of disabled. The disabled persons will be entitled to get Rs.40/-

to Rs.200/- per month under the scheme after a period of 5 years of contribution. The experience of the scheme was that the response was very poor, as institutions reported that a very small percentage of the parents were capable of paying any kind of fees even to the institutions and therefore insurance would be beyond their reach. Secondly, the method of disbursement of these annuities to the disabled persons was not satisfactorily worked out. Unfortunately this Social Security Measures in the real sense of 'social security' doesn't seem to have taken off the ground to replace parental care on the death of parent of the disabled. This needs to be further pursued to make the scheme more viable and useful to those that can benefit out of such a scheme.

Conclusion

While there is no neglect of the importance of developing self-reliance on the part of the mentally disabled persons through education, training and sheltered employment, care and concern either of the family or community is very important for this category of persons and the society has to understand and give them more'love' than to any other group, as this seems to be one disability which can be removed more by concern,care and love than any other kind of disability.

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TABLE NO. 10.21 : NUMBER OF PATIENTS OF MENTAL DISORDER TREATED IN SPECIALISED MENTAL HOSPITALS ACCORDING TO VARIOUS CAUSES AS PER I.C.D.-IX DURING 1992

Sl. NO.	STATES/ UTs.	I.C.D CODES NUMBER AND DISEASE											
		PSYCOSES (290-299)			NEUROSES (300-316)			MENTAL RETARTED (317-319)			GRAND TOTAL (290-319)		
		M	F	T	M	F	T	M	F	T	M	F	T
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Andhra Pradesh	1743	660	2403	115	31	146	22	11	33	1880	702	2582
2.	Assam	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
3.	Bihar	4431	952	5383	322	18	340	29	12	41	4782	982	5764
4.	Goa	848	623	1471	670	310	980	12	5	17	1530	938	2468
5.	Gujarat	383	106	489	13	5	18	45	2	47	441	113	554
6.	Jammu & Kashmir	296	308	604	32	16	48	3	2	5	331	326	657
7.	Karnataka	1860	1230	3090	786	248	1034	94	47	141	2740	1525	4265
8.	Kerala	4746	1629	6375	256	123	379	40	18	58	5042	1770	6812
9.	Madhya Pradesh	395	102	497	28	9	37	9	8	17	432	119	551
10.	Maharashtra	2568	1500	4068	709	25	734	60	26	86	3337	1551	4888
11.	Nagaland	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
12.	Orissa	499	296	795	151	101	252	33	10	43	683	407	1090
13.	Punjab	129	45	174	8	0	8	2	0	2	139	45	184
14.	Rajasthan	556	436	992	216	154	370	55	7	62	827	597	1424
15.	Tamil Nadu	3717	1178	4895	164	12	176	67	31	98	3948	1221	5169
16.	Uttar Pradesh	808	290	1098	128	14	142	6	2	8	942	306	1248
17.	West Bengal	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
18.	Delhi	372	138	510	96	35	131	19	7	26	487	180	667
TOTAL		23351	9493	32844	3694	1101	4795	496	188	684	27541	10782	38323

Note : NR = Not Received

SOURCE: SPECIALISED MENTAL HOSPITALS.

TABLE NO. 10.22 : REPORTED CASES AND DEATHS DUE TO COMMUNICABLE DISEASES IN STATES/U.Ts IN INDIA DURING 1993

Sl. NO.	STATES/U.Ts.	DIPHTHERIA		POLIOMYELITIS		TETANUS-NEONATAL	
		C	D	C	D	C	D
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	1026	28	1435	33	83	27
2.	ARUNACHAL PRADESH	14	0	0	0	0	0
3.	ASSAM	75	11	18	0	90	12
4.	BIHAR	..	..	..	..	..	..
5.	GOA	1	0	2	0	0	0
6.	GUJARAT	218	34	443	48	278	147
7.	HARYANA	34	1	61	1	178	31
8.	HIMACHAL PRADESH	4	0	0	0	3	2
9.	JAMMU & KASHMIR	2227	0	94	0	4	0
10.	KARNATAKA	306	6	167	0	673	54
11.	KERALA	40	2	71	3	9	1
12.	MADHYA PRADESH	314	8	452	4	842	102
13.	MAHARASHTRA	163	18	112	8	86	44
14.	MANIPUR	0	0	0	0	0	0
15.	MEGHALAYA	100	0	7	0	3	0
16.	MIZORAM	0	0	0	0	3	2
17.	NAGALAND	233	0	10	0	1	0
18.	ORISSA	166	18	197	4	622	97
19.	PUNJAB	22	1	44	0	89	19
20.	RAJASTHAN	245	14	1120	5	949	150
21.	SIKKIM	0	0	0	0	11	0
22.	TAMIL NADU	21	8	231	8	29	14
23.	TRIPURA	11	0	8	0	8	0
24.	UTTAR PRADESH	449	70	926	7	2316	581
25.	WEST BENGAL	1268	112	1092	7	165	60
26.	A & N ISLANDS	0	0	1	0	0	0
27.	CHANDIGARH	..	..	..	..	..	..
28.	D & N HAVELI	1	0	0	0	0	0
29.	DAMAN & DIU	0	0	0	0	0	0
30.	DELHI	207	66	1085	48	164	41
31.	LAKSHADWEEP	0	0	0	0	0	0
32.	PONDICHERRY	0	0	0	0	0	0
	TOTAL	7131	397	7576	176	6606	1384

(CONTD.ON NEXT PAGE)

Note : NR = Not Received

SOURCE: 'SPECIALISED MENTAL HOSPITALS.

TABLE NO. 10.22 : REPORTED CASES AND DEATHS DUE TO COMMUNICABLE DISEASES IN STATES/U.Ts IN INDIA DURING 1993

Sl. No.	States/U.Ts.	A.R.I		PNEUMONIA		ENTERIC FEVER	
		C	D	C	D	C	D
1	2	15	16	17	18	19	20
1.	ANDHRA PRADESH	1496165	330	35808	129	56506	42
2.	ARUNACHAL PRADESH	33865	5	1745	0	2569	0
3.	ASSAM	672743	47	17777	97	17667	17
4.	BIHAR	..	..	..	..	..	..
5.	GOA	28093	2	372	6	133	0
6.	GUJARAT	403178	355	4553	87	8515	24
7.	HARYANA	448738	64	8995	46	4596	7
8.	HIMACHAL PRADESH	747878	208	45540	109	11977	9
9.	JAMMU & KASHMIR	174943	0	105954	1	19074	0
10.	KARNATAKA	896076	147	16574	68	33451	22
11.	KERALA	2870610	113	16735	30	11598	2
12.	MADHYA PRADESH	649241	475	44252	182	70026	84
13.	MAHARASHTRA	442971	203	15543	557	14658	76
14.	MANIPUR	14964	1	5044	1	2821	0
15.	MEGHALAYA	132124	14	1669	5	4611	8
16.	MIZORAM	24999	10	3191	20	195	2
17.	NAGALAND	6296	0	213	0	437	0
18.	ORISSA	1584229	346	27564	536	33054	46
19.	PUNJAB	288681	55	2758	27	2441	5
20.	RAJASTHAN	402634	249	69910	309	13605	78
21.	SIKKIM	31338	12	973	6	14	0
22.	TAMIL NADU	141743	110	721	39	6313	31
23.	TRIPURA	34902	28	1800	11	1695	1
24.	UTTAR PRADESH	505781	349	29027	201	24535	345
25.	WEST BENGAL	21913	86	1059	124	5688	58
26.	A & N ISLANDS	73841	18	183	9	1211	2
27.	CHANDIGARH	..	..	..	..	..	..
28.	D & N HAVELI	40500	3	264	6	40	0
29.	DAMAN & DIU	7265	0	0	0	81	0
30.	DELHI	143110	90	28654	512	8711	29
31.	LAKSHADWEEP	8660	2	48	0	306	0
32.	PONDICHERRY	46665	0	1335	0	924	0
	TOTAL	12373146	3322	488261	3118	357452	888

NOTE: ARI - ACUTE RESPIRATORY INFECTION

----------CONTD.ON NEXT PAGE-----

TABLE NO. 10.22 : REPORTED CASES AND DEATHS DUE TO COMMUNICABLE DISEASES IN STATES/U.Ts IN INDIA DURING 1993

SI. NO.	STATES/U.Ts.	GONOCOCCAL INFECTION		TUBERCULOSIS	
		C	D	C	D
1	2	27	28	29	30
1.	ANDHRA PRADESH	50137	0	186466	1010
2.	ARUNACHAL PRADESH	49	0	8062	26
3.	ASSAM	887	0	17726	81
4.	BIHAR	..	..	..	..
5.	GOA	25	0	9152	63
6.	GUJARAT	221	2	39069	238
7.	HARYANA	62	0	27559	193
8.	HIMACHAL PRADESH	39	0	17166	212
9.	JAMMU & KASHMIR	2341	0	9672	0
10.	KARNATAKA	6352	9	43786	537
11.	KERALA	989	0	40406	210
12.	MADHYA PRADESH	4051	6	51612	334
13.	MAHARASHTRA	1509	0	87783	1250
14.	MANIPUR	14	0	1240	1
15.	MEGHALAYA	80	0	1361	7
16.	MIZORAM	50	0	1164	22
17.	NAGALAND	58	0	436	1
18.	ORISSA	2605	0	46630	616
19.	PUNJAB	98	0	19750	121
20.	RAJASTHAN	1529	0	82220	560
21.	SIKKIM	18	0	876	3
22.	TAMIL NADU	819	4	32288	121
23.	TRIPURA	30	0	0	0
24.	UTTAR PRADESH	1077	0	265889	278
25.	WEST BENGAL	0	0	10954	187
26.	A & N ISLANDS	9	0	1214	26
27.	CHANDIGARH	..	..	..	..
28.	D & N HAVELI	1	0	685	3
29.	DAMAN & DIU	0	0	882	4
30.	DELHI	496	0	85133	1822
31.	LAKSHADWEEP	0	0	0	0
32.	PONDICHERRY	56	0	21919	26
	TOTAL	73602	21	1111100	7952

NOTE :C = CASES. D = DEATHS.

DATA IS PROVISIONAL AND NOT COMPARABLE DUE TO ILL-DEFINED COVERAGE

SOURCE: MONTLY HEALTH CONDITIONS REPORTS-STATES/U.T.S(D.H.S).

STATUS PAPER ON DELIVERY OF MENTAL HEALTH SERVICES IN INDIA -THE LAST 40 YEARS

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DELIVERY OF MENTAL HEALTH SERVICES IN INDIA-LAST 40 YEARS

1. INTRODUCTION

Organisation of mental health services in developing countries has been the subject matter of a number of national and international meetings and conferences. The essential focus of the professional concern has been the very important awareness of the available mental health technology how that can alter the quality of life to the millions mentally ill and the paucity of the services in the developing countries. The staggering discrepancy in the number of psychiatrists in different parts of the world are real. Most countries of Asia and Africa have less than one psychiatrist per million population, the U.K., the U.S.S.R. and Ireland each have more than 50 per million, while in the U.S.A. there are probably by now over 120 psychiatrists per million. If we take the widely accepted estimate of 1% as the prevalence of seriously disabling mental disorder in all communities (WHO, 1975), we see that for every working psychiatrist there are about 80 such patients in U.S.A., 11 in Ireland, 170 in U.S.S.R. and 190 in England and Wales; there are now 5000 in Senegal, 20,000 in Nigeria and 50,000 in Ethiopia (Harding. These discrepancies have been very much in the minds of the mental and health professionals in our country. Efforts have been made recently to solve this problem by a number of approaches, some of them very specially suited to the National context. It is in this context that this review of the developments in the last 40 years has been chosen for review to examine the trends in care, the problems and possibilities for future work. The time appears opportune as there is a tremendous interest in PRIMARY HEALTH CARE and the inclusion of MENTAL HEALTH CARE with primary health care can take the needed services to those who need most.

The changing scene in the last 40 years is brought by the following write about the Madras Mental Hospital very aptly:

> 'Psychiatric service till two decades before, was only custodial in nature. The only mental hospital in the state (TAMIL NADU) was established more than 100 years ago in Madras and drugs like Serpasil, paraldehyde and barbiturates were mainly employed combined with mechanical restraint to keep the patient under control and around 1959 the use of chlorpromazine was introduced. As in other countries the social stigma of mental illness prevented people seeking psychiatric help but during the last 20 years there seems to be a change in their attitude towards mental illness and more and more people seek early treatment. But it is not uncommon even during the present days, many patients seek indigenous treatment before coming over for modern treatment. In 1948, open hospital system was introduced in mental hospital and psychiatric out patient services were introduced for the first time in city medical colleges in 1953 and 1954... a centre was opened in Madurai in 1960 and we were able to utilise the services of the clinical psychologists and social workers to help us manage the case. day hospital was started for the first time in 1961. At present there are 9 medical colleges... and in all these medical colleges, the department of psychiatry was started in course of time..A as more and more psychiatrists became available, the services were extended to almost all district headquarters and taluk centres so much so at present a

> psychiatric centre is situated within 50 to 100 miles of all potential patients living in the state' (Vaidyalingam, 1982).

This transformation, at least in one state in the country over such a short time span-from a single centre in the state to more than 20 is remarkable indeed. The following reviews focusses on the factors that made these changes possible and also highlight the areas where further work needs to be carried out.

2. DEVELOPMENT OF HEALTH SERVICES IN INDIA (1940-1981)

The historical development of health services in the country provides an opportunity to understand the trends in general health service and see the place of mental health service in the overall programmes. The topic of how the various committees have functioned and what has happenned to the recommendations have been reviewed by Bose (1980), Banerjee (1976) and Naik (1977). The following is a brief account of the developments.

2:1 The historical record is traditionally started with the Bhore Committee appointed in 1943. However, Bose (1980) has rightly pointed out that the health planning began much earlier. The National Planning Committee (NPC) was appointed in 1938 under the Chairmanship of Jawaharlal Nehru and began its work in 1939. The NPC appointed a number of sub-committee one of which was on the National Health under the chairmanship of Col. S.S.Sokhey. The interim report of the sub-committee was presented on 30 August, 1940. However the report on national health was published in 1948. The National Planning Committee passed several resolutions on national health, items 6 and 7 read as follows:

> 'as a minimum step in order to meet the special conditions prevailing in India, we recommend the training of a large number of health workers. These health workers should be given elementary training in practical community and personal hygiene, first aid and simple medical treatment, stress being laid on the social aspects and implications of medical and public health. There should be one health worker for every 1000 population and this probably should be attained within five years. Selected health workers should be given further training at suitable intervals so that they might be better trained for this service. There should be ultimately one qualified medical man or woman for every 1000 of population and one bed for every 600 population. Within the next 10 years, the objectives aimed at should be one medical man or woman for every 3000 of population and a bed for 1500 of population'.

It is rather tragic to note that in 1982, we are far from having reached the needs accepted in 1940. With this rather discouraging observation the development of health services can be surveyed.

2:2 BHORE COMMITTEE REPORT:

The HEALTH SURVEY AND DEVELOPMENT COMMITTEE was set up by the colonial Government in 1943 under the chairmanship of Sir Joseph Bhore. The report of this committee was published in four volumes in 1946. This committee recommendations provided an almost revolutionary alternative to the existing health system in the country. The guiding principles of the committee were:

(i) No individual should fail to secure adequate medical care because of inability to pay for it.

(ii) Health programmes must, from the beginning lay special emphasis on preventive work.

(iii) The need is urgent for providing as much medical and preventive care as possible to the vast rural population of the country because they received medical attention of most meagre description although they pay the heaviest toll when the famine and pestilence sweeps through the land; and

(iv) The doctor of the future should be a social physician attracting the people and guiding them to healthier and happier life.

The major recommendation was the setting up of infrastructure in the rural areas with the primary health centre as the chief focus. The committee laid down the staffing criteria for these peripheral centres for each unit population of 40,000 which has not been realised even today in 1982.

2:3 The first Five Year Plan (1951-1956) considered the needs of the country and largely influenced by the above recommendations, laid down the following priorities in the Health Plan: (1) provision of water supply and sanitation, (2) control of malaria; (3) preventive health care of the rural population with health units and mobile units; (4) health services for the mothers and children; (5) education and training and health education; (6) self sufficiency in drugs and equipment; and (7) family planning and population control. The plan recognised that 'Malaria is the most important public health problem in India and its control should therefore be assigned the top priority in national planning'. Tuberculosis was recognised as a major public health problem next in importance only to malaria.

The important development in this plan period is the expansion of the medical infrastructure in India. In this period the National Malaria Control Programme was launched in 1953 to be converted into the National Malaria Eradication Programme (NMEP) in 1958.

2:4 The Second Five Year Plan (1956-1961) adopted the same strategy as the first plan. There was greater emphasis on Institutional facilities at the local level. The objectives were: (1) establishment of institutional facilities to serve as basis from which services can be rendered to people both locally and in surrounding territories; (2) development of technical manpower to appropriate training programmes; (3) institutional measures to control communicable diseases which may be widely prevalent in the community; (4) an active compaign for environmental hygiene; and (5) family planning and other supportive

programmes for raising the standard of health of the people.

One of the most important action taken during the second plan period is the establishment of primary health units in as many developmental blocks as possible. Thus from 67 PHC's at the end of First plan, there were 2565 PHC's at the end of the Second plan period. This trend continued to the third plan when the number was 4631. (TABLE I).

2:5 Another important development in this period was the appointment of the Health Survey and Planning Committee in August 1959 under the chairmanship of Dr. A.L. Mudaliar. The report of this committee was published in two volumes in 1962. This committee first discussed the recommendations of the Bhore Committee, the present position (1960) and then made their own recommendations.

One of the important observations by the Mudaliar Committee was the recognition that 'it would be neither practical to provide medical coverage in the near future on the scale visualised by the Bhore Committee nor would it be feasible for the state to extend such coverage on the basis of medical care services free for all. We are of the view that if the hospital beds could be provided in the course of two or three plan periods at a scale of one bed per thousand population, it should be considered fairly satisfactory'. It was further said 'while the idea of primary health centre is an excellent one, it would not serve any useful purpose if centres are established without adequate facilities, resources and personnel'. They had one major suggestion in this regard, namely, 'we think that in the present state, with the increased facilities of road communications, telephone and telegraph devices and in view of the proposed establishment of modern hospitals at district headquarters and the taluks, it may be preferable to provide medical coverage to the rural population through mobile health vans, visiting them from the district and taluk headquarters instead of multiplying PHC's in the existing patterns'. However as noted the establishment of PHC went ahead.

During this period, the National Smallpox Eradication Programme was launched in 1962-63 and soon to be followed in 1966 a separate Department of Family Planning in the Ministry of Health.

2:6 THIRD FIVE YEAR PLAN (1961-66) reviewed the plans of the earlier period in regard to the working of the PHC's. This pointed out that the sources of problems arose from (1) shortage of health personnel, (2) delays in construction of buildings, (3) inadequate training facilities for different categories of staff required for service in rural areas. The following measures were planned in the Third Plan: (i) creation of a single cadre of personnel working in the rural areas as well as urban areas, with insistence that each person spend some period of work in the rural areas and service in rural areas to be taken for promotions, advance increments or selection to postgraduate training; (ii) residential accommodation for medical personnel; (iii) scholarships to students in medical colleges with the obligation to serve in rural areas after graduation

for a minimum period; (iv) services of medical practitioners both in the rural and urban areas should be utilised on a part time basis in the hospitals and dispensaries and for school health services; and (v) the services of qualified and properly trained graduates in indegenous systems of medicine in PHC and subcentres in addition to the medical officer should be utilized'.

2:7 The Fourth plan period (1969-1974) saw setbacks in the malaria eradication programme. It was also noted that in spite of all the importance expressed, as many as 340 Community Development Blocks had no primary health centre. Only 50% of the PHC's had hospital buildings and only 25% had residential quarters. During this period, the increasing importance to family planning became evident. A notable feature at this point in the health system development is the number of VERTICAL PROGRAMMES aimed at problems like tuberculosis, leprosy, malaria, smallpox, MCH Services etc. etc. This often led to poor coordination of the day to day work at the field level and the lack of confidence of the community in the peripherally placed rural health personnel. This was noted and the Kartar Singh Committee aimed to solve this.

2:8 The Kartar Singh Committee was mainly focussed on the improper utilisation of the health personnel in the rural areas. The various categories of health auxiliaries not only were under different administrative h ads, but also varied in their duration of training (ranging from a few weeks to few years) and the emoluments. T s heterogenecity was considered undesirable for operational effectiveness as each category was bothered about the fulfilling their planned targets with no single person having the confidence of the community.

The committee suggested the introduction of the MULTIPURPOSE WORKER SCHEME all over the country. The essential feature of this is the reduction in the area and population covered by an individual worker, the increasing the skills of the workers and integrating all health activities and streamlining the pay structure. This is theoretically a very good approach. However, in the first five years since its introduction only 10% of the districts had adopted this scheme and a decade later in 1982 the coverage is not more than 20%. In addition, even where it has been in progress the change of name and working pattern has not been followed by streamlining of the pay structure and service conditions. Thus, a good idea has led to discontent among the health workers.

2:9 The Fifth Five Year Plan (1974-1979) put forward a new strategy, the MINIMUM NEEDS PROGRAMME. This programme aimed at 'the primary objective during the Fifth Plan is to provide minimum public health facilities integrated with family planning and nutrition for vulnerable groups namely children, pregnant women, and lactating mothers'. The specific approaches were as follows: (i) increasing the accessibility of health services to rural areas; (ii) correcting the regional imbalance; (iii) further development of referral services by r oving deficiencie in district and subdivisional hospitals; (iv) intensification o control and

eradication of malaria and smallpox; (v) qualitative improvement in the education and training of health personnel; and (vi) development of reference services by providing specialists attention to common diseases in rural areas'. The following targets were set out under the minimum needs programme - one PHC for each community development block; one sub-centre for a population unit of 10,000; upgrading of one in 4 PHCs to a 30 bedded rural hospital.

2:10 The major review committee that came into being during this period is the GROUP ON MEDICAL EDUCATION AND SUPPORT MANPOWER headed by Dr. J.B.Srivastava in 1974. They presented a document titled 'Health Services and Medical Education: A programme for Immediate Action'. The committee noted that the importance of the community in all health programmes has been missing in the previous planning. They suggested IMMEDIATE ACTION on the following FOUR Programmes, namely (i) organisation of basic health services (including nutrition, health education and family planning) within the community itself (emphasis added) and training the personnel needed for the purpose; (ii) organisation of an economic and efficient programme of health services to bridge the community with the first level referral centre, viz the PHC (including the strengthening of the PHC itself); (iii) the creation of a National Referral Services Complex by the development of proper linkages between the PHC and higher level referral and service centres; and to create the necessary administrative and financial machinery for the organisation of the entire programme of medical and health education from the point of view of the objectives and needs of the proposed programme of national health services.

The committee noted that 'during the last 25 years, the cadres of functionaries which provide health services to the community have multiplied greatly because each programme was run virtually independently of the others and with little health coordination, both among the field workers and among those at the supervisory level. Even the two doctors at the PHC had separate spheres of activity, one being devoted to the family planning programme and the other to the provision of general health services. It is now realised that in the interest of economy as well as of efficiency, it is necessary to create a single multipurpose cadre to provide all the different promotive, preventive and curative services needed, (including the control of communicable diseases) and also to include, within the responsibilities of this cadre, a medium of curative services, an emphasis on material and child welfare services and family planning'.

The committee recommended the creation of a new cadre of personnel and functioning of the existing personnel as follows: 'there is now a male health worker for every 6000-7000 population and one female health worker for every 10,000 population. The proposed target for the Fifth plan is to provide one male and female worker each for a population of 8,000. While we welcome this, we recommend that by the end of the Sixth Plan we should strive to provide one male and one female worker each for every 5000 population. We also recommend that every health worker should be trained and equipped to give simple specified remedies (including known indigenous remedies as well)for day to day illnesses. Apart from the fact that this will provide

an essential and needed curative service to the people it will also increase the acceptability, utility and efficiency of the health workers themselves'. This category of health workers were referred as HEALTH WORKERS

The committee also called for setting up of a Medical and Health Education Commission by an Act of Parliament for coordination and maintenance of standards in health and medical education.

The committee also emphasised the need for a new cadre of workers close to the community, not full time employed in health care activity and carrying out simple activities of prevention and curative nature.

2:11 COMMUNITY HEALTH VOLUNTEER SCHEME:

A major result of the shift in thinking in health planning as expressed in the Srivastava committee report was the scheme to train a large number of CHVs in the short period of five years. This scheme was launched on the birth Anniversary of Mahatma Gandhi in 1977. According to this scheme, CHV is selected in collaboration with the village leaders one for 1000 population. He is given training for a period of three months. He is taught the fundamentals of health sciences, measures for maintaining health, hygiene, treatment of common infectious diseases, ailments, first aid etc. He is expected to provide basic health care in these areas. He will also serve as the first informant of the health status of the community to the medical officer incharge of the PHC under the immediate guidance of the MPW. The trained worker is provided with a medical kit and an honorarium for the service rendered to the community on a part time basis.

This scheme was launched and was progressing as planned for the first two years till the National Development Council of 1979 asked the states to meet 50% of the expenditure on this scheme from the states, which has brought a big setback.

The TABLES I TO V in APPENDIX provide an idea of the development of general health services in the country.

To summarise, the developments in the health field the efforts have been directed to reach the most needy and to provide basic health care, i.e. to those chosen priorities. The two broad approaches used has been the systematic and progressive DECENTRALISATION and DEPROFESSIONALISATION. These trends have important implications for the planning of Mental health services.

3. MENTAL HEALTH COMPONENT IN MAJOR HEALTH COMMITTEES:

3.1 Mental health needs of the population have figured in the different health surveys and special committees set up in the last 4 decades. The offer an understanding of the hopes and failures regarding mental health care in the last forty years. Following is the relevant sections.

3.1.1 One of the earliest references at the turn of the period of this review is the report in the INDIAN MEDICAL REVIEW (1938). At that time it was noted that 'there are 17 mental hospitals in British India with an accommodation for 8425 patients, but the number of patients actually confined in the hospitals in 1936 was 11,792. There was overcrowding in almost all the hospitals, but it was more acute in Madras, Bombay and the United provinces...Psychiatric clinics attached to large hospitals, medical schools and colleges do not exist in Madras for the treatment of mental defective patients. In Bombay there is a psychiatric clinic attached to the J.J.Hospital, Bombay, in charge of an Honorary Medical Officer, who runs it for two days in week. Bengal has a clinic attached to the Carmichael Medical College, Belgachia, managed by a committee appointed for the purpose. There is a small clinic attached to the K.G. Medical College Hospital, Lucknow, in the United provinces,which is a sub-section of the medical out-patient department of the College Hospital and in charge of the physician of that department. No such clinics exist in the Punjab, Bihar, Central provinces and Berar, Assam, North West Frontier Province, Orissa, Baluchistan and Coorg....No facilities for the training of the mentally defective children exist in the United provinces, Punjab, Bihar, Central Provinces and Berar, Assam, Sind, NWFP, Orissa, Baluchistan and Coorg.

Major expression of concern for mental health was noted in the Bhore Committee report (1946).

3.2 BHORE COMMITTEE REPORT:

The findings and recommendations are as follows: '...even if the proportion of mental patients be taken as 2 per thousand population in India, hospital accommodation should be available for atleast 8,00,000 mental patients as against the existing provision for a little over 10,000 beds for the country as a whole. In India the existing number of mental hospital beds is in the ratio of one bed to about 40,000 of the population while in England, the corresponding ratio is approximately one bed to 300 population.

The PROPOSALS WERE '...as against this background of mental ill health the existing provision for the medical care of such patients is altogether inadequate and unsatisfactory. We therefore, make the following recommendations for the short term programme:

(a) The creation of mental health organisations as part of the establishments under the Director General of Health Services at the Centre and of the Provincial Directors of Health Services. The creation of mental health organisations as part of the DGHS at the Centre and of the Provincial DHSs is, in our view, of such great importance that we have placed it among the our recommendations. So little information is available regarding the incidence of mental ill health in the country and the developments in this field of health administration, even in the more progressive countries, are so recent that we feel we shall not be justified in making detailed recommendations regarding the mental health organisation which the country requires. We must leave this task to the health departments

with the guidance of the specialists, whose appointment we have suggested.

(b) The improvement of the existing 17 mental hospitals and the establishment of two new institutions in the first five years and of five more during the next five years. Radical improvements should be made in the existing mental hospitals in order to make them conform to modern standards. Provision should also be made for all the newer methods of diagnosis and treatment. Apart from such remodelling of existing mental hospitals we recommend the creation of 7 new institutions during the short term programme, of which at least two should be established as early as possible during the first five years period.

(c) The provision of facilities for training in mental health work for medical men in India and abroad and for ancillary personnel in India. Nowhere in this country are available all the facilities necessary for starting a course for the Diploma in Psychological Medicine. We recommend that, as early as possible, courses of training for this diploma should be developed in Bombay and Calcutta in association with the universities concerned. We also suggest that, as soon as possible, similar diploma courses should be developed in the universities of other provincial capitals. In the mean time a certain number of carefully selected medical men, with some experience of work in mental hospitals in India, should be sent abroad for training. Provision should be made for sending atleast 20 doctors during the first five years and 20 during the second five years of our programme.

We have also made proposals for developing training facilities for non-medical personnel including such workers as occupational therapists, psychiatric social workers, psychologists, nursing staff and male and female ward attendants.

(d) The establishment of Department of Mental Health in the proposed All India Medical Institute. This Department is calculated to promote (1) development of facilities for the undergraduate and postgraduate training of doctors in all branches of psychological medicine and the demonstration to the provincial authorities of the standards to be aimed at when similar facilities are created by these authorities in their own territories; (2) the promotion of research in the field of mental health and (3) participation in the organisation of the mental health programme for the area in which the Institute is located.

3.3 MUDALIAR COMMITTEE (1962):

Under the heading of MENTAL HEALTH, the committee reviewed the progress made subsequent to the Bhore Committee, i.e. in the period of nearly two decades, as follows: .reliable statistics regarding the incidence of mental morbidity in India are not available. It is believed that enormous number of patients require psychiatric assistance and service...as against the total need of the number of beds available in mental hospitals in India is only 15,000. There is hardly any

provision for the education of mental defectives. Provision for the treatment of psychosomatic diseases in general hospitals is inadequate.

On the positive side 'the ALL INDIA INSTITUTE OF MENTAL HEALTH was established in July, 1954 as a result of the recommendations of the Bhore Committee and started functioning in 1955 in association with the mental hospital, Bangalore. This institute provides facilities for postgraduate teaching and research...it conducts a two year diploma course in mental psychology (D.M.P.). The Diploma in psychiatric nursing is of one year duration.

The Mental Hospital Ranchi which was previously under a Board of Trustees has now been taken over by the Central Government with a view of reorganising it on sound lines and also making it a model centre for treatment of mental disorders.

Under the second five year plan scheme for the establishment of Child Guidance clinics and psychiatric departments in teaching hospitals, 8 such units have come up in Andhra, Madras (2), Punjab, Uttar Pradesh, Old Bombay state, Madhya Pradesh and Bihar.

The RECOMMENDATIONS were made under three heads, viz. general, training, research.

a. General: In the preventive field there should be (i) provision of mental health services at pre-primary, primary and secondary schools by the employment of not only of psychiatrists and psychiatric social workers but of school counsellors among the teachers who have undergone intensive training and who should be able to deal with children with emotional and other problems; (ii) marital and pre marital guidance in the social field, (iii) child guidance and psychiatric clinics in all teaching and other major and district hospitals.

In the curative field (i) in patient and outpatient departments at lay hospitals; (ii) independent psychiatric clinics or mental health clinics and (iii) institution for mental defectives were stressed.

b. Training: There is need for (i) training and mental health personnel; (ii) orientation in mental hygiene of such professional groups as pediatricians, school teachers, nurses and administrators; (iii) orientation in mental health for all medical and health personnel; (iv) meeting the acute shortage of psychiatrists, clinical psychologists and psychiatric nurses by developing the Ranchi Mental Hospital into a full fledged training institution additional to All India Institute of Mental Health, Bangalore and (v) arranging that ultimately each region, if not each state, become self sufficient in the matter of training its total requirement of mental health personnel.

c. Research: This is need in such subjects as : (i) causes of mental diseases and disorders; (ii) factors which promote mental health; (iii) personal and educational problems of children; (iv) the genesis of unhealthy parent child relationships; (v) in association with the practittoners of indigenous medicine, research into the treatment of mental illness by ancient methods; (vi) possibilities of integrating psychiatric teaching into medical curriculum; (vii) malnutrition; and (viii) suicide and crime.

3.4 SRIVASTAVA COMMITTEE:

The background to the functioning of this committee in 1974 has been referred to earlier in....The document PLAN FOR IMMEDIATE ACTION does not contain any specific proposals for developing mental health programmes, as the purpose of this committee was to suggest policy approaches rather than specific programmes. (Ministry of Health, 1974).

One of the important outcomes of this committee's recommendation was the CHV scheme. It is relevant to note that the training of CHV contains an element of mental health. Out of the total training of 200 hours, one hour was kept for mental health. One of the 12 chapters in the CHV manual also devoted to recognition and management of mental health emergencies and problems. The objective and the content of training material included in CHV training is given as APPENDIX. This step is very significant as MENTAL HEALTH has been considered relevant at the most peripheral level in the primary health care system.

3.5 ALMA ATA CONFERENCE: (1978) This international conference in which India took an active part has come to be recognized as the turning point in the organisation of health services for all. The term 'HEALTH FOR ALL' has become the focus of much activity and reorientation of health programmes around the globe. In view of this the inclusion of MENTAL HEALTH as part of primary health care by this conference, as one of the eight essential components of PHC as follows:

> The Conference,
> Stressing that primary health care should focus on the main health problems in the community but recognising that those problems and ways of solving them will vary from one country to another.
> Recommends that primary health care should include atleast: education concerning prevailing health problems and the methods of identifying, preventing and controlling them; promotion of food supply and proper nutrition and adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunisation against major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; promotion of mental health; (emphasis added) and provision of essential drugs. (WHO, 1978).

A committment to primary health care in this sense calls for adequate programmes and methods of mental health care.

The above review clearly shows that the mental health needs have been in the minthe minds of the leading health professionals during the last 4 decades though their implementation has been to a varying degree.

4. MENTAL HEALTH COMPONENT IN MAJOR PROGRAMMES: FIVE YEAR PLANS

The last five year plans provide a glimpse of the importance attached to the mental health services in the overall development of the country as well as the measures taken to organise services. The impression one gets on reading the plan documents is one of relative low importance to mental health services.

4.1 FIRST FIVE YEAR PLAN:

Under the title 'Mental Diseases' the following observations and provisions were made.

> 'Although little information is available regarding the incidence of mental ill health in the country, there is no doubt that mental disorder and mental deficiency are prevalent on a wide scale. The number of persons suffering from varying degrees of mental disorder who may not require hospitalisation but should recieve treatment and those suffering from mental deficiency is likely to run into several millions. The existing provision for the medical care of such persons is altogether inadequate and unsatisfactory. Each state health administration, through its mental health organisation, should attempt collection of information. It is estimated that hospital accommodation should be available for 8,00,000 mental patients but the existing provision is little over 10,000 beds for the country as a whole. Radical improvements are required in the existing mental hospitals in order to make them conform to modern standards. Provision should also be made for all the methods of diagnosis and treatment. Apart from such remodelling of mental hospitals, the Central Government are upgrading two mental institutions, namely one in Bangalore and the other at Ranchi. The establishment of an All India Institute of Mental Health in association with the Bangalore Mental Hospital will involve an expenditure during the five year period of Rs. 9.7 lakhs non-recurring and Rs. 3.4 lakhs recurring. This expenditure is to be shared between the Central Government and the State Government in Mysore. There are hardly any psychiatric clinics. A beginning should be made in special and teaching hospitals and later extended to district hospitals. There are no facilities for training in psychological medicine in the country. It is necessary that a certain number of

selected medical men with some experience of work in mental hospitals in India should be sent abroad for training.

The provision made by the various states and the Centre for mental hospitals are indicated below:

STATE	SCHEMES	EXPENDITURE (in lakhs) (1951-56)
MYSORE	Mental Hospital, Bangalore	5.00
SAURASTRA	Training in psychiatry	0.04
RANCHI	Mental Hospita, Bangalore.	4.00
	TOTAL:	9.04

4.2 SECOND FIVE YEAR PLAN:

There is no specific section that considers the problems of mental disorders in the second plan document. However, the psychiatric departments are included as follows under 'MEDICAL EDUCATION':

> 'The plan provides about Rs. 20 crores for the expansion of medical colleges and attached hospitals, establishment of preventive medicine and psychiatric departments in medical colleges, completion of All India Institute of Medical Sciences and Schemes for upgrading certain departments of medical colleges for postgraduate training and research'.

4.3 THIRD FIVE YEAR PLAN:

There is no separate mention of mental disorders under the health section of the plan document. However an allotment of Rs. 25 lakhs have been made under the category of MENTAL HEALTH which is part of medical care.

4.4 FOURTH FIVE YEAR PLAN:

In the plan document there is no separate section under Health to look at the needs of mental health but a provision of Rs. 2.0 crores was made under the broad heading of Medical Care and the subheading mental health. This is to compare with the amounts made to voluntary agencies (Rs. 5 crores), dental health services (3.50 crores).

4.5 FIFTH FIVE YEAR PLAN:

The plan considered the needs of mental health under Health, under subsection 'Rehabilitation centres and Psychiatric Clinics' as follows:

'Rehabilitation programmes for the physically handicapped and establishment of psychiatric clinics for the mentally ill will continue to receive emphasis during the Fifth Plan'.

This was reflected in grant of Rs. 50 lakhs to All India Institute of Mental Health, Bangalore under the head of postgraduate medical education. This amount was comparable to that given to V.P. Chest Institute, Delhi, Dr. Rajendra Prasad Opthalmic Centre, New Delhi.

Under Centrally sponsorred schemes, ESTABLISHMENT OF PSYCHIATRIC CLINICS figured under the other programmes alongwith school health and an allocation of Rs. 1.0 crore was made.

The allocation of specific grants under the FIVE PLANS is given below:

OUTLAYS FOR 'MENTAL HEALTH' IN FIVE YEAR PLANS

First Five Year Plan	Rs. 0.094 crores
Second Five Year Plan	NA
Third Five Year Plan	Rs. 0.25 crores
Fourth Five Year Plan	
Mental Health	Rs. 2.00 crores
Estb. of Psychiatric clinics	Rs. 0.50 crores
Fifth Five Year Plan	
A.I.M.H, Bangalore	Rs. 0.50 crores
Estb. Psych. Clinics	Rs. 1.00 crore

4.6 SIXTH FIVE YEAR PLAN:

The Sixth plan in its planned targets includes the targets to be achieved in the next twenty years 'to identify and provide urgent treatment to those with mental disorders as follows:

'Under the heading of Mental Health, 20% population coverage is expected by 1985, 50% by 1990 and 75% by 2000 AD. This refers to case detection and treatment. In addition, the proposed plan includes 64.23 lakhs for control of drug abuses in the category of new schemes and 8.30 lakhs for NIMHANS Bangalore. There is specifically no details regarding any starring of new hospitals and psychiatric units'.

5. DEVELOPMENT OF MENTAL HEALTH SERVICES IN INDIA:

The following sections deals with the historical development of various types of mental health services with special focus on the way mental hospitals, general hospital psychiatric units and district psychiatric units have been organised. In a way till recently the growth and development of mental hospitals was the process of providing mental health service delivery.

5.1 Historically, the ancient Hindu texts contain many profound insights into human psychology and mental health. Modern commentators (Rao, ... Varma....., Neki.....) have indicated that the relationship between Guru and Chela is not unlike that between a psychotherapist and the patient. From time immemorial rural populations have sought relief for their mental and physical ills by consulting those claimed to be able to commune with unseen spirits and to invoke supernatural aid for the sufferer. For many centuries the public have been served by practitioners of traditional Ayurvedic and Unani systems of medicine. It is also appropriate to note that Ayurveda was in possession and using a potent tranquiliser- Reserpine for the management of psychosis for centuries prior to its discovery and wider application by modern medicine in the 1950s.

5.2 GROWTH OF MENTAL HOSPITALS:

The historical development of mental hospitals has been reviewed in a series of writings by Varma (1953a, 1953b, 1965, 1978, 1982) from which the greater part of this section is taken.

Hospitals in India were popular since the time of Ashoka, the Great (274-235 B.C.) who organised measures for the relief of suffering men by provision of herbs, roots and fruits. Mental patients were treated alongwith physically ill ones. There is no specific mention of mental hospitals in the ancient Indian writings. None is mentioned by Caraka, Jivak (500 B.C.) practiced neurosurgery and performed several operations on the brain. Every monarch of reputa established hospitals in his kingdom. Businessmen, nobles, landlords, vied with one another to open new institutions and leaving sufficient endowments for their upkeep and maintainence. Still there is no mention of mental hospital except one at Dhar near Mandu in Madhya Pradesh. This was established by Mahmood Khilji (1436-1469) and Maulana Fazulur-lah Hakim was the physician. Certain temples in the country specialise in sleep treatment, for example in Tamil Nadu there are temples at Gunaseslum, Thirumuruganpondi, Anumanthaparam, Thiruvidimaruthur and Shlingur (Somasundaram, 1973). Some Mazars have also this reputation.

Attempts were made to segregate the mentally ill towards the middle and latter part of the 19th Century. Forsaken stables, barracks and prisons were freely used and whenever necessary, high walls were used to house the patients. They were left to the care of the keepers and rods, confined by straight jackets, locked up in cells and treated with morhia, opium, hot baths, and leeches. Until 1905 all the asylums were under the charge of a civil surgeon; in that year 'alienists' were appointed to look after the insane. This provision was the result of the efforts of Lord Morley, the then Secretary of State of India. Although in general the conditions of the mental hospitals were very unsatisfactory and the 'achievements of the psychiatrists, barring a few notable exceptions, have been practically nil' (Varma 1953).

The history of psychiatry in India is the history of establishment of mental hospitals and then increasing their accommodations from time to time as the exigencies of time demanded.

The first attempt to build a lunatic asylum was made at Bombay in 1745 when orders were given to construct at the cost of Rs. 125 at the back of the hospital. No trace of this hospital is found at a later date. The second asylum was seen in Calcutta in 1787 which was meant for insane Europeans. This asylum was in a poor state so the Assistant Surgeon, William Dick, offered to build one at his own cost. He was permitted to do so and the East India Company agreed to pay him a rent of Rs. 400 per month. Some time later another was rented for female patients. This institution served till 1817 when the surgeon Beardsmore succeeded in getting a new lunatic asylum built in the outskirts of Calcutta immediately behind the Presidency General Hospital. It appears to be a beautiful hospital and the patients were properly looked after. Every good thing has an end and so had this institution. It was purely a private effort and Govt. took it over and called it Bhawanipur European Lunatic Asylum. In 1874, people in Calcutta could see 'ten or more horrible looking men pulling along the streets a big scavenging cart'. They were patients from the lunatic asylum. This created to muc commotion in the press and parliament in England that Government was forced to build a new hospital, European Mental ' spital at Ranchi in 1918. The third lunatic asylum was opened in Madras in 1793 which is still in existence. The forth was started at Monguyr in 1795 for the Indian sepoys. This was closed in 1821 when the Patna Lunatic asylum was founded. Patna was closed in 1952. A number of institutions sprang up later on and are still in existence. They were situated at Varanasi which was opened in 1809, Waltair in 1863, Nagpur in 1864, Agra in 1869, Trivandrum in 1870, Calicut in 1872, Tezpur in 1876, Ratnagiri in 1866, and Baroda in 1898.

During the later period of eighteenth century, lunatics were considered horrible and were treated no better than wild animals who howled at night and disturbed the peace and tranquility of the officials and Government. As they were the most troublesome persons, everyone was anxious to get rid of them inside high enclosures round and dilapidated buildings that could be easily made available. In the absence of any better site, forsaken stables and barracks were turned into lunatic asylums. If the superintendent was a humanitarian, he reached his brain and made the best use of what he had. The patients were then comfortable. On the other hand, if he was only a civil surgeon and an administrator with no interest in mental disease, the treatment of patients was left to the keepers. These keepers were lazy, illiterate and sadistic. They had no sympathy for poor patients and employed all methods to torture their wards.

All lunatic asylums were placed under the charge of a civil surgeon till 1905, when a special provision was made which created some special asylums. They were placed under the care of an alienist as the psychiatrists were then called. This was definitely a major step forward as for the first time psychiatry was recognised as a speciality. Other institutions for the mentally ill thus came into existence. They were Thana (1902) Yervada (1913), Trichur (1914), European Mental Hospital (1918), Mental observation ward, Bhawanipur, Calcutta (1922), Indian Mental Hospital, Ranchi (1925), Indore (1927), Gwalior (1935), Bagia Unmad Ashram (1935), Bangalore (1937), Jodhpur (1940), Lumbini Park, Calcutta (1940), Bhavanagar (1942), Jaipur (1944) and Amritsar (1947). The following names stand out for their contributions to the development and improvement of mental hospitals in India. Berkeley Hill, Lodge patch, Honigberger, Valentine Conolly and Dhujibhoy.

A complete list of the mental hospitals in India at this time as well as the dates of their institution and the current bed strength are given in APPENDIX AS TABLE VI.

5.3 GROWTH OF GENERAL HOSPITAL PSYCHIATRIC UNITS:

The growth and development of general hospital psychiatric units in India has been considered 'an important change in the field of psychiatry' (Wig, 1978). Wig refers to it as a slow and silent change but in many ways a major revolution in the whole approach to psychiatric treatment in our lifetime (Wig, 1978). He has also reviewed the historical development of this important development alongwith raising questions that need to be answered in the future.

The Indian Medical Review (1938) referred to these early units as follows; 'In Bombay there is a psychiatric clinic attached to the J.J. Hospital, Bombay in the charge of an Honarary Medical Officer, who runs it two days in a week. Bengal has a clinic attached to the Carmichael Medical College, Belgachia managed by a committee attached for this purpose. There is a small clinic attached to K.G. Medical College, Lucknow, in the United Provinces, which is a sub-section of the medical outpatient department of the college hospital and is in charge of the physician of that department. No such clinics exist in the Punjab, Bihar, Central provinces, and Berar, Assam, NWFP, Orissa, Baluchistan and Coorg' (IMR, 1938).

Wig (1978) credits the starting of the first general hospital psychiatric unit (GHPU) to Dr. Girendra Sekhar Bose at K.G. Kar Medical College in 1933. The second unit was opened in J.J. Hospital in 1938 at Bombay by Dr. K.K.Mazumdar. The other unit of K.E.M. Hospital was begun by Dr. Vahia, N.S. in the early forties. Further centres were opened by Wig at Lucknow in 1958 and by Dr. J.S. Neki at Amritsar in 1958. Subsequently a large number of general hospital psychiatric units came to be established. It

was estimated that there are 90 such units in the early 1970's. A list of the known units of this type is given as Appendix. (Sharma, 1976).

The introduction of these units as a method of mental health delivery system has very important implications for the development of mental health service in the country. They have given a big push to not only for the greater acceptance of psychiatric services by general public but also changed the mental health scene in terms of training of mental health professionals and research work.

Most of these centres, in the initial phases started in collaboration with neurology and were named as 'neuropsychiatric clinics' and many psychiatrists had their training in neurology. The existence of GHPU in the general hospitals, though resented initially as 'mental hospitals coming to general hospitals but very soon was accepted as valuable partners in the total health care system. The GHPU have a number of advantages over traditional mental hospitals. Some of them are (i) they are situated right in the community and they are more accessible and easily approachable, (ii) families can easily visit and relatives can stay with disturbed patients, (iii) there is no [illegible] form of mental hospital, (iv) there are no legal restrictions on admission or treatment, (v) proximity of other medical facilities ensure thorough physical investigations and early detection of associated physical problems. All this has brought new hope to patients.

The other most important spin off has been the starting of the postgraduate training centres. Notable among these are the ones at Delhi, Lucknow, Chandigarh, Madurai and Bombay. As a matter of fact at this point the major contribution of trained mental health professionals has been from these centres more than the two mental hospital based centres at Ranchi and Bangalore. It can also be said that there is a qualitative change in the type of medical personnel seeking to specialise in mental health profession.

The still more significant contribution of the GHPU has been the research contributions. Wig (1978) estimated that nearly 75% of research publications in psychiatry in India in the last 10 years have come from the departments based in these units. Perhaps the general atmosphere of a university department in a general hospital stimulates research activity. Notable also have been the number of efforts made to understand the problems of treatment utilisation (Srinivasa Murthy et al, 1974, 1977) and the involvement of non-medical personnel for care of the mentally ill in the community (Suman et al, 1980). Because of the limited in patient facilities in these units, ambulatory care has become the norm and has further decreased the myth of mental illness being only possible to be treated in closed mental hospitals.

There are a number of research and service issues that have not been satisfactorily answered regarding the GHP units. These are, the staffing pattern, bed strength, the management of

chronic patients, and the scope for outreach programmes.

Wig (1978) has rightly summarised the current importance of CMPUs and the scope for future development as follows; 'with the coming of general hospital psychiatric units, psychiatry has come of age in India. It has broken the walls of mental hospitals but it has yet to break the mental walls of hospital based psychiatry to become larger community based mental health movement. As today's general hospital psychiatrist is a far cry from mental hospital alienist of hundred years ago, similarly tomorrow's mental health professional will be considerably different than today's psychiatrist. Perhaps a part of old psychiatry must die if new mental health movement has to succeed. The old leaves must fall off if new flowers have to bloom. Time appears ripe for evolution and change to meet the future needs'.

A number of publications refer to the development of the CMPUs in the country (Prabhakaran, 1968, Parekh et al, 1968, Sethi and Gupta, 1972, Khanna et al, 1974, Vadia et al, 1974, Wig and Shah, 1973, Wig, 1978, Sharma & Hussain, 1977, Malhotra et al, 1982).

5.4 DISTRICT PSYCHIATRIC UNITS:

The development of district psychiatric units recommended by a number of health committees notably the Mudaliar Committee has been very slow and uneven. At present every district in Kerala and Tamil Nadu have a district psychiatric units. Some of the districts of Karnataka have similar units. However the situation in other states of India are very unsatisfactory. In Haryana only 2 of the 12 districts have psychiatric units, Himachal Pradesh has it in only one and situation is not any better in Punjab. Thus it is estimated that of the nearly 400 district hospitals there are not likely to be more than 40 such units, i.e, in not more than 10% of the district hospitals.

6. MENTAL HEALTH STATISTICS:

The availability of data relating of the magnitude of the mental health problems as well as the current patterns of utilisation of existing psychiatric services forms an essential base for all future planning of services. We have information on both these areas.

It was rightly pointed out both by the Bhore Committee (1946) and the Mudaliar Committee (1962) that no correct estimates of mental ill in the country are available. In fact, they used an estimate of 2 per thousand which is very much below the reported figures from epidemiological studies done in the 1960s and 1970s. Prof. K.C.Dube's major epidemiological study paved the way to systematic study of the prevalence of mental disorders in the country. Following this more than a dozen studies have been carried from different parts of the country. These have been e ellently reviewed by Prabhu (1981). The overall impression, giving allowance to the methodological problems,

is that mental disorders are not any way less in India as compared to the West. The conservative figures for severe mental disorders is around 2% (prevalence).

The information in regard to the adequacy or inadequacy of the existing mental health facilities to meet the estimated numbers requiring urgent help is not so satisfactory. As referred to in an earlier section, in 1961, a statistical survey estimated that not more than 2.5% of those requiring help are receiving the same from mental hospitals. The currently existing agency to collect and collate the information is the CENTRAL HEALTH INTELLIGENCE BUREAU attached to the DGHS, New Delhi. This agency collects information annually from the Mental Hospitals and publishes them annually since 1970. The data from these publications have been put together in the APPENDIX TABLE VI to provide an idea of the information regarding mental hospital utilisation. Some comments regarding the TABLE referred to above are called for. Firstly, it is to be noted that the collection of information is not complete each year, for example for the state of Maharashtra the data was incomplete every year reported (something that should have been corrected by feed-back); Secondly the data collected only include the Mental Hospitals and not the other mental health facilities like General Hospital psychiatric units(more than 100 in number), private nursing homes, district hospitals etc. etc. It appears ideally that these centres are providing the care to the same extent or to a greater extent than the mental hospitals; Thirdly, the analysis had been confined to admission, discharge and deaths till 1977. It is essential that broad diagnostic groups are used for presentation of data as has been done in the 1977 report. However this important activity carried out by CHIB is important to continue and the effort is commendable. With the above elaborations and increasing efforts the available data should help in further planning and evaluation of mental health services.

In this connection, the ICMR supported workshop relating to a standard approach to collecting minimum data from the different psychiatric centres in a standardised manner, held at Chandigarh in March, 1981 is of importance. The planned collaborative work should take the available data base further and open new possibilities for evaluation of services in the different centres (ICMR, 1981).

7. MENTAL HEALTH MANPOWER AND TRAINING FACILITIES:

At the time of Independence, there were only a handful of psychiatrists and no organised facility for training of psychiatrists in the country. The recommendations of the Bhore Committee led to the establishments of ALL INDIA INSTITUTE OF MENTAL HEALTH at Bangalore in collaboration with the existing Mental Hospital, Bangalore, in 1954. From January 1955 the first postgraduate diploma in psychological medicine was initiated. Since then a large number of training centres have come up and the following is a brief account as to their development as well as the current manpower position.

7.1 MANPOWER:

About 900 qualified psychiatrists are working both in the Government and private practice settings. At this time there are both D.P.M. and M.D. qualified persons functioning as psychiatrists. 400-500 clinical psychologists are working both in collaboration and indpendently at different centres in the country. The number of psychiatric social workers is estimated to be around 300. The number of trained psychiatric nurses is about 600.

7.2 TRAINING OF UNDERGRADUATES:

Of the 108 medical colleges in the country, about half the colleges have an Academic department of psychiatry. In another quarter a psychiatrist functions as part of the general medicine department with no additional staff. However, it is estimated that nearly a quarter of the colleges do not still have psychiatrists. The actual amount of training is grossly inadequate, as the minimum amount of training required as per the Medical council of India rules is only 2 weeks of training. Often this occurs in a distant mental hospital. This lacunae in giving adequate exposure and competence needs urgent attention. It is noteworthy that this need has been repeatedly expressed in a number of expert committees and other forums as reviewed in a earlier section.

7.3 TRAINING OF PSYCHIATRISTS:

In contrast to the undergraduate training, the postgraduate training can be considered to be in a better footing. At present about two dozen centres offer oppurtunities for training in psychiatry. Both Diploma and M.D. programmes are available. The location of the training centres as of 1981 is given as a map in APPENDIX.....

The first training course to be started was the DPM course at Bangalore in 1955. Twelve students were taken for this course. The All India Institute of Mental Health (AIIMH) was initially affiliated to the Mysore University and subsequently in 1966 got affiliated to Bangalore University. The seats for D.P.M. were increased to 15 in 1961-62. In 1966-67 M.D. course in psychological medicine was started with four candidates. The number of M.D. seats were increased to 8 in 1978-79. The other major centre where postgraduate training is going on are at Delhi, Chandigarh, Lucknow, Madurai, Bombay, Madras, Vellore, Varanasi, Calcutta, Ranchi, Goa and Trivandrum (APPENDIX..... for complete list and distribution). It is estimated that about 100 psychiatrists are trained from different centres annually.

7.4 TRAINING OF CLINICAL PSYCHOLOGISTS:

The first programme of training for diploma in Medical (Clinical) Psychology was stated in January 1955, at the AIIMH, Bangalore. Currently it has a 2 year programme. The training programme was changed to Diploma in Medical and Social Psychology (DMSP) in the year 1960 and since 1978

it is referred to as M.Phil in medical and social psychology. Twelve trainees are taken every year. Over the last 25 years about 300 candidates have qualified as clinical psychologists. This Institute referred to as NIMHANS since 1974 has a three year Doctoral course in clinical psychology since 1967 and takes two candidates for this training. In addition, post-diploma doctoral programme is also available. The only other centre offering training in clinical psychology is at the Central Institute of Psychiatry, Ranchi.

7.5 TRAINING OF SOCIAL WORKERS (PSYCHIATRY):

Training in psychiatric social work is available both at the NIMHANS, Bangalore and CIP, Ranchi. The diploma course was started at Bangalore in 1967, which is of two years duration. In 1970 CIP, Ranchi instituted a similar programme. Currently it is known as the M.Phil programme. Every year a group of 8 students are taken in NIMHANS, Bangalore. So far about 50 have been trained at Bangalore.

In addition to this a number of schools of social work provide training in Masters in Social work with a special paper on psychiatric social work.

7.6 TRAINING IN PSYCHIATRIC NURSING:

The first diploma in Psychiatric Nursing course was started at AIIMH, Bangalore in 1956. This was a one year course and offered as a postbasic diploma in psychiatric nursing (DPN). The first batch consisted of 15 nurses from different parts of the country. The DPN programme is available only at Bangalore. So far 600 persons have received training. The Institute NIMHANS also carried out a 9 month course, Certificate Course, in psychiatric nursing for men nurses from 1962 onwards (Reddemma, 1982).

There is provision for a two year postgraduate course (M.Sc.) in psychiatric nursing at Delhi and Chandigarh. At present the number of psychiatric nurses with postgraduate qualification are only a handful. There are plans to start the M.Sc. course at NIMHANS, Bangalore from 1983.

7.7 Till 1981 there was no opportunity for any advanced training in the area of community psychiatry in the country. However, in July-August, a six week course was offered for mental health professionals for EXTENSION OF MENTAL HEALTH SERVICES IN THE COMMUNITY. A group of 7 mental health professionals took part in this training programme. This training was supported by the Indian Council of Medical Research, New Delhi. This planned annual training programme hopes to provide opportunities for advanced training to mental health professionals and increases the know how in the area of community psychiatry (ICMR 1981).

Similarly training courses in child psychiatry, psychopharmacology, forensic psychiatry, psychotherapy have been considered to be required but at present those interested have to seek training outside the country.

The situation in regard to manpower development and training has been reviewed by Neki (1973). It has also been one of the repeated recommendations of the expert committees. The postgraduate training facilities can be considered to be in better position than the undergraduate training in psychiatry. However, the hope that all mental health training could occur at least within the regions of the country expressed by the Mudaliar Committee remains a far dream.

8. ROLE OF INDIAN PSYCHIATRIC SOCIETY:

The Indian Psychiatric society as the official organisation bringing together the mental health professionals together has been actively considering the needs in the area of delivery of mental health services. These have been reflected in the various resolutions, workshops held and the Presidential addresses. The following is a summary of the major actions and activities of the society in this area.

8.1 Historically the Indian Psychiatric Society can be traced to 1936 when sanction was obtained for the formation of the INDIAN DIVISION of the Royal Medico-psychological Association in 1936. However there was some delay in actually getting the Division started and the first meeting was held on 23.2.1939. The scientific session included three papers namely (i) a century of psychiatry in the Punjab by Lt. Col. Lodge Patch; (ii) a bird's eye view of Australian Psychiatry by Dr. Bamgrasi Das and (iii) a plea for mental psychiatric clinics by Dr. K.N.H. Rizvi. The concern for the care of the mentally ill and improving treatment facilities is clear from this scientific Session (IPS, 1978).

8.2 The growth and development of the Indian Psychiatric Society has been the subject matter of a number of papers and it will not be considered in detail here. (IPS, 1972, IPS, 1978). It is important to note that from a handful in the late 1940s currently the membership has crossed 600. In 1893 India had only one psychiatrist. It took a quarter century to raise this number to 5, but the growth from then on has been rapid, though far from adequate even now.

8.3 One of the first activities to be taken up by the IPS was the revision of the Indian Lunacy Act 1912. In addition, the need to have a Central Health representative was felt strongly, as is reflected by the Presidential address of Col. Kirpal Singh'. It appears necessary that a Directorate of Mental Health should be created at the Centre under the Director General of Health Services. This Directorate should be responsible for laying down standards for the various mental health institutions in the country and for

enforcing the same. Besides, this, Directorates of Mental Health are necessary in the states so as to enable the planning, organisation and direction of preventive mental health and psychiatric clinics and institutions for a large category of patients who do not suffer from insanity, and therefore, do not need to be admitted to a mental hospital (1959).

8.4 First Conference of Superintendents of Mental Hospitals in INDIA:

This conference was held at AGRA on the 25th and 26th Nov., 1960. The conference specifically examined the draft Mental Health Bill and recommended for its adoption. In addition the following resolutions were passed, which have relevance to the area of delivery of mental health services (Min. of Health, 1960).

Resolution 3: This conference emphasises that it is necessary for selected medical auxiliaries working in the medical and health institutions to be given a short period of training in psychiatry after their normal training. Short training courses of 3 months may be arranged at training centres which already exist and or which may be set up in future.

Resolution 5: The attention given to psychology and psychiatry in the present medical courses considered to be insufficient. The casual visits to a mental hospital are not obviously likely to give the undergraduate sufficient knowledge of the subject. Without increasing the duration of the medical course, the curriculum may be reviewed and improved and strengthened.

Resolution 7: This conference viewing with concern the poor standards obtaining in most mental hospitals in the country considers (i) that the improvement of the existing mental hospitals e.g. remodelling and modernising the buildings, provision of improved treatment facilities and amenities, provision of adequate staff etc. is the most important need of today and should be given the highest priority in the National Planning during the Third Five Year Plan; (ii) that hospitals for chronic patients with wings for mentally defectives, senile and epileptic patients should immediately be set up; (iii) that psychiatric clinics and psychiatric wards be added to general hospitals and hospitals attached to medical colleges. There should be atleast one clinic for each district. Such clinics and wards should be in charge of qualified psychiatrist.

Resolution 10: This conference recommends that an Adviser in Mental Health be appointed by the Government of India in the Ministry of Health to advise the Government on mental health and similar Advisers be appointed in the states also.

Resolution 13: This conference recommends training of Child Psychiatrists from among qualified psychiatrists and the establishment of mental health services for children and adolescents such as child guidance clinics, Mental Health Services in schools and Colleges; youth counselling, premarital counselling and Marriage Guidance Clinics.

Resolution 15: This Conference recommends that Government sponsor health education in the field of mental health.

8.5 Standing Committee on Public Education in Mental Health:

This is a committee of IPS which submitted its report to the Executive Council on 10.11.1964. The Committee noted that there are 15,000 mental hospital beds and the total number of patients treated annually in these hospitals does not exceed 30,000. If to this is added the figure of 90,000 individuals treated as outpatients, even then the total strength of individuals receiving expert help for mental disorders does not come to more than 2.5% of those who need it (Statistical Abstract, 1961). The Committee went on to make the following observation:

> 'Even if almost all the five year plan effort in the fields of health were geared to increasing the number of psychiatric doctors, it would be impossible to provide an adequate number of hospital beds and mental specialists in the next 50-100 years,.....even if the training facilities in the country are doubled and tripled, which is not easy, it could still require 100 years to provide an adequate number of psychiatrists for working in the curative field' (National Committee for World Mental Health Year 1960).

The committee noted that 'it looks we are confronted with an impasse; and adequate arrangements for looking after the mentally sick will always remain beyond our right. Should we not then, gear our resources to preventing mental disorders, if we see little possibility of being able to cater for adequate treatment facilities and preventive mental health programme seem to be the answer to our present impasse in the field of psychiatry'.

The Committee surveyed the situation as it existed and recommended the following activities FOR EXTENSION OF THE PRESENT ACTIVITIES : (i) raising the standards of care in the mental hospitals, (ii) opening the hospitals for preventive usefulness, (iii) group discussions with convalescent patients and their guardians; (iv) improving the involving of the general public in the work of mental hospitals, (v) educational activities directed to undergraduates, general practitioners and other personnel and (vi) use of public press, platform, radio and cinema for public education.

The Committee outlined the following activities as FURTHER AVENUES: (i) Incorporation of mental health with public health, namely the task of public health workers should include not only the spotting out of actual cases of mental illness but also to get some idea of the conditions which still act as protective and preventive surroundings and of the weaknesses that are concealed by them; further although the services of specialists will be required where any manifest mental trouble has broken out, a public health worker should be prepared to administer psychiatric first aid in cases that need it; he can moreover function as a useful link between the psychiatric service and the community; (ii) mental health services in district hospitals; (iii) involvement of psychiatric hospital staff in community welfare activities like parent teacher activities, social welfare activities.

The task of IPS was considered to lie in providing leadership, creating liason and coordinating activity, assisting in organising orientation courses, and stimulating public awareness by measures like 'Mental health week' , arranging mental health exhibition (IPS, 1964).

The above recommendations of IPS was very comprehensive indeed and alongwith the recommendations of Mudaliar Committee could have acted as a blue print for organising mental health service. However this did not occur in the next few years is reflected in the Presidential addresses of Dube (1966, and Bhaskaran (1970). Dube (1966) noted:

'..Since the recommendations of the Bhore Committee very little has been done in the first Three Five Year Plans for development of mental health activities, and mental hospitals have not yet caught the eye of the planners. It is a dismal picture. Inspite of all the odds and little help from the state, the enthusiastic administrators of mental hospitals have helped to improve the atmosphere in the hospitals within their limited resources...there is a very urgent need to improve these institutions at once. With all the force at my command I plead for placing this development on the highest priority. I believe for a long time to come, mental hospitals will remain the nucleus of mental health services'.

Bhaskaran (1970) had the following specific suggestions with a wider coverage;

'...from the point of view of concrete action in the field of rehabilitation of the unwanted chronic mentally ill with particular reference to our country, the following steps are suggested as immediate measures: (i) scrapping the Indian Lunacy Act of 1912 and replacing it with a more humane and progressive legal code; (ii) launching pilot projects in the home care of schizophrenic patients; (iii) establishment of sheltered workshops in association with mental hospitals and independently in the community; (iv) establishing hostels for ex-patients; (v) training a cadre of social workers and public health nurses for the after care of chronic discharged patients;

(vi) developing broad based psychiatric facilities for both outpatient treatment and inpatient treatment on a short stay basis in close association with a view to preventing chronicity; (vii)converting the custodial type mental hospitals into dynamic therapeutic communities and using them as only waystations in a comprehensive community mental health service net-work; and (viii) a great degree of committment on the part of psychiatrists in the matter of rehabilitation measures for the chronic patients and providing bold imaginative leadership in launching new projects'.

8.6 At the turn of the 1970s a number of Presidential addresses were addressed to this important area of delivery of mental health services. Before looking at these, it is relevant to take note of the recommendations of an important INTERNATIONAL WORKSHOP ON PRIORITIES IN MENTAL HEALTH CARE held at Madurai from 21 to 22 January,1971 by the joint collaboration of IPS and WFMH. The recommendations of this workshop are as follows (IPS, 1971):

> '(i) Cases of mental and emotional disorder are very numerous, and trained professionals in this field are very few; hence, mental health care must be given by many other types of workers, including (a) general practitioners and medical officers; (b) nurses, health visitors and midwives; (c) social workers, including voluntary social workers and gram sevaks and (d) government and voluntary agencies. ALL OF THESE WORKERS WILL REQUIRE INSTRUCTION IN MENTAL HEALTH AND MENTAL ILLNESS, SUITED TO THEIR LEVEL OF PROFESSIONAL TRAINING (emphasis added); (ii) members of the families of the affected patients should also be instructed so that they can help in the management and after-care of patients; (iii) the recognition and treatment of mental disorders should be part of the work of the curative health service in primary health centre, in district hospitals and in general and teaching hospitals; (iv) there is still a place for mental hospitals, but they should be centres of active treatment of severe and chronic cases. In order to improve the standards of care, they should have more trained staff. When new mental hospitals are built, they should be kept small in size and their work should include outpatient clinics and after-care; (v) there is a need for early recognition and treatment of emotional disturbance and retardation in school children; (vi) the present Lunacy Act (1912) hinders humane and effective care of the psychotic patient, and should be amended in accordance with suggestions of IPS; and (vii) there should be a full time adviser on Mental Health at the Central Govt. level and/or at the Directorate of mental Health Services, to coordinate plans and implement them. In the same year Bagadia (1971) in his presidential address noted that the mental health services available at present in the community do not even touch the fringe of the problem. He called for setting of general hospital psychiatric units apart from teaching hospitals,

every hospital in the city and every district hospital should have a psychiatric department' The following year, Dr. S.S.Jayaram (1974) put forward his ideas 'The following methods can be put into effect here and now in our country to integrate psychiatry and general practice'. He focussed on the role of the general practitioner in the total mental health care system. The following Presidential address by Dr. Vidya Sagar (1973) expressed the opinion that 'there should be qualified psychiatrists at the District Headquarters hospital and later at the sub-divisional hospital'. He also felt that 'the basic doctor working at the PHCs and in general practice have to be sufficiently informed in psychiatry, as they are in the diseases of the eye, ear, nose and throat, so as to be able to diagnose psychiatric illnesses and treat most of them and refer others to the psychiatrists at the referral and Headquarters Hospital'.

8.7 The Indian Psychiatric Society organised two workshops in 1975 and 1976. The Trivandrum workshop was devoted to the subject of paraprofessionals in mental health care and the Nagpur workshop was focussed on Rural Psychiatry.

8.8 Review of the concern expressed and the avenues suggested by the members of the Indian Psychiatric Society speak a uniform language for the extension of mental health services to most of the people as soon as possible. Further, the various suggestions have called for varying degrees of decentralisation and deprofessionalisation.

9. ICMR RESEARCH RELATED TO DELIVERY OF HEALTH SERVICES:

The Indian Council of Medical Research, New Delhi has been actively supporting research related to the prevalence of mental disorders as well as organisation of mental health services in the country.

9.1 One of the first major epidemiological study in India was carried out by Prof. K.C. Dube with the support of the ICMR, New Delhi. This study initiated in 1964 and published in 1970 (Dube, 1970) was a major one in that for the first time the estimates regarding the prevalence of severe mental disorders was made available. As it happens the prevalence turned out to be nearly 10 times that assumed by the Bhore Committee and the Mudaliar Committees for making their recommendations. Similar has been the result of the epidemiological study carried out by Prof. A. Varghese in the Vellore town. This study was of equal significance as greater effort was directed to find the exact amount of neurotic disorders. Thus, we have a much higher figure for the prevalence of neurosis from this study. This study also made the unique contribution by carrying out a survey of children for the first time.

9.2 In the Mid 1970s ICMR brought out a book on Drug Abuse in India compiling all the data relating to the work on drug abuse in India. This also outlined the needed action to meet the problem.

9.3 The next major initiative from ICMR was the formation of an Advisory Group on Mental Health. This group of senior psychiatrists met for the first time in July, 1979. This group reviewed the current status of research in mental health and identified the broad areas that need to be taken up for further research work. One of the mechanisms suggested by the Advisory Group is the formation of TASK FORCES and Working Groups on 7 areas. The purpose of these were to bring together a group of interested professionals working in that area to formulate detailed proposals for support by the Council. One of the working groups was devoted to the 'DELIVERY OF MENTAL HEALTH SERVICES'.

9.4 The working Group on Delivery of Mental Health Services met on two occasions and outlined the needs in this area. Besides focussing on the needs, two specific proposals to train mental health professionals and general practitioners were recommended for support. These proposals alongwith others from the other Groups was considered by the Advisory Body in October, 1980 and a final list of specific project proposals were selected for immediate support. Of those selected both the proposals from the Delivery of Mental Health Services group were chosen.

9.5 The ICMR training course on EXTENSION OF MENTAL HEALTH SERVICES IN THE COMMUNITY was carried out in the month of July-August (6 weeks) at Bangalore, Chandigarh and Delhi. Seven persons from different parts of the country took part in this training course. This training provided the trainees an opportunity to become personally acquainted with the ongoing community psychiatry projects at Chandigarh and Delhi, meet the investigators and research staff in these areas, and examine the areas for future work, as well as an opportunity for the Centres to view the ongoing work from unbiased professionals point of view. The training course has been valuable and one of the reflections of this is the specific proposals developed and sent by the trainees to the ICMR for support soon after the completion of the training (ICMR, 1981).

Further work initiated from the trainees in their own centres will be of interest.

9.6 The training of the General practitioners project based at Bangalore, Vellore and Hyderabad is in progress.

9.7 The other major projects initiated by the Council in collaboration with department of Science and Technology in the multicentered study on 'SEVERE MENTAL MORBIDITY'. This is located at Bangalore, Calcutta, Baroda and Lucknow. It has reached the stage of intervention and the results are awaited. The focus of work in this project is the evaluation of effectiveness of basic health workers and PHC doctors to carry out mental health tasks alongwith the general health care. A number of research tools for studying public attitude, measuring social functioning and identification of mentally ill in the community have been developed.

Thus the contribution of the Council has been significant, especially welcome is the renewed interest in operational research and training.

10. WORLD HEALTH ORGANISATION MEETINGS AND RECOMMENDATIONS:

10.1 During the last 10 years the Regional Office of the WHO, has conducted a number of workshops to examine the needs of the region and possible approaches to the organisation of mental health services. The first of these is a series of Seminars on 'place of psychiatry in Medical Education' held in 1969, 1971, and 1972. These seminars recommended that (i) psychiatry must be given a legitimate place in the medical curriculum as an independent discipline; (ii) in the clinical years there should be at least 60 hours of clinical instruction; (iii) practical clinical experience is an essential feature of psychiatric instruction and the teaching specified should be followed by clinical clerkships of a month's duration and (iv) psychiatry should be taught properly, with appropriate facilities in the medical college itself.

10.2 The Seminar on the ORGANISATION AND FUTURE NEEDS OF MENTAL HEALTH SERVICES (1971) reviewed the existing services and recommendations for future organisation. In view of the limited specialist help, in planning future mental health services particular attention should be paid to the needs of the most gravely disordered, the psychotic and severally mentally deficient persons. Ideally, if those in need of the services were to receive proper care the services should be developed on a massive scale. However it was felt that the planning should be realistic and economical, initiating low cost developments and in this connection due emphasis should be placed on the expansion of community services as a means of reserving the more costly hospital services for the care of those requiring specialist treatment. It was also noted that there was no current uniform pattern of mental health care which would be acceptable for general application to the widely varying geographical, social, cultural and economic conditions encountered in different parts of India. Thus there was clearly a need to experiment with different ways of delivering mental health care to the rural areas. The participants noted that one of the most important elements in the supply of health care in India is the Primary Health Centre (PHC). Upto now PHCs have not been developed to their full potential, but as trained staff and supplies become available they will become increasingly important elements in the delivery of health care, and as soon as possible, the oppurtunity should be taken to provide mental health care at and from these centres, through the multi-disciplinary mental health team and by the use of other available staff such as government medical officers, nurses, family planning workers and basic health workers who have undergone suitable training.

In regard to the role of mental hospitals, it was felt although changing patterns of hospital care in certain parts of the world may indicate that the role of mental hospital in the

overall service may diminish, it was considered that in India, the mental hospital would continue to form an important part of the service for sometime to come. Certain mental hospitals are grossly overcrowded and in some areas no mental hospitals exist. The aim should be to improve the conditions of those mental hospitals which are overcrowded and in addition provide new mental hospitals of limited size, say of 100 to 200 beds, in areas which are demonstrably deficient in beds for long term care.

The needs of the mentally retarded was viewed as follows: 'for the mentally retarded, as in the case of the mental illness, greater emphasis should be placed on developing services within the community rather than in a hospital setting. The problem of caring for the retarded is not primarily a medical one but must involve education and social work, as well as the health services. The aim should be to improve existing homes and develop further residential or day care facilities in association with the departments of education and social welfare.

10.3 The Seminar on 'COMMUNITY ACTION FOR MENTAL HEALTH CARE' held at Bangalore from October 26 to November 2, 1973 (WHO 1974) reviewed the situation especially the innovative approaches and the needs for training of medical and paramedical personnel. The seminar urged for the organisation of pilot projects at the different levels of care in order to evolve efficient pattern of integrated services. It also called for the identification of different categories of personnel other than physicians and development of suitable training programmes. It was also felt that the role of traditional healers in augmenting the community mental health services should be evaluated.

10.4 An important document relating to the delivery of mental health services titled 'ORGANISATION OF MENTAL HEALTH SERVICES IN DEVELOPING COUNTRIES' was produced as a Technical Report (No. 564, WHO) in 1975. This was the result of the deliberations of a group of eminent psychiatrists as part of the Sixteenth Expert Committee on Mental Health. The document lays down many important guidelines. Some of the most important are:

Resolution No. 4: The Committee recommends that mental health objectives should be defined in early country taking into account the nature, extent and consequences of mental disorders and the resources available. The objectives should be realistic and should be formulated in terms of health effect or service delivery to be achieved for a stated proportion of the population in a defined area within a stated time.

Resolution 5: To achieve these objectives, the Committee recommends decentralisation of mental health services, integration of mental health services with agencies. Decentralisation of mental health services implies that mental health care should be made available at the community, district and regional levels through psychiatric inpatient and outpatient units linked to the general medical facilities. The creation of large mental hospitals should be discouraged and where they already exist the prime consideration should be to ensure that the staff/

patient ratio allows adequate treatment, care and rehabilitation. They should be supported by a network of other services as described in this report. Integration of mental health care into the general health service means that the mental health component should be incorporated into the work of the primary health worker, the community health centre, district and regional health centres and hospitals. Collaboration with nonmedical community agencies means that the contribution of community agents such as religious leaders, teachers, development workers, the police and the various associations should be sought and that mental health professionals should devote part of their time to the mental health education of such workers in the community in order to make such a broad approach possible.

The committee further spells out the needed changes to implement the above:

Resolution No. 8: The committee recommends that governments make adequate financial provision for the following programme: (a) recruitment, training, and employment of personnel; (b) adequate provision of drugs; (c) a network of facilities, including transport; and (d) data collection and research. In the developing countries trained mental health professionals are very scare indeed - often they number less than one per million of the population. Clearly, if basic mental health care is to be done by non-specialised health workers at all levels from the primary health worker to the nurse or doctor working in collaboration with and supported by more specialised personnel. This will require changes in the roles and training of both general health workers and mental health professionals.

The implications for the training and functioning of professionals is outlined as follows:

Resolution No. 10: The committee recommends that specialised mental health workers should devote only a part of their working hours to the clinical care of the patients; the greater part of their time should be spent in training and supervising non-specialised health workers, who will provide basic health care in the community. This will entail significant changes in the role and training of the mental health professionals.

Resolution No. 11: The Committee therefore, recommends that the training of mental health professionals should include instruction and supervised experience in this new task of training and supporting non-specialised health workers. There will also be need to provide training in mental health service administration for personnel down from the various disciplines involved in these services. In the view of the Committee, there is still and will remain for some years, a pressing need for the recruitment and training of additional mental health professionals to carry out these new roles.

Resolution No. 13: The Committee recommends that steps should be taken to reduce the cost of drugs, to make them more readily available, and to ensure that they are correctly used.

In addition the other recommendations refer to the need to alter legislation, collect relevant data and carry out appropriate research.

The above summarised recommendations are very relevant and important. In this document we have a commitment to basic mental health care outlined as well as the necessary steps to be taken. Thus the committee has clearly pointed out the importance of PRIORITIES, the need for DECENTRALISATION of the services and the involvement of all categories of health and welfare personnel (DEPROFESSIONALISATION). Further it has outlined the needed ROLE CHANGE and FUNCTIONING of the specialist mental health professionals. The other requirements like the drug availability, the legal changes and the research commitments have all been given due recognition. Thus, this forms a very important document as a guiding instrument for planning mental health services.

10.5 Further commitment to mental health was reflected in the International Conference on PRIMARY HEALTH CARE at Alma Ata in 1978. The document of this conference titled HEALTH FOR ALL outlines a number of recommendations. As pointed out in greater detail in an earlier section ( ) the elements of primary health care include PROMOTION OF MENTAL HEALTH. Thus the commitment to mental health care at the primary health care is very strong indeed. Indeed, as agreed to in the Alma Ata declaration, the member signatories are bound to take steps to fulfil the goal of Health for All by 2000. India is one of the signatories to the above goal.

10.6 A number of other WHO meetings have further supported the above approaches in their deliberations. Notable among these are the following documents from these meetings: Consultation on drug treatment of neuropsychiatric disorders in developing countries (1976); Child mental health and psychosocial development (1977); The application of advances in neurosciences for the control of neurological disorders (1978); the promotion and development of traditional medicine (1978); and Training and utilisation of auxiliary personnel for rural health teams in developing countries (1979). In addition to these the WHO convened a STUDY GROUP ON MENTAL HEALTH CARE IN DEVELOPING COUNTRIES in 1981. This meeting reviewed the work done in the preceeding years from the time of the 1975 document (organisation of mental health services in developing countries) was prepared. The report of the study group should be very beneficial for future planning of services.

11. INNOVATIVE APPROACHES TO MENTAL HEALTH CARE:

11.1 During the last 40 years, specifically in the last two decades efforts have been directed to meet the shortage of facilities of trained personnel in a number of innovative methods. Some of the important

ones are (i) involvement of family members in the care at Amritsar, (ii) use of traditional methods of therapy like Yoga at Bombay and (iii) alternative approaches developed for the care of university students and school children. In addition the two major systematic efforts to integrate mental health with general health care at Bangalore and Chandigarh have broken new ground. These innovations simple in themselves, by their novelty and appropriateness to the National context make it possible to reach a larger section of those requiring urgent psychiatric help. A brief account of these efforts and their current status is given below:

11.2 INVOLVEMENT OF FAMILY IN PSYCHIATRIC CARE:

The major credit for considering this step to open the gates of mental hospitals to the family members goes to Prof. Vidya Sagar. He undertook this work at Amritsar Mental Hospital. It arose as a result of his deep commitment to keep the status of the mentally ill person intact through the illness as well as to meet the shortages in facilities. This experiment and innovation is best read in the words of Prof. Vidya Sagar (APPENDIX....). The following is summarisation by Prof. G.M. Carstairs who has been very familiar with the above work (Carstairs, 1974).

'...In the mid-fifties Dr. Vidya Sagar took steps to change the public image in that institution (Amritsar Hospital). He had observed that patients were brought for admission only when their mental illness was already long standing and when their relatives had despaired of their ever recovering. Indeed, relatives often made a long journey to bring a patient to the hospital and were prepared to abandon him (or her) there forever. Dr. Vidya Sagar encouraged the relatives to stay, and pitched tents within the hospital grounds for their accommodation. He also encouraged them to participate in the daily nursing care of the patients, and by so doing to learn about their medication and find out how to manage them. In the evenings, Dr. Vidya Sagar addressed large meetings of patients and their relatives, in talks which outlined the principles of sound mental health and gave simple descriptions of mental illnesses and how they could be treated. His addresses were couched in the style of sermons of religious teachers, with whom these country people were familiar. Eventually, his tents were replaced by simple stone houses, with sanitary and kitchen facilities. The rumour began to spread round the country side that patients could be greatly helped, if not cured, and that in many cases they could return to live in their own villages. With this hope, families began to bring patients at a much earlier stage of their illness and the frequency of early discharge became correspondingly greater. Instead of being a place of dread, associated with life long incarvation, the hospital had become a renowned centre for active treatment and for public Mental Health Education.'

Similar attempts were initiated at Vellore in the early 1960s where family treatment has been a tradition all along in the last two decades. Specific research efforts to examine this approach

of care was undertaken by Narayanan et al (1972). At present most general hospital psychiatric settings utilise this potential of the families in the treatment of the mentally ill (Kohlmeyer, 1963; Chacko, 1967; Varghese, 1971; Narayanan, 1977; Geetha et al, 1980; Bhatti et al, 1980, 1981).

11.3 TRADITIONAL METHODS OF THERAPY:

Significant effort to evaluate the utility of utilising the long-known Patanjali system of Yoga for the treatment of psychiatric problems has been undertaken by Vahia and his colleagues (Vahia et al,1973, 1973b, 1977). Earlier attempts were made to examine the utility of Ayurvedic and other drugs by Hakimet al (1953) but this work was not brought to a stage to gain popular acceptance by the professionals. Currently, efforts are underway at NIMHANS, Bangalore to evaluate the Ayurvedic methods of treatment in the treatment of mental disorders. Initial results are interesting (Mahal et al, 1976, 1974). The following section deals with the work of Vahia and his colleagues. (Vahia et al, 1973, 1974, 1975)

Vahia and his colleagues carried out a series of studies to evaluate the effectiveness of patanjali system of Yoga. The first experimental design included 102 patients in whom 50% improvement was noted in 70% of the patients. In the next design of double blind controlled trial 15 patients were studied. The third stage of investigation was a double blind trial with a drug with 33 patients. The results are promising, However there has been limited extension of this very important revival of an ancient method of therapy with relevance to India (Balakrishna et al, 1977).

11.4 SERVICES FOR STUDENTS AND SCHOOL CHILDREN:

The problems of University students and their mental health needs have been the subject matter of a number of investigations. This has been reviewed recently by Prabhu (1981). Using different diagnostic criteria Thacore and Gupta (1972) and Aggarwal (1973) found widely varying prevalence rates among medical students ranging from 1% to 31.3%. The nature of problems were personality disorders, adjustment problems and anxiety related problems. Wig et al (1969) found that academic problems were viewed by Heads of Department as psychological problems while students themselves stressed problems that created personal stress. In their other studies Wig et al (1971) and Wig and Nagpal (1972, 1975) found that success at University is a product of complex interaction of various personal and environmental factors. In a more recent study Chandrasekhar et al (1980) found a prevalence rate of 16%. They also found a number of characteristics relating to the prevalence of mental health problems like the family income and life in the family.

The studies done in University students point out an important area for urgent intervention because of the very important age characteristics of the student group. However, todate no systematic efforts have been made to handle the problems, though the matter of student counsellors or teaching teachers to counsel students on the campus has been suggested.

The work with school children initiated at NIMHANS has reached a more satisfactory stage of development. In a series of attempts, efforts have been directed to develop a general training programme of child mental health for all categories of teachers and a more intensive programme for the interested teachers. A Manual providing guidelines and a series of instruments for evaluation of the training programme and the individual weekly seminars has been developed by the team (Kapur, Carlappa, 1978a, 1978b, Kapur et al, 1980). This work needs to be enlarged and replicated. The programme if it finds a wide acceptance can lead to a feasible approach to meeting the mental health needs of the school children.

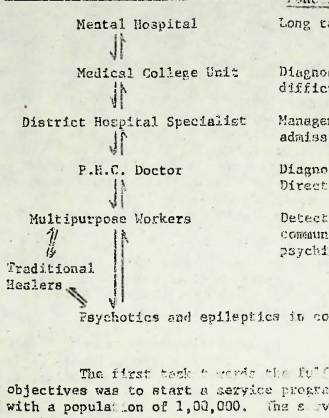
11.5 GENERAL PRACTITIONERS TRAINING:

Dr. Shamsunder and colleagues at NIMHANS, Bangalore have been involved in the systematic attempts to develop approaches to provide training to the general practitioners. This method is specially suited to the needs of the urban populations (Shamsunder et al, 1978). The initial experiences have been very encouraging. This training of G.Ps from a project supported by ICMR, New Delhi and being carried out at Vellore and Hyderabad at present. This replication effort should have the way for this type of programmes to be launched in other urban areas. The possibility to link it with the activities of Indian Medical Association is an attractive and practical possibility. (Gautam et al, 1980, Krishna Murthy et al, 1981).

11.6 BANGALORE EXPERIENCE IN COMMUNITY PSYCHIATRY:

The programme of community Psychiatry was launched in 1976 under the leadership of Prof. R.L. Kapur at the NIMHANS, Bangalore. During the last 6 years a number of approaches relevant to the rural areas have been developed. The overall effort has been to integrate mental health with general health services.

The aim of the rural project was to develop suitable training programmes for the doctors and the multipurpose workers from the various primary health centres in the state of Karnataka, so that after their training for PHC personnel could provide basic mental health care in their respective catchment areas. By basic mental health care it is meant detection and management of epilepsy and psychosis. The above objectives have been presented diagrammatically in the following figure.



The first task towards the fulfilment of the final objectives was to start a service programme in a rural area with a population of 1,00,000. The service programme was carried out by a team of one psychiatrist, one psychiatric social worker and one psychiatric nurse. Since the inception of the service programme the team has visited 122 villages and covered a population of 76,000. 442 patients of epilepsy and psychosis are on follow up. The regular attendance at the clinic which is run three times a week ranges between 70-80 and all types of medical problems are attended to. In case a patient does not turn up on the day he is asked to, the team makes a home visit. In case a patient cannot come to the clinic the medicines are given to a relative or a neighbour. Sometimes one single individual takes medicines for all the patients in the village. During the last 4 years (1977-80) 61 with schizophrenia, 37 with acute psychotic episodes, 32 MDP, 335 epileptics, 37 neurotic depressives and 38 other psychiatric cases were seen and treated (Chandrasekhar et al, 1981; Kapur, 1981; Kapur et al, 1980; Parthasarathy et al, 1981).

A manual for the basic health workers to identify and refer cases to the PHC has been developed and tried out. Similarly a Manual for doctor's training has also been developed. The team has undertaken the training of basic health workers in different PHC blocks and reported the experience as being positive. Following this experience, a multicentred project on SEVERE MENTAL MORBIDITY in 4 centres is in progress with the support of the ICMR, New Delhi. The centres involved are Vellore, Bangalore, Baroda, Calcutta. The results of this collaborative study should

provide further guideline to the methods to be used for the extension of mental health services into the rural areas through the existing general health services. Plan to train the doctors of Karnataka in groups is due to start in 1982.

11.7 CHANDIGARH EXPERIENCE IN COMMUNITY PSYCHIATRY:

The Chandigarh experience to develop a model for rural psychiatric service has been under the leadership of Prof.N.N.Wig and Dr. R.Srinivasa Murthy. This work has been part of a WHO Project titled 'STRATEGIES FOR EXTENDING MENTAL HEALTH CARE'. This is a multicentred project carried out in 7 geographically defined areas in Brazil, Colombia, Egypt, India, Philipines, Senegal and Sudan and designed to develop and evaluate alternative and low cost methods of mental health care (including training methods) in developing countries (WHO. 1976).

The basic approach adopted in this model is to integrate mental health with general health services and provide basic mental health care as part of primary health care. This is presented diagrammatically in Figures 1, 2 and 3.

The specific aims were to: (i) develop methods of priority selection for intervention in the field of mental health care; (ii) develop and evaluate methods of task oriented training in mental health care for health workers and those in other systems of health care; (iii) evaluate effectiveness of alternative and low cost methods of mental health care introduced into basic health services; and (iv) develop and evaluate ways of stimulating the community's understanding of and response to the problems related to mental disorders.

The study was initiated in June 1975 in the Raipur Rani Block of Ambala District of Haryana State, North India. A study area population of about 60,000 was chosen based on the already existing administrative structure. A series of BASELINE OBSERVATIONS were carried out to (i) study the health staff perceptions, attitude to mental disorders, willingness to take on mental health care; (ii) screening of the general health clinic populations for psychiatric problems and (iii) interview with community leaders. These were carried out to be used as measures of evaluation of effectiveness of intervention as well as to decide on priorities to be chosen for basic mental health care work. Detailed reports have been made elsewhere (Wig et al, 1980, Harding et al, 1980, Climent et al, 1980).

Based on the findings of the baseline observations, the following were selected as priorities for intervention, namely, acute psychosis, epilepsy, chronic psychosis, psychotic depression and mental retardation. The task distribution is shown in Figure 2. A Manual for the use by the Primary Health Care Personnel both in English and Hindi was prepared and finalised for use (Wig and Srinivasa Murthy, 1979, 1981). The main approach was to teach and

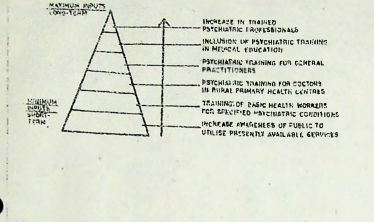
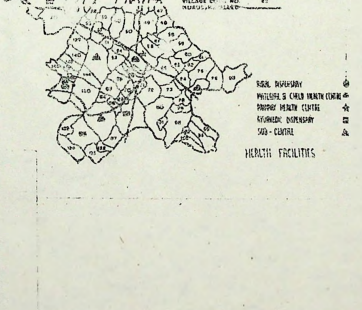


FIGURE 1

FIGURE 2



MENTAL HEALTH CARE THROUGH PRESENT HEALTH STAFF

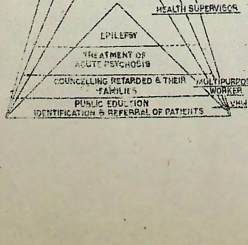


FIGURE 3

provide skills to suspect, identify and diagnose, refer the problem cases and initiate treatment for suitable cases. Three (limited range) drugs namely Chlorpromazine, Phenobarbitone and Imipramine were chosen for use. Following class room training on the job inservice training was continued. Gradually mental health clinics were started at the subcentres so that patients could get the needed drugs and help close to their homes. The initial period of work of the health workers was supervised and supported by the research staff. Simple records for follow up and drug supply were maintained (Wig, Srinivasa Murthy and Harding, 1981).

The results of this project completed in 1981 show that it is possible to integrate mental health with general health services by choosing priorities and developing proper training programmes for the health personnel. However, this requires (i) the commitment of the health authorities to include mental health as part of PH care, (ii) provision of adequate drugs, (iii) the availability of support and supervision from the PHC doctors and (iv) further crystallisation of knowledge regarding the treatment schedules to be used in the community without daily and continuous supervision of specialised staff. Other research issues that need to be taken note of for further work is given in a later section.

11.8 In addition to these major efforts at Bangalore and Chandigarh, a number of other centres are attempting similar thrusts into the community. Notable among this is the work by Varghese and colleagues at Vellore. The other experiment is at Ahmedabad under the leadership of Shah and Buch where an effort was made to train MENTAL HEALTH WORKERS to function in the District Hospitals. The detailed reports of their functioning subsequent to their training is not available for comments at this stage. However, the fact that it has been not continued after the first batch indicates to problems regarding a separate cadre for mental health care.

11.9 Traditional healers have been the subject of study by Kapur (1975, 1977); Sethi and colleagues from Lucknow (1978). At present this is an area with great degree of interest and thought to have a potential for providing mental health care. However, systematic efforts to involve them are awaited. Till such efforts are carried out any opinion for or against would be uncalled for and premature. This is an area for systematic study and not for political or emotional rhetoric (Nekt, 1973; Sethi and Trivedi, 1979; Sethi et al, 1977; Sethi et al, 1979a, 1979b, 1980). The approach cannot be one of total acceptance as advocated by some politicians or rejection as quackery 9 for example the reaction of Indian Medical Association. One have to keep in mind that they are playing a part and will continue to play a part till modern services reach the remotest village and basic mental health care becomes a reality.

12. SERVICES FOR THE MENTALLY RETARDED:

12.1 The needs of the mentally retarded in the country has been the subject matter of a large number of meetings and workshops. Notable among them are the meeting of the Expert group on National Planning for the mentally handicapped in India (Nov. 12-19, 1979) at New Delhi (Sinclair, 1979), and the IIIrd Asian Conference on Mental Retardation (Nov. 7-11, 1977) at Bangalore (FMMR, 1977). The above two documents provide comprehensive accounts of the magnitude of the problem (estimated to be about 2-3% of the population) and the service lacunae. At present there are about 150 day care centres, schools and institutions, catering to a maximum of 10,000 children i.e. approximately 0.04% of the number of the mentally retarded in India, estimating the prevalence at only 4 per thousand figure given for severe mental handicap. (Sinclair, 1979). Even these centres have been concentrated in a few towns, for example, of the 150 centres, Delhi, Bangalore, Bombay, and Madras account for more than 50% of them.

12.2 Thus, large parts of the country are to be left of any meaningful services. Recent reports from the rural areas, to study the needs of those living in the rural areas, point to the needs being significant, contrary to the popular belief that rural life protects retarded from problems (Srinivasa Murthy et al., 1981). Similarly the [illegible] mental [illegible] causes of mental retardation are also largely unmet (Srinivasa Murthy, 1978).

12.3 The facilities for training teachers for the care of the mentally retarded is still limited. At present there is no provision for full professional (degree) course. Most trainings are of about one year's duration. The varying types of training do not share a common curriculum. Organisation and bringing some uniformity in training teachers is an urgent need. The creation of cadre of personnel with special interest, skills and commitment to mental handicap can go a long way to fulfil the needs of organising adequate services.

12.4 It is salient to note that in the whole broad area of mental health, it is with regard to mental retardation that voluntary agencies and parent groups have played a significant role. The active role by the Federation for the Welfare of the Mentally Retarded (India) New Delhi, to bring together parents, teachers and professionals, and to stimulate them to plan services has been very commendable. Much future work needs to be done before we can assure a meaningful life for the mentally retarded'.

13. VOLUNTARY ACTION FOR MENTAL HEALTH:

13.1 The report of the Indian Psychiatric Society's standing Committee on public education in mental health refers to the Indian Council for mental Hygiene, located at Bombay and its affiliated societies in other parts of the country. The above report (IPS, 196[illegible]

also outlines a number of approaches to public action and education as outlined in 8.5. However, the active work in this area appears very limited.

13.2 Notable among the voluntary agencies that have been active in organising services has been in the area of mental retardation. This has been considered in an earlier section (12.4).

13.3 The significant success reported by SANJIVINI, a voluntary non-profit organisation located at Delhi has been an encouraging experiment. This movement started in 1976, as an effort to prevent suicides and later on enlarged to act as a crisis intervention centre. Sanjivini has been training lay persons for volunteer work of the agency with the help of a panel of experts and active collaboration of the various social and welfare agencies. The present reports indicate that Sanjivini is fulfilling an important need in the community. However, it is too early to evaluate this programme as it has to yet develop into full fledged organisation beyond the initial effort, with its own philosophy. Similar reports have been reported from Bangalore, Bombay and Vellore, though details are not available. These activities have an important role to play not so much as service providers but more as stimulators of services and public educators, as well as liasion between the professionals and the public. They are also having the potential of introducing innovative approaches to mental health care. The successes achieved by the Mental Hygiene movement in U.S.A. and MIND in U.K. call for further efforts to encourage these activities.

14. MENTAL HEALTH LEGISLATION:

14.1 The need for revising the legislation regarding mentally ill persons has been preoccupying the mental health professionals in the last 30 years. It is said that one of the first tasks considered by the Indian Psychiatric Society in 1948, was to redraft a new law to replace the Indian Lunacy Act of 1912. This need was emphasised by the Conference of Superintendents of Mental Hospitals (Ministry of Health, 1960) which concluded as follows:

> 'This conference after considering in detail the draft mental health Bill recommends for adoption the Bill with changes proposed by them' (Resolution No. 1).

14.2 The Mental Health Advisory Committee constituted on the 29th September, 1962, had its first meeting on the 11th April, 1963 and four sub-committees were constituted. One of them related to the draft Mental Health Bill. The second meeting of the Advisory Committee was held on 8th November, 1963 at Ranchi and the recommendations of the sub-committees were considered. In this meeting,

'the committee also endorsed the proposal to introduce legislation for revising the existing Lunacy Act and approved the draft Bill prepared by the Ministry of Health' (Ministry of Health, 1964-65).

14.3 However, the need continued to be on papers and the urgency for changing it repeated by the IPS, the Presidents of IPS in their Presidential address (Vidya Sagar, 1972) with no positive effect. It was only in April, 1978, a draft Bill was introduced in the Parliament. The bill was referred to a select committee for revision. However, the Bill lapsed due to the dissolution of the Parliament in 1979.

Recently, in December, 1981, a new revised draft Bill has been placed before the Parliament. The DRAFT MENTAL HEALTH BILL (1981) provides new provisions for (i) informal admissions, (ii) certification of centres for psychiatric care and (iii) the need for minimum criteria for service centres. It can be hoped that when the BILL becomes an Act the hope of removing the social stigma of psychiatric treatment will become less.

15. NATIONAL MENTAL HEALTH PLAN

15.1 The Mental Health Advisory Committee constituted in 1982 met in 1963, 1965 and 1966 to consider the various aspects of mental health needs in the country. The areas that received consideration were (i) the mental health Bill (34.4), (ii) ambulatory treatment, (iii) training of mental health personnel, (iv) starting of epilepsy clinics, (v) improvement of mental hospitals, (vi) standardisation of forms and records for mental health services and (vii) need for drugs (Ministry of Health, 1964-66).

15.2 The need for a comprehensive plan to organise nationwide services has been often expressed (IPS, 1971). Many of the recommendations have been considered in detail in earlier sections in 3.1 to 3.5, 4.1 to 4.5, 8.1 to 8.9. The need for a clear plan led to the formation of a group of 3 psychiatrists to assist the President of IPS to prepare a blue print for national level of planning of Mental Health (WHO Collaborating Centre, PGI, Chandigarh, April, 1977).

15.3 However, it was only during 1981, the Directorate General of Health Services organised a National level workshop to consider a draft mental health plan. This was held at AIIMS, New Delhi under the active convenership of Prof. N.N. Wig, in July 1981 (20-31). The essential aspects of the suggested plan following the workshop is to stimulate services both in the periphery and the Centre. This is planned to be achieved by suitably integrating mental health care at all levels of health services. The plan outlines the needs in terms of (i) appointment of a Mental Health Advisor at the Centre for coordination, (ii) appropriate state level Mental Health Advisors, (iii) identification of priorities to be included

at different levels of health care from the VHW to the district hospitals and referral centres, (iv) the tasks and training programmes to be developed for different levels of health personnel, (v) strengthening of mental hospitals, (vi) enhancing undergraduate medical training in terms of mental health components, and (vii) training in community psychiatry for different categories of mental health personnel.

A positive decision to implement the above, well thoughtout programme and plan should go a long way in resulting meaningful basic mental services in the near future.

THE FUTURE.....

The preceeding review of developments in the last 40 years has been viewed from different vantage points. However weighty the sentiments or forceful the arguments, the most important matter is the quality and coverage of the services. It is estimated that the currently available services do not cover even 10% of those requiring urgent psychiatric needs.

The positive and negative aspects or the agony and ecstacy of mental health care was brought out in a recent series of articles that appeared in a widely circulated fortnightly, INDIA TODAY,. In the matter of few months, 3 full page reports appeared relating to mental health. The first appeared in June and referred to the innovative approaches to mental health care though health workers titled 'the save approach'. The second referred to as 'playing on the gullible' (September,1981) highlighted the force of superstitions in the form of witchcraft which led the public in North Karnataka look for solutions for clearly medical problems from sorcers and magicians. The third report referred to a rare report in a mental hospital in Kerala state under the title 'a moment of madness'.

The above three aspects of Indian psychiatry reflects the real situation of mental health care in India - the gullibility of the public, the inhuman conditions of mental hospitals and the way out of the situation by integrating mental-health care with general health services.

CAN WE EXPECT MEANINGFUL RESULTS IN THE NEAR FUTURE.?

There is no single answer to this vital question inspite of the much avowed goal of HEALTH FOR ALL by 2000 A.D. The factors that will decide the emergence of meaningful services will depend on three factors;

i) General development of the community,
ii) growth of general health services in the country,
iii) the organisation of mental health services on sound principles.

i) General Development of the Community;

What are the relevant aspects of general development that are directly relevant to the organisation of mental health services? Leaving aside the much talked of measures like the GNP, per capita income, the more directly relevant factors are the distribution of the population, their accessibility and the general standard of living.

India is truly a nation of villages. We have 5,75,936 villages of various sizes. It is appropriate to note that about 80% of the population live in the rural areas. It is these persons who have the least access to services. People in villages live in small groups. Nearly 60% live in villages of less than 500 population. If we consider those living in units of less than 1000, it is 75%. Only 10% of population live in villages of populations bigger than 5000 population. These thinly spread population calls for a very DECENTRALISED service. This is true of all states of India and more so in some states like Himachal Pradesh where more than 90% live in units of less than 500 population (GOI, 1980).

In a recent report titled 'How well connected are our villages' Sangal (1981) points out that of the 4,51,632 villages with less than 1000 population, only 24% have all weather roads, 15% fair weather roads and 61% of villages still remain to be connected with any road'. The figure for all weather roads that needs to be connected with in future for all villages is 4,07297 (71%). This data refers to March 31, 1978.

The situation in regard to the provision of drinking water to our villages is equally dismal (Prasad and Manohar, 1981). According to a survey carried out in 1972-73, of the 5,76,000 villages, 1,13,000 (20%) have no water supply safe for drinking purposes within a mile distance, 1,85,000 (32%) have unprotected water supply open to the risk of pollution and another 2,14,000 (37%) are dependent on wells, tanks, ponds and streams - sources which are also unsafe. The villages that have protected water supply from only 10% of the total rural population.

The accepted official figures of more than half of the population, living under poverty line crystallises the long distance that needs to be covered in the process of social justice for all and minimum needs of all population.

(ii) General Health Services in the Country:

The actual situation in regard to the manpower, facilities and various National programmes have been presented in TABLES I to V. However impressive are the pronouncements and multitudinous the schemes, the health statistics like the infant mortality rate indicate the long road ahead to reach the minimum standards of health care. Only two examples will suffice to illustrate the point, namely the problems of MALNUTRITION AND TUBERCULOSIS.

One of the major areas of success in our national life has been conversion of the country from 'begging bowl to bread basket'. The total foodgrains production at the beginning of the First Five Year Plan in 1950 was 55 million tonnes. During the year 1977-78 the production reached over 125 million tonnes. Thus, the capacity for producing the foodgrains exceeds the capacity developed during the preceding 7000 years. However, it has been reported that 30% of school children are malnourished. Out of the 100 million pre-school children, 30 million suffer from

severe degree of malnutrition. Further several surveys have shown that the severer forms of malnutrition among children between six months to two years is common and almost 10-15% babies suffer from third degree malnutrition. The nutritional status of pregnant women is equally grim. In one study 57.5% were anemic, symptoms of vitamin deficiency were present in 11-42%. In an another study, 90% of pregnant women and 80% of nursing mothers had a calorie requirement below the minimum requirements and further 29% and 34% of the above two groups received less than 50% of the daily requirement (reviewed in detail elsewhere Srinivasa Murthy, 1979).

It is exactly a Century since Robert Koch demonstrated that 'consumption' was caused by germs. It was in the 1940s and 1950s that specific drugs became available for effective treatment. In the later part of 1950s the excellent studies of Madras Tuberculosis centre (TCC, 1959, 1960) made domiciliary treatment of tuberculosis a practicality. However, even today a large part of the open infective cases are not receiving treatment. As recent as last year, professionals noted that the TB programme in villages are 'Woefully deficient' (TOI, 1981) and called for a 'new strategy' (IE, 1981).

Further examples from general health area also point similar limitations in implementation of health programmes.

The development of mental health services, generally considered a luxury, cannot occur when more clearly 'FELT NEEDS' outlined above are not tackled effectively. The development or inclusion of mental health care as part of basic health care can occur only as part of growing strength and effectiveness of the primary health care system.

(iii) Approaches to Future organisation of Mental Health Services:

The foregoing review of the road taken by the mental health services and the current position points to two important pointers for future. Firstly, mental health care cannot develop and outpace the overall development or organisation of health and welfare services. The second point is that, the approaches suggested since 1950s whether in the Presidential addresses of IPS, or the conferences or scientific papers or the results of the pilot studies, all show that if realistic coverage (in terms of those who urgently need) have to be obtained, DECENTRALISATION and DEPROFESSIONALISATION are mandatory. This approach is not only the right way but also it will allow the country to avoid the errors of the West at the initial phases of the organisation of mental health services. The problems of disentangling the differing interests of different professionals that often limit the innovative approaches to be implemented is not a problem in our country where there are so few professionals and where the roles have not yet got crystallised. This point has been very well made by German (1975).

'the major advantage for the psychiatrist in a developing (African) country is the very paucity of previous provision for the mentally sick. Thus he does not have to expend his energies in frustrating attempts to dismantle an inert and cumersome administrative structure; nor does he have to concern himself with finding a method of absorbing large numbers of solidly built mental hospitals into a more efficient and humane psychiatric programme; there is little need for him to struggle with large armies of personnel in various categories, each preoccupied with and defensing about its own status and sancrosanct tradition and in varying degrees unwilling to change from the security of well defined roles to meet the challenges of the present and future....they have at least a fairly clean canvas on which to develop their themes'.

How can pilot ideas whether the starting of district hospitals (a measure recommended to be completed in the 1950s by the Mudaliar report but still unimplemented) or the deprofessionalisation shown to be relevant at Chandigarh and Bangalore, become a reality beyond the confines of the pilot studies. It is rightly said that the pilot studies enjoy the benefit of committed staff, [illegible] of others and do not have managerial problems. However, when it is extended at a bigger scale, problems come. One need not look too far for such experiences. The example of pulmonary tuberculosis is there to warn us to not look for quick results. It was in 1959 and 1960 (TRC, 1959, 1960) that the dramatic approach to DOMICILIARY CARE was hailed as a new way to reach all the tuberculous patients. The conclusions of this dramatic study is worth recalling;

'The findings of the present study, based on a comparison of the two types of treatment over a period of 12 months, show that despite the manifest advantages of sanatorium care - rest, adequate diet, nursing and supervised medicine taking - the merits of domiciliary chemotherapy are comparable to those of the sanatorium treatment, and that it would therefore be appropriate to treat the majority of patients at home, provided an adequate service was established' (emphasis added).

Inspite of this dramatic result and bold conclusion, we still, in 1981 and 1982 hear that there is need for a new strategy (IE, 1981) and the TB programmes is woefully deficient in villages (TOI, 1981). The failures have been 'in not providing an adequate service to be established'. In other words, Sanjivi has this to say; (The Hindu, 24.3.82).

'Therefore what we need to eradicate tuberculosis and this will apply to leprosy also is not more research, more knowledge but more commitment on the part of everyone, governments and citizens alike to create the organisational and managerial minutia needed'.

The Mental Health Plans for future, FOUR aspects need to be given importance. These are:

i. The political committment,
ii. the professional committment,
iii. the crystallisation of knowledge in mental health care,
iv. public education and involvement.

POLITICAL COMMITTMENT:

It may sound rather odd to start with political committment. What is mean by political committment? It is a committment for care, in terms of funds, recognition of importance and emphasis in deciding priorities. The importance of this aspect is emphasised by Benerji (1976) as follows:

'political forces play a dominant role in the shaping of the health services of a community, through decisions on research allocation, manpower policy, choice of technology and the degree to which the health services are to be available and accessible to the population, for instance'.

Other professionals working in the organisational aspects of health care and other services in the country have been led to the realisation of what can be referred to as 'the political will'. Swaminathan of the planning commission had this to say in a recent TV interview 'any amount of professional skill cannot replace the political will'.

The political will or the social committment will influence in terms of money allotted, the quality of care, the importance given to the work by the public and professionals in a myriad ways to make the programmes popular and acceptable. The record of the 'political will' in the mental health area, taking the amount of money committed to mental health in the health plans and five year plans speak of low priority. This has to change. May be that the professionals have been too preoccupied with clinical questions to speak the language of care in terms of lost productivity and social burden, which appeal to the planners. It is time this matter received adequate attention. The repeated failures and long delays to get the legislative changes also speak of how the people who matter look at urgent mental health needs. Whether we call it political will which is influenced by hobbying or education, we need to urgently give due importance to it.

THE PROFESSIONAL COMMITTMENT:

The review of the work of the professionals provide an idea of the professional committment. The necessity of the roles of professionals to be different is clear when we consider decentralisation and deprofessionalisation. The whole new approach can fail and no positive results reacher, if the professionals (i) set up 'artificial' rigid boundaries between different mental health personnel, (ii) do not devote enough of its efforts to this area of work in terms of sheer manpower, time and research efforts, (iii) do not break the barriers about drug utilisation by the health personnel of different categories.

Each of these and other resistances of professionals, till now considered a super speciality to become a basic health service, similar to Malaria or family planning will be real. These heart burns, doubts failures and frustrations have been faced boldly and squarely. A change in the outlook to accept this as the REAL ALTERNATIVE rather than a second rate method is vital. How can this occur? This can results by professional efforts to crystallise mental health skills and tasks and in the long run by a new generation of professionals growing up with these ideas. All this calls for wide discussion, sharing of ideas, critical appraisal of pilot schemes and inclusion of community mental health skills in the training phase of the professionals.

ADVANCES IN MENTAL HEALTH KNOW HOW:

The third and very vital development is the crystallisation of the knowledge of mental health care. It is to be recalled that the domiciliary care of tuberculosis was demonstrated scientifically before the care moved out of the walls of sanatorium. Similarly for mental health care we have to devote research efforts to define the essentials of care of clinical problems in terms of recognition, referral, treatment schedules and intervention strategies. This is a big lacunae at present in all deprofessionalisation programmes. The needs are protein and they have to be given the most stringent consideration so that tasks are not defined in an adhoc manner but based on sound scientific facts. They should not be based on isolated experiments but based on sound research efforts in setting as similar to the field setting as possible. Some of the areas for such consideration are outlined below:

> 'Clinical research as to the needed range of drugs, dosage and duration, role of ECT have to be defined in clear terms, if mental health care has to become part of general health services. At present, the clinical issues of what psychotropic drug to use, how much dosage and for how long varies among professionals. Often these are not based on any concrete clinical evidence of factors like early response, decreased relapse rate or lower side effects, though these issues are not vital when

specialists are dealing with limited clientele in specialised institutions, they can decide the success or failure of the national level programmes involving nonspecialists. Specific issues like: (i) the relative effectiveness and safety of phenothiazines and ECT for acute psychoses and depression, (ii) the differences in the rate of relapse when the initial treatment for psychoses or depression is 3 months as compared to 6 months to one year, (iii) the relapse rates for epilepsy when the treatment is stopped after one, two, three, four or five years after the last fit, (iv) the methods of public education and (v) cost effectiveness of rehabilitative efforts with chronic patients. The number of areas that can be taken up similarly are many' (Srinivasa Murthy, 1981).

It is gratifying to note that the ICMR, New Delhi has decided to set up an Advanced Centre for Community Mental Health Research. This Centre should give the above issues top priority so that standard and generally acceptable methods of care become available.

It can be said that these i.e. knowledge alone will not be enough. But no one can doubt the need for a sound knowledge based for future and large scale planning.

PUBLIC EDUCATION AND INVOLVEMENT:

The general public form the next vital link in the organisation of mental health services. This recognition has been the reason for the high priority given in health programmes for health education. Public awareness needs to be mobilised at many levels; (i) correcting the erroneous beleifs and exploitation by oppurtunists to be stopped; (ii) to act as a pressure group to bring about the political committment and (iii) to act as watch bodies on professionals, lest the professionals pursue their isolated needs and concerns rather than matters of greater importance to the public.

The involvement of the general public will have to be by (i) public education by traditional methods like meetings, pamphlets, use of mass media etc., (ii) organisation of mental health associations and (iii) ex-patients clubs etc. so that they continuously support and supervise the growth and direction of mental health services.

TO CONCLUDE THE REVIEW OF THE EFFORTS AT ORGANISATION OF MENTAL HEALTH SERVICES IN THE LAST 40 YEARS GIVES US, THE LONG DISTANCE THE PROFESSION HAS TRAVELLED AND THE APPROACHES ADOPTED. IT ALSO OUTLINES THE TASKS AHEAD AND THE SCOPE FOR IMMEDIATE ACTION. THE CURRENT SITUATION RAISES HOPES OF POSITIVE RESULTS IN THE NEAR FUTURE. THE TIME SEEMS RIPE FOR CHANGES AND WITH THE INVOLVEMENT OF PUBLIC PROFESSIONALS AND PLANNERS AND BY WORKING OUT A LONG TERM PLAN, MEANINGFUL RESULTS CAN BE SEEN IN NEAR FUTURE. THUS, IT MAY BE APPROPRIATE FOR US TO CONSIDER THIS AS BEING ON THE THRESHOLD OF ORGANISING BASIC MENTAL HEALTH SERVICES WITHIN THE NEXT TWO DECADES WITH MINIMUM OF INPUTS. HERE POSSIBLY LIES THE ROAD 'TO REACH THE UNREACHED'

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APPENDIX

TABLE I

ESTABLISHMENT OF PRIMARY HEALTH CENTRES AND SUBCENTRES IN INDIA

	PHCs	Subcentres
First Plan	67	
Second Plan	2565	
Third Plan	4631	
INTER-PLAN PERIOD 3 Years		
As on 31.3.1967	4793	17 521
As on 31.3.1968	4946	21 539
As on 31.3.1969	4919	22 826
IV th Five Year Plan		
As on 31.3.1970	5015	23 527
As on 31.3.1971	5112	28 489
As on 31.311972	5183	28 167
As on 31.3.1973	5248	31 034
As on 31.3.1974	5283	33 509
Vth Five Year Plan		
As on 31.3.1975	5293	33 616
As on 31.3.1976	5328	34 088
As on 31.3.1977	5380	38 110
As on 31.3.1978	5400	38 115
VIth Five Year Plan		
As on 31.3.1979	5423	40 124

TABLE II HEALTH INFRASTRUCTURE IN INDIA

Name of Programme	Position on 1.4.1978
1. Minimum Needs Programme	
(i) PHCs	5 430
(ii) Sub-Centres	38 594
(iii) Rural Hospitals	126
(iv) Subsidiary Health Units	258
(v) Mobile Units	124
II. Communicable Diseases Control programmes	
(a) Filaria Control Programmes	
(i) Control Units	148
(ii) Survey Units	17
(iii) Filaria Clinics	23
(iv) Rural Filaria Control	3 Districts
(b) National Smallpox Eradication Programme	
(i) Primary Vaccination(in million)	318.46
(ii) Re-Vaccination (in million)	1163.33
(iii)	
(c) Leprosy Control Programme	
(i) Control Units	371
(ii) Upgraded Units	147
(iii) S.E.T. Centres	5 770
(iv) Urban Leprosy Centres	405
(v) Reconstructive Survey Units	64
(vi) Training Centres for Paramedical staff	40
(v) Temporary Hospitalisation Wards	165
(d) Tuberculosis Control Programme	
(i) District T.B. Centres	311
(ii) T.B. Isolation beds	42 500
(iii) Demonstration Training Centres	17
(e) Cholera Control Programme	
Cholera Combat Teams	41
(f) Trachome Control Programme	
Blocks/PHCs	4 591
(g) Prevention of Blindness Programme	
(i) Mobile Units	15
(ii) PHCs	700
(iii) District Hospitals	100
(iv) Medical colleges	8
(v) Regional Colleges/Institutes	4
(iv) National Institutes	1

TABLE III

INVESTMENT IN HEALTH AND FAMILY WELFARE IN FIVE YEAR PLANS

PLAN	Investment on Health (crore rupees)	Percentage of total investment in Plan	Investment on FP (crore rurppees)	Percentage of total Investment
First (1951-56)	64.6	3.3	0.65	0.03
Second(1956-61)	135.8	2.9	4.97	0.11
Third (1961-1966)	223.9	2.6	26.97	0.31
Annual Plans (1966-1969)	140.2	2.1	82.93	1.25
Fourth Plan(1969-74)	335.5	2.1	285.76	1.81
Fifth(1974-1979)	528.4	1.7	285.65	0.96
Draft 1968 Sixth Plan	1263.4	1.8	765.00	1.08

TABLE IV

MEDICAL MANPOWER IN INDIA,1978

Number of doctors registered with medical councils(1978)	235 631
Registered dentiats(1978)	74119
Registered Homeopathic practitioners(78)	151 137
Registered Practitioners of Indian Syst. of Medicine (78)	273 641
Registered Pharmacists(78)	107 452
Registered Nurses(77)	120 412
Registered ANMs (77)	55 656
Registered Health visitors (77)	76618

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Table V:V Health Care Services in India - Plans and Priorities

(In millions)

		Plan priority programmes	Allocation
I	1	Water supply and sanitation	490.0
	2	Primary Health Centres, Hospitals & Dispensaries	250.0
	3	Control of Communicable Diseases	231.8
	4	Education and Training	216.0
	5	Family Planning	4.0
	6	Indigenous system of Medicine	7.0
	7	Other Schemes	202.0
II	1	Water supply and Sanitation	760.0
	2	Control of Communicable diseases	640.0
	3	Primary Health Centres, Hospitals & Dispensaries	360.0
	4	Education and Training	360.0
	5	Indigenous system of Medicine	40.0
	6.	Family Planning	30.0
	7	Other schemes	60.0
	8		
III	1	Water supply and Sanitation	720.0
	2	Control of Communicable diseases	690.0
	3	Primary Health centres, Hospitals & Dispensaries	370.00
	4		
	4	Education and Training	350.0
	5	Family planning	269.7
	6	Indigenous system of Medicine	40.0
	7	Other schemes	50.0
IV	1	Water supply and sanitation	4,970.0
	2	Family planning	3,009.3
	3	Control of communicable diseases	1,270.0
	4	Education and training	982.0
	5	Primary Health centres, Hospitals & Dispensaries	882.9
	6	Minimum Needs Programmes	764.9
	7	Indigenous system of Medicine	158.3
	8	Other schemes	276.9
V	1	Water supply and Sanitation	10,220.0
	2	Minimum Needs Programmes	2,914.7
	3	Control of Communicable Diseases	1,686.1
	4	Primary Health Centres, Hospitals & Dispensaries	1,552.8
	5	Medical Education and training	945.6
	6	Indigenous system of Medicine & Homes	280.7
	7	Training programmes	172.0
	8	Other Schemes	408.7

SOURCES: 1. Central Bureau of Health Intelligence, Directorate General of Health services, Government of India, Pocket Book of Health Statistics of India, 1976.

2. Government of India Planning commission, Draft Fifth Five year Plan. Excluding Union Territories.

TABLE VI

MENTAL HOSPITAL STATISTICS(1971-1978)**

STATE	BEDS	HOSP.	ADMISSIONS 1971	1972	1973	1975	1976	1977	1978
A.P.	900	2	1463	1793	1828	2039	939*	2481	1293*
Assam	1000	1	1137	***	1650	1715	1601	1407	1287
Bihar	2117	3	4677	4269	4499	4216	5338*	6012*	7277*
Gujarat	538	4	305*	377*	456	472	486	313*	301*
J & K	175	2	913	891	10055	604*	1141*	1111	1094
Kerala	1298	3	7096*	4752*	7730	6746	7420	9489	8540
M.P.	307	2	554	675	570	677	805	730	889
Maharashtra	5675	5	4421*	5771*	4805*	5524*	5264*	5368*	5877*
Karnataka	1260	2	3806	552*	5107	6342	7193	8395	9453
Orissa	60	1	797	927	971	976	1015	1080	1177
Punjab	811	1	418*	***	***	542	972	519	1193
Rajasthan	365	2	1995	1963	402*	346*	2379	2431*	2296*
T. Nadu	1800	1	1480	1334	***	1382	1439	1615	1794
U.P.	1495	4	805	818	882	224*	1197*	440*	474*
W. Bengal	900	6	328*	286*	472*	1326	1704*	1989*	1393*
Goa	350	1	1087	***	1052	1278	1335	974	1268
Delhi	285	1	572	***	***	68*	***	754	***
Total	19326	41	32064	44346	31429	34457	39848	45108	45606
No. Reporting data			32	27	29	33	33	32	30

* DATA INCOMPLETE *** NO INFORMATION

** FROM POCKET BOOK OF HEALTH STATISTICS IN INDIA - 1975, 1976,1978.1979.

MENTAL HOSPITAL INDIA (Year of starting in the brackets)

Bombay (1945); Calcutta (1787); Bhownipur (1817); Ranchi (1918); Madras (1793); Yerwada (1795); Patna (1821); Ranchi (1925); Varanasi (1809); Waltair (1863); Jaipur(1864); Agra(1869); Trivandrum (1871) ; Calicut (1872);Tezpur (1876); Ratnagiri (1886); Baroda (1898); Thana (1902); Yervada(1913); Trichur (1914); I.M.H. Calcutta(1922); Indore(1927); Gwalior(1935); Bangya Unmad(Calcutta)(1935); Bangalore (1937); Jodhpur(1940); Lumbini Park, Calcutta(1940), Bharnagar(1942); Jaipur (1944);Amritsar(1947); Hyderabad (1953); Srinager (1958); Jamnagar (1960); Chandra (1966).

NO MENTAL HOSPITALS IN HARYANA H. PRADESH MANIPUR MEGHALAYA A&N island, ..PRADESH,CHANDIGARH, MIZORAM, PONDICHERRY, and LAKSHDWEEP.

TABLE VII

MARKET SHARE OF VARIOUS DRUGS (Hathi Committee Report)

1973 data

CATEGORY OF PRODUCTS	1973 %
TRADE SALES:	
Antibiotics	19.9
Vitamins	11.7
Cough and Cold Preparations	5.5
Haematinics	5.3
Tonics and Health restorers	5.2
Harmones	4.8
Dermatological Preparations	4.1
Analgesics	3.8
Anti-diarrheals	3.1
Anti-rheumatics	3.1
Dietitics	2.6
Enzymes and digestants	2.5
Cardio-Vascular drugs	1.8
Anti-Spasmadics	1.8
Psychotherapeutics	1.7
Opthalmologicals	1.7
Antiasthmatics	1.6
Amoebicides	1.5
Anti TB Preparations	1.4
Antacids	1.4
Anti-histaminics	1.4
Sulphonamides	1.3
Sales to Govt.Hosp. and Doctors	15.9
	100.0

It is to be noted that the currently produced drugs in the area of psychotherapeutics is very limited. Any plan to extend services will call for enhancing the production and distribution system.

MH-6.

Mental Health Issues in Women

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INTRODUCTION

Proper understanding on mental health issues in women is very important for an effective counselling. Women psychologists are providing new analytical tools and insights to gain analytical vision to understand mental health issues of women. Women's Movement has provided fresh inputs in terms of individual and group counselling, popularly known as "Consciousness raising" exercise, a form of mutual counselling that enables women as a group to share experiences, problems, feelings, dreams, utopia and action plan for rebuilding shattered lives. This process of attaining feminist consciousness allows women to recognise that what they perceive as personal problems are shared with others in a non- threatening and non-power oriented atmosphere. It also enables women to realise what they think of as resulting of living in patriarchal society. "Consciousness raising can be seen as enabling women to overcome false consciousness."[1] It empowers women to come to a realisation of their own potential, makes them autonomous, self–dependent in their decision-making power and emotionally self-reliant. It is an ongoing process that brings about personal and collaborative change as opposed to structural change. The need for small groups/ informal group discussion is emphasised in this method.

Manifestations of Depression:

Depression in women manifests in headaches, sleepless nights, constant tension, detachment, irritability, loss of appetite, dryness of mouth, fear, self-blame, lack of concentration, lack of interest in any kind of activity. Although chronic headaches may not be psychosomatic, they can be caused by depression or anxiety. Thus, counselling can help you identify and address emotional concerns and should be considered as part of your treatment."[2] There are two types of stressors leading to mental disorder. Biochemical stressors are hormonal fluctuations at the onset of puberty, pre-menstrual phase, post partum phase and menopause. According to Dr. K Ravishankar, "Estrogens have an effect on brain chemicals like serotonin and nor epinephrine that are involved in headaches. An imbalance in serotonin levels has, in fact, been implicated in disorders like migraine and depression."[3]
Psychosocial stressors originate from the external social environment such as women's inferior social position, lack of power, homelessness, economic hardships, man-made or natural disasters. They create learned helplessness (women's seeming passivity in the midst of crisis such as domestic violence, accidents, etc) and reduce motivation to lead an active life. Stress related mental health issues are illness in the family, death of one's spouse, divorce, accident that might reduce or destroy women's ability to shoulder responsibility. After marriage, women get displaced which brings about cultural loss and bereavement, loss of social networks and supports, loss of traditional healing sites. Psychological stages through which women pass are –enduring, suffering, reckoning, reconciling and normalising. The

successful completion of therapeutic cycle depends on how conducive the physical and emotional systems are. Sometimes hysteria can also open up more opportunities and increased freedom/space with added costs. Women cope with tension by crying, talking it over, praying and engaging in creative work-music, art-craft-reading-studies-community work, team building.

Approaches to Mental Illnesses:

Universalist ETIC approach uses diagnostic categories of mental illnesses such as neurosis, schizophrenia, psychosis, mania, phobia, paranoia so on and so forth. Psychiatric labelling does not take cognisance of material reality faced by women on a day-to-day experiential levels. It obscures social reality such as riots, natural disasters, fire and accident while dealing with phobia among women. While working with women victims of riots, we should know that their phobia about men has a basis in the fact that they have witnessed killings and rape. Hence, medicalisation of mental health in the Draft National Health Policy 2001 has been criticized by women's groups providing support to women in mental distress.[4]

EMIC approach emphasises cross-cultural psychiatry and evaluates phenomena of mental illness from within a culture. Traditional treatment of the mental illness used to be meditation, yoga, group-singing and listening to a discourser. A Culturally sensitive counselling on mental health consequences of trauma take into consideration women's socio-cultural environment.

ETIC-EMIC debate gave way to new cross-cultural psychiatry where the emphasis lay on the different contexts of mental illnesses in different cultures, not on bio-medical categories. Now, there are no two opinions about the statement that psychotherapy should keep into consideration multicultural aspects of women's existential reality. [5]

Psychiatrists use chemotherapy i.e. administration of anti-depressants and sedatives, shock therapy which induces shock, with or without convulsions, in a patient by means of insulin or electric current through brain. Individual psychotherapy includes hypnosis, suggestions, supportive therapy, re-education, desensitisation and other forms of consultation, group psychotherapy, family therapy and psychoanalysis.[6]

Four phases of Healing Cycles[7] are:
1.Enduring- anxiety, grieving and loss of past
2.Acceptance- reality testing, preparedness and reckoning of the future reconciling, evaluation of self and resources, recuperating
3.Recovery-rebuilding life, maximising options, setting new goals, healing
4.Normalising-stability and routines, building relationships and community

Unequal relationship between professional counsellor, who is UP THERE and the seeker, who is DOWN BELOW creates a communication gap. In case of women, this inequality is compounded by subjugation of women by the patriarchally structured psychiatric system. Focus on 'feminine qualities' pathologises all physiological changes of a woman, in childhood, adolescence, reproductive age and menopause.

Philosophical basis of psychiatry as a bio-medical discipline prevents the mental health professionals to take into consideration larger reality and macro issues resulting from socio-economic and political factors. Psychiatry focuses on treating the individual symptom while ignoring the disease. 'Diagnosis' frequently arouses protests of indignation about labelling people as ill and treating them as impersonal objects.[8] Limitations of bio-medical perspectives lie in their narrow focus on somatic and psychological factors in their diagnostic efforts, ignoring the impact of socio-cultural and socio-demographic factors. In India, the focus is more on the treatment of the illness, not on preventive and promotive efforts. Marginalisation of mental health concerns results from the understanding that mental distress is a manifestation of an individual problem, not directly related to social oppression and not common to all women.[9]

Worsening Socio-economic and Political Situation and Mental Health of Women:

Experiences from both industrialised and developing countries have revealed that the prevalence of common mental disorders or minor psychiatric morbidity is high among the urban low income and marginalized population. Women among them are even more vulnerable. Globalisation, structural Adjustment Programmes, increasing conflict with neighbouring countries and ongoing sectarian violence on caste, ethnicity and communal lines within the country[10] have put the population of our country at high risk of mental illnesses.[11] Alert India is a large NGO with 550 community workers working among the marginalized sections of Mumbai metropolis. Their women health workers found that women who have to deal with financial hardship, experience tremendous stress. Moreover, women within community are affected differentially depending on their own place in the Indian socio-economic hierarchy. In this regards, female-headed households are most vulnerable to mental distress. The mental health professionals are only geared for the episodic disasters and not the enduring disasters. Hence, there is a need for interdisciplinary mental health interventions.

Professional counsellors act as facilitators in Self Help Groups (SHGs). They use the technique of mutual counselling to identify areas of strategic interventions.

Need for Culture Specific Approach in Counselling:

Respect for basic human rights demands that the counsellor addresses the issues concerning cultural mindsets and behavioural variety that determine women's mental responses to tragedies. If this variety is not appreciated, counselling will end up being reductionist and homogenising. Here the soft wear is not formal education, but life. Mental health of women victims and survivors of tragedy demands multifaceted approach. Individual counselling by the professional counsellor can be helpful in breaking ice. At the same time, women with similar experiences can empower each other by narrating their problem areas and finding solutions.

Patriarchal biases of the Mental Health Establishments:

The mainstream mental health professionals are unable to impart the required counselling to women due to misogyny. Stereotypical understanding about women's role in the family and society governs their psyche and if the so-called "mentally ill" woman does not fit in that mould, she is declared 'socially incompetent' woman. Witch hunting of lesbians by the mainstream psychiatrist is

so strong that even All India Institute of Medical Science has a special package for counselling, "to correct deviant behaviour" of the lesbians. Subordination-domination relations between men and women are re-emphasised in the mainstream counselling.

Sexual Violence and Mental Health:

Sexual assault, molestation, rape, sexual harassment at workplace, child sexual abuse, nuisance calls cause psychological disturbances among girls and women. The trauma of sexual violence sparks off tension and anxiety at a dangerous level. Their mental health problems are manifested in anxiety, fear, avoidance, guilt, loss of efficiency, lack of coordination, depression, sexual dysfunction, substance abuse, relieving the traumatic incidents through memory, suicidal attempts, eating disorders, disturbed sleep patterns, fear of encountering such situation once again. It is found that " women who undergo extreme sexual violence experience a loss of self and self-esteem following the shock inflicted on them. When there is a continuous period of traumatic stress, it becomes chronic, lessening the individual's ability to do any kind of constructive work." [12] Hence, this forms of male violence towards women is an important issue that demands public attention. Women's organisations have taken up this issue at a local, national and global level.

Domestic Violence and Mental Health of Women:

Discourse on mental health of women in the family situation gained serious consideration in the context of campaign against violence against women.[13] In domestic violence situations, predicament of women is determined by their position in power-relations vis-à-vis the rest of the family members. Many social work researches which attribute deviant behaviour of adolescent girls to their working mothers guilt trip women by narrowly focussing on single parameter[14] and ignoring factors such as peer –pressure, media, overall standards of morality in our society and power relations in the nuclear/ joint family. Such researches are used by some counsellors to cage women into domesticity and divert the attention from generation of genuine support system for developmental needs of the daughters of working mothers. Women's rights organisations which are doing support work for women in distress have started giving due importance to counselling.[15]

Adolescent Girls and Counselling:

The most mind-boggling problems faced by adolescent girls are decision-making in the day-to-day life, self- dependence and career. Rapid changes in the socio-economic and cultural reality, parental expectations, values and norms, rising levels of competition and pressure during examination time and a break down of traditional family structures are factors that accelerate this alarming trend.[16] Examination related anxiety results into sharp rise in girls hurting themselves deliberately, leaving homes or killing themselves. Fear of failure is a root cause of all qualms. Large number of students and their parents are seeking professional help. Consulting a psychiatrist is no longer a taboo as the psychiatrist responds to cries for help from a crippling academic burden. According to them, we have more problem parents than problem children. Providing good and healthy role models is very important. Parents who want their children to develop high self-esteem should make it a point of treating them with respect and dignity. Concept of fiscal hygiene is important for girls to understand the value of clean money earned through hard

work. Today's adolescent girls are at the crossroads. But every crossroad leads to new roads. Information revolution has made adolescent girls more aware and precocious. They have to enhance their knowledge base. Broadening one's personal horizons is a sure way of tackling the crisis within oneself. Today's girls find the values instilled in them since their childhood, hollow in real life. Romance is found utilitarian and consumerist. The economic security is bleak, emotional security is becoming a victim of uncertain times. Globalisation has led to the emergence of apparently homogeneous life-styles, necessities and comforts through media-images, whereas the reality of life is pathetically at variance with resources required to maintain such a life. This has further deepened the crisis of the youth. Dictatorial atmosphere in the family, educational institutions and in the community life, make adolescents feel left out of the decision-making processes affecting their lives. Hence it is very important to understand that,

" Inclusion is trend,
Such as democracy,
Freedom and justice for all.
All means all,
No buts about it.
Inclusion is opposite of exclusion.
Inclusion is no to boycott.
Inclusion is a battle cry.
Challenge to the parents,
Child's cry for his/her existence...
For welcome, for embrace,
To be remembered fondly...for award
For gift of love...like surprise,
Like treasure.

Inclusion means clean game,
General knowledge, courtesy, hard work.
Inclusion is great in its simplicity,
And surprising in its complexity.
Instead of investing in jails, mental asylums, hospitals, refugee camps,
To canalise resources for creating true homes,
True life, true human beings...
For humanising life.

Marsha Forest

Both in private and in the public spheres, we need to give more space for development to the adolescent girls.

Counselling for Substance Abusers:

Support resources for substance abusers are counsellor, family members, significant peers and school or treatment staff. Group therapy is an effective intervention method with abusers. It facilitates the process of recovery of addicts.[17] Sharing of experiences by the abusers shows them ways to empower each other. Self-help groups of abusers are more effective as they avoid problems generated due to different wavelengths.

Counselling for HIV-AIDS Patients: This is very important issue faced the 21st century. Counselling for dealing with social stigma and creating an alternate

support network are the most important aspects of providing emotional support to the HIV-AIDs patients. The Lawyers Collective HIV/AIDS Unit holds monthly drop-in meetings, with an objective of sharing information, experiences and resolve mind boggling issues affecting the lives of HIV/AIDS patients. It also provides legal aid and allied services to the needy. " The main objective of the Unit is to protect and promote the fundamental rights of persons living with HIV/AIDS who have been denied their rights in areas such as healthcare, employment, terminal dues like gratuity, pension, marital rights relating to maintenance, custody of children and housing."[18]

Electronic Media and Mental Health:

People are inside the T.V. because there is vacuum outside the T.V. Different standards of morality for men and women; are created by the film, television serials and advertisement industry. Boys and men who watch pornography are always on the look out for innocent adolescent girls. These girls are the victims of pornography, blackmail and physical/psychological coercion. Adolescent girls working, as domestic workers don't have any emotional support, as there are hardly any television and radio programmes for non-student urban youth. Dehumanisaton of women can be prevented by promotion of women's agency in the media so that women can lead intellectually, psychologically and emotionally self-sufficient life.

Counselling in the Shelter Homes for Women:

The most promising solution to confusion and disorientation among the women inmates of shelter-homes is a democratic space for brainstorming as autism is one of the main problems faced them. Informal set up is more congenial to their personal and career counselling. Workers at the shelter homes for women and girls need to be made to understand that behind every behaviour, there is a story. It is important for them to know the story. Panel of psychotherapists and psychoanalysts in the shelter homes should also conduct the staff development programme so that the staff can handle post trauma stress disorder among the inmates with empathy rather than resorting to victim blaming.

Mental Health and Reproductive Rights of Women:

Societal attitude towards Indian women as son-producing machines creates painful mental problems for women. Woman's body is de-linked from her subjectivity. Pre menstrual syndrome (PMS) and Post Partum depression (PPD) are regarded as general complaints concerning women's reproductive abilities. Weapon of Pre menstrual syndrome as a debilitating factor has been used to run down women in the family and at the workplace. PMS is a political category, which conveys that biology is destiny for women. Instead of focusing on the genuine issues concerning premenstrual discomfort in terms of fatigue, headache, cramps, headaches resulting in to depression and crying spells, PMS provides reductionist and reactionary explanation for women's discontent. Women don't have right to decide, how many children should they have and at what interval. New reproductive technologies (NRTs) have robbed women of their individuality and reduced them into spare parts for either scientific experimentation and/or sale. NRT values women only for their ovaries, uterus, foetus, that too for production of male progeny. NRTs have caused tremendous psychological burden on women in the arena of sexual activity for

procreation or only for recreation without procreation with the help of contraception or abortion. Researches over last 3 decades have highlighted mental problems associated with repeated induced abortions, long acting hormone based contraceptives or conception inducing drugs.

Instead of using humane healing techniques of music, fragrance, get to gathers to deal with discomfort during pregnancy and post-partum depression, bio-medical intervention of giving tranquillisers and electro-convulsive therapy are promoted by the psychiatrists. This is the most vulgar example of the medicalisation of the natural processes of women's bodies. Gender sensitive training programmes should be organised for medical officers of primary health centres and women health workers adopting perspective promoted by the UNFPA.[19]

Menopause and Mental Health of Women:

Many psychologists have attributed harassment of daughter in law by her mother in law to menopause. But it is not true for all women. Many women find staying with their in-laws a liberating experience. It all depends on how society and family treat an aging woman. Pathologisation of menopause and negative attributes given to "old hag" *(sadeli buddhi)* experienced by women are responsible for identity crisis and depression among women during this period. Here, the role of counsellor is to recommend activities for self-actualisation and a healthy diet and vitamin supplements to menopausal woman. Exercise is very important to increase conversion of androgens to estrogens.

Women and Epilepsy: Disability and impaired quality of life caused by epilepsy can be reduced by "psychiatric and psychosocial referral counselling on how to live with refractory seizures and advise on vocational rehabilitation."[20] Persecution and discrimination against epileptic women should be prevented, by giving scientifically accurate public education through mass media. For the curriculum of community workers training programme, module on epilepsy, seizure and convulsion should be incorporated.

Mental Health of Women Senior Citizens: Geriatric care is an important area in counselling. The most talked about problem concerning mental health of elderly women is dementia i.e. "loss of cognitive functioning, memory, language abilities, abstract thinking and planning".[21] Dementia is often reversible. Irreversible dementia can arise due to amnesia , Hutington disease and Alzimer's disease(AD). Modern medicine treats this problem with estrogen replacement therapy, non-steroidal anti-inflammatory drugs and vitamins. Feminist senior citizens deal with mental problems of elderly women by providing spiritually rich and emotionally and intellectually stimulating group life to them. Discourses, singing, outing, social service, meditation and mutuality and reciprocity in human relations make great contribution towards their mental health. Vardhana, a group of feminists has defined women above 60 years of age as "Women of Age" and has provided a democratic and development oriented platform to Women of Age.[22] As the age structure of society is changing due to small family norm and increase in life expectancy of women, the state and civil society institutions will have to pay serious attention to geriatric care and come up with constructive schemes and programmes. There should be increase in the budgetary provision for senior citizens.

Mental Health of Women in the Mental Hospital :

A fire in Moideen Badusha Mental Home in Erwadi, Tamilnadu, on August, 6, 2001 which killed 28 inmates who were chained to their position, hence could not run away, has once again invited attention of all concerned citizens to the condition of women in the mental homes. Surviving women patients of the tragedy were transferred to the Institute of Mental Health in Chennai. Now, they are no longer in chains but their condition is not different from their earlier home.[23]

Pathologisation of women by using diagnostic labels is a major cause of stigmatisation and ostracism of women. Women's groups are demanding that pegion-holing of people into set slots must stop. Interaction with the mental health professionals is used by the family members and the community; to declare the concerned woman "an unfit" to live in the family or to be a parent or to function as an autonomous individual or to take up a job. Husband's family uses the episode of "mental disorder" to dispose her of or debar her from property right or right to live in a matrimonial or parental home. "Madness certificate" of the mental health professionals are used by husbands/ inlaws to divorce, desert or throw out wives from their matrimonial homes. Women are admitted in the mental asylum as per the directives of the Mental Health Act, 1987and Lunacy Act, 1912.

Saarthak, a voluntary organisation has filed a petition in The Supreme Court (WP © 334/2001 with WP © 562/2001) requesting the apex court to issue directives banning direct Electro-convulsive Therapy (ECT), popularly known as SHOCK therapy in the mental hospitals, psychiatric nursing homes and government/municipal hospitals with psychiatric wards. [24] Several groups have started signature campaign in support of the petition.

Once dumped in a mental asylum, it is impossible for her to get out of it even after complete recovery. " Women in the mental hospitals have fewer visitors, are abandoned or tend to stay on longer than men within the institution. There are fewer voluntary patients among women than among men. Even in adjudication for a woman's institutionalisation, the official discourses are often coloured by the sex role stereotypes that the judges, police officials and the staff in mental hospitals uphold."[25] Remarks of a social worker after the visit to the mental hospital are apt, " The interaction with female patients made me sadder. Almost all of them were abandoned/ dumped by families or the police and court got them admitted after they hit the rock bottom. Most of them were forced to face violent situations in their lives and had painful and atrocious account to tell. In many cases, one could see (although without an in-depth study, one can not claim and prove) that the mental distress, ill health had its roots not in a person's biology or psychology, but in society, in our social environment". [26]

Iron wall of secrecy about the administration of drugs, surgery and ECT and their side effects needs to be condemned by the citizen's initiatives and ethical medical practitioners. The long lasting side effects of biomedical approach need to be highlighted. Our mental hospitals need to focus on psychotherapy and counselling which involve therapies that produce positive results and no negative side effects. Long term stay in mental hospital leads to chronicity. Hence there is a need to promote "half- way homes, hostels and most importantly, the treatment of women patients in their family settings through follow up visits by nurses and social workers." [27]

Psychological Problems of Women in the Police Custody and Prison:

Activists working on prison reforms have demanded humane code-of-conduct for governance of police custody and prisons, so that the inmates are not afflicted with permanent psychological scars. Solitary confinement of women prisoners takes away verbal articulation from them. Inter personal violence among prison inmates can be reduced by counselling, group discussions and creative expressions. Women political prisoners should not be forced to stay with hard-core criminals in the custody or jail.

Role of Support and Self-help Groups (SHGs): SHGs provide democratic space for rebuilding broken lives. Non-power oriented special interest groups provide stimulus for canalisation of creative energy. Mutual counselling focussing on experience sharing without preaching or giving sermons can help psychologically distressed women reorganise their life and enhance their potential. Speak Out Centres can provide platform for Community mental health intervention. Here comes the endorsement from an expert, "At the height of feminist activism in the 1970s and 1980s, there was excitement in the air as women shared experiences about themselves, their families, their lives and encounters. The growth of women's confidence and self esteem knew no bounds as they challenged established theories about law, work, justice, equality and medicine. They talked late into the night, wrote pamphlets, stuck wall posters, spoke at public meetings, filed writ petitions. They felt reassured that theirs was not an isolated or individual problem. The group's endorsement and sharing of painful experiences perhaps did much more for mental health than all medicines in the expert's books. The women's movement helped avert many breakdowns."[28] Enduring therapeutic engagement at community level can be group singing, festival celebrations, discourses on women's issues and public meetings.

Developmental Input: Cosmetic counselling offered by agony aunts is of no use. Breakthrough counselling is need of an hour. To make women's material reality more secure, liberating and healthy is the only alternative to get out of repeated attacks of mental illnesses. Developmental counselling aims at removal of chronic conflict situation in women's lives that is associated with high mental health morbidity. It is more than a remedial service. It believes that involvement, readiness and commitment on the part of the counsellor are necessary and basic conditions for counselling success."[29] It is concerned with the development and facilitation of human effectiveness. It increases self-direction and evolves better problem solving and decision-making abilities. This is the central axis around which feminist therapy or counselling revolves. It emerged in the wake of the women's movement as an alternative to hegemonic patriarchal mental health establishments that depended on bio-medical approach to deal with the innate feeling of unhappiness in women. At the same time to evolve safety nets in the community and criminal justice system for protection from physical abuse. Budgetary allocation for medical aid to treat mental illnesses of women should be enhanced. Mentally ill women need legal protection in terms of property rights and right to dwelling place. We need to create protective environment in personal and public life to prevent mental illnesses among women. E.g. efforts to prevent man-made disasters such as riots, loot, rampage. Mental illnesses result into deskilling of the individuals concerned. Hence, there is a need to evolve a plan of action for the re-skilling based on their preferences and abilities. Half way homes should be created where the mentally ill women can do productive work during the day and go home in the evening. After

the recovery from the mental illnesses, they should be employed.[30] Financial security helps in rebuilding their sense of self-esteem. The most successful healer is one who avoids victim blaming and provides patient listening.[31] After talking / catharsis, the seeker feels better. Girls and Women with communication disability need special help.[32] At the same time, "Reversing the process of alienation by consciously building community networks is a must. Mental health professionals should be seen in the community rather than in the secure institute or clinics." avers a well known psychiatrist, Dr. Harish Shetty. [33]

Training Programmes on Counselling: Sensitization and training of general practitioners and other health personnel to mental health, particularly, minor psychiatric morbidity (anxiety-depression) is a must. There is a need for social counsellors at health posts and public hospitals who are in touch with NGOs providing institutional support to women in social distress. Sensitization of teachers, community workers, youth groups, women's organisations is extremely important. Training sessions for professional and para-professional volunteers should focus on supportive networks, group cohesion and solidarity. Training should include modules on interviewing skills, history taking, mental status examination. Electronic and print media should be trained in sensitising the general public about psychological response to violence and providing information about referral services as women and children affected by domestic violence, man-made or social disasters have special psychological needs.

Counselling ought to make women more aware about their problems and the oppression they face. Therapy can provide alternatives to deal with their problems. Counselling can be used to bring to the fore the cognitive facility required to recognise danger and threat to life, to assess the options and to leave if necessary, among women victims of violence. Counsellor's have become astrologers. Counsellor should be proud with the arrogant and humble with the courteous. Don't do only supportive counselling. At times, you need to provoke. Role- playing is an excellent procedure for learning about counselling. Role- playing situations can be easily developed from the experience of people. [34] The ethics of valuing and respecting others must be observed by the counsellor.[35] Common characteristics required from the counsellor are concern, emotional investment, cognitive detachment, sensitivity and introspection.[36] The counsellor should know that healing is a part of empowerment.

The World Health Report, 2001- Mental Health

The report advocates for the public health Approach to mental health. It avers "Advances in neuroscience and behavioural medicine have shown that, like many physical illnesses, mental and behavioral disorders are the result of a complex interaction between biological, psychological and social factors. The report gives special emphasis to the needs of women with mental disorder. They are summarised as:

Medical-Early recognition, Information about illness & treatment, Medical care, Support, hospitalisation

Community-No stigma, No discrimination, Social participation, Human rights

Family-Skills for care, family cohesion, networking, crisis support, financial support, respite care

Rehabilitation- Social support, Education, Vocational support, day care, long-term care, spiritual needs.

WHO approach to deal with biological, psychological & Social factors has components of Prevention-Treatment –Rehabilitation. WHO recommends

- Pharmacotherapy
- Psychotherapy
- Psychosocial rehabilitation
- Vocational rehabilitation
- Housing-process of de-institutionalisation & psychiatric reform

Needs of women with Mental Disorder- Women with mental disorders need support from the medical practitioners, community, family and institutions providing support to women in distress.

- Medical-Early recognition, Information about illness & treatment, Medical care, Support, hospitalisation
- Community-No stigma, No discrimination, Social participation, Human rights
- Family-Skills for care, family cohesion, networking, crisis support, financial support, respite care
- Rehabilitation-Social support, Education, Vocational support, day care, long term care, spiritual needs

WHO recommendations for Mental HealthCare include the following aspects:

- Provide treatment in primary care
- Make psychotropic drugs available
- Give care in community
- Educate the public
- Involve communities, families & consumers
- Establish National policies, programmes & legislations
- Develop human resource
- Link with other sectors
- Monitor community mental health
- Support more research

Conclusion

Subordinate status of women is the major cause of mental illnesses among women. "For too many women, experience of self-worth, competence, autonomy, economic independence, and physical, sexual, and emotional safety and security, so essential to good mental health, are systematically denied because they are women."[37]

Civil society and the state should provide more and more opportunities to women of all age groups for self-actualisation so that women can achieve high level of mental health. Respect for diversity, plurality and multicultural outlook ensure democratic and tolerant milieu that is conducive for mental health of women. As compared to institutionalisation based mainly on bio-medical intervention, community or family-based rehabilitation of mentally ill women based on human touch is far more effective.

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WHO/MSD/MSB/01.5

What do people Think they know about Substance Dependence ?

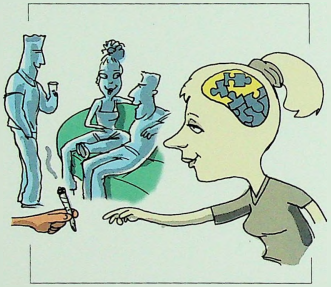
myths and facts for policy makers responsible for substance dependence prevention, treatment and support programs

World Health Organization

2001

Myth 1.

Drug dependence is simply a failure of will or of strength of character



Fact

Dependence is a brain disorder and people with drug dependence have altered brain structure and function. It is true that dependence is expressed in the form of compulsive behavior, but this behavior is strongly related to brain changes occurring over time, with repeated use of drugs. In recent years genetics was found to be associated with the predisposition of individuals to be more or less susceptible to develop drug dependence.

Myth 2.

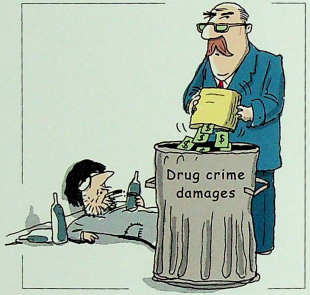
People who have drug dependence can easily move back to occasional use

Fact

Drug dependence is difficult to control due to compulsive drug use and craving, leading to drug seeking and repetitive use, even in the face of negative health and social consequences. Once dependent, the individual often fails in his or her attempts to quit.

Myth 3.

It's not worthwhile to invest in treatment for individuals who have drug dependence - it is a waste of public funds



Fact

Investing in evidence-based treatment for substance dependence decreases negative health consequences and social effects (e.g. crime, economic burden and HIV infection). For every dollar spent on treatment 7 dollars are returned in cost-savings. Treatment is proven to be cost-effective in both developed and developing countries. It costs less than imprisonment.

Myth 4.

People in my country do not have drug-related problems

Fact

No country is immune to substance related problems. Substance users are found worldwide among men, women and youth. Incidence of substance dependence are on the rise, and in many countries substance use is the driving force for other epidemics. Currently, 114 countries have reported HIV infections related to injection drug use.

MSB is the Management of Substance Dependence team in WHO's Department of Mental Health and Substance Dependence, Noncommunicable Diseases and Mental Health Cluster. Our team is concerned with the management of problems related to the use of all psychoactive substances; regardless of their legal status. It is concerned with the epidemiology of alcohol and drug use, neuroscience of addiction, brief interventions for alcohol and drug problems, drug use and HIV/AIDS (including injecting drug use), responses to the problems related to amphetamine-type stimulants, evaluation of treatment and other interventions for drug/alcohol users and capacity building in the area of research and treatment. It seeks an integrated approach to all substance use problems within the health care system, in particular primary care.

Co-ordinator: Dr Maristela Monteiro

Some of the areas we are currently working on include:
Neuroscience of addictive behaviors
Alcohol and Injuries
Amphetamine type stimulants
WHO Drug Injecting Study
People living with HIV/AIDS who are substance dependent
Early interventions for drug and alcohol problems
Agonist pharmacotherapies for opiate dependence

Stop exclusion - Dare to care

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Myth 5.

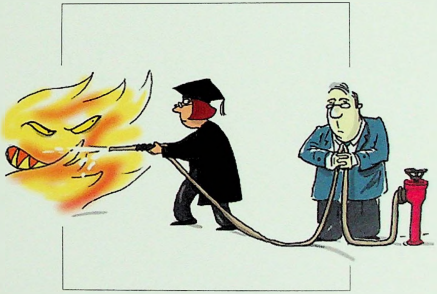
Drug and alcohol related problems only affect individuals in developed countries

Fact

There is strong evidence showing an increase in drug-related problems in developing countries with a significant impact on mortality, disease and injury. These problems affect more the poor, and are more prevalent among the poor in developed countries too.

Myth 6.

There is already enough research for policy making on drug and alcohol related problems, there is no need for more



Fact

Drug and alcohol using behaviors are dynamic, with emergent patterns changing depending on factors such as: availability of drugs, introduction of new drugs, new modes of administration and rapid social changes. More research is necessary to develop new treatments and preventive strategies, support services and to understand the associations between substance dependence and other risky behaviors. The new challenges of HIV related to injecting drug use pose a new focus for further research.

Myth 7.

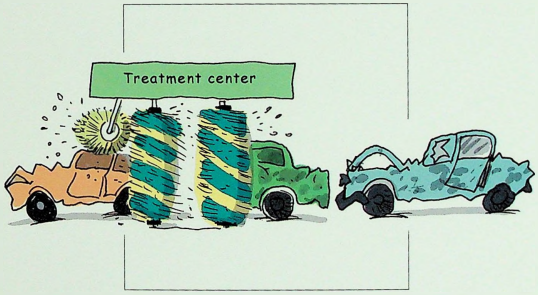
Substance users do not receive sufficient punishment

Fact

People with health problems should receive and benefit from health services and not punishment. The possible short and long term consequences of substance use include: mortality, morbidity, comorbidity, social isolation and stigma. People with substance dependence are among the most marginalized in societies and are in need of treatment and care. To incarcerate offenders for drug use and dependence is not an effective prevention or treatment strategy.

Myth 8.

All that is needed to cure dependence is treatment centers - once you are in, you are cured



Fact

There is no magic solution in treating substance dependence. It is a long process, with varying services, not always adequately available or provided. This is a chronic recurring illness, needing repeated treatments until abstinence is achieved. Aftercare is essential to successful recovery, as well as compliance and responsibility of the patients themselves.

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WORLD HEALTH ORGANIZATION

Mental Health in Emergencies

Above: refugee from Kosovo. Photo courtesy of UNHCR/B. Press

Mental and Social Aspects of Health of Populations Exposed to Extreme Stressors

Department of Mental Health and Substance Dependence
World Health Organization Geneva
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Mental Health in Emergencies

Background

The World Health Organization (WHO) is the United Nations agency responsible for action to attain the highest possible level of health for all people. Within WHO, the Department of Mental Health and Substance Dependence provides leadership and guidance to close the gap between what is needed and what is currently available to reduce the burden of mental disorders and to promote mental health.

This document summarises the present position of the Department of Mental Health and Substance Dependence on assisting populations exposed to extreme stressors, such as refugees, internally displaced persons, disaster survivors and terrorism-, war- or genocide-exposed populations. WHO recognises that the number of persons exposed to extreme stressors is large and that exposure to extreme stressors is a risk factor for mental health and social problems. Principles and strategies described here are primarily for application in resource-poor countries, where most populations exposed to disasters and war live. The mental health and well-being of humanitarian aid workers also warrant attention, but their needs are not addressed in this document.

In this document the term social intervention is used for interventions that primarily aim to have social effects, and the term psychological intervention is used for interventions that primarily aim to have psychological effects. It is acknowledged that social interventions have secondary psychological effects and that psychological interventions have secondary social effects as the term psychosocial suggests. WHO in its constitution defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Using this definition of health as an anchor point, this statement covers the Department's current position regarding the mental and social aspects of health of populations exposed to extreme stressors.

Our objectives, with respect to the mental and social aspects of health of populations exposed to extreme stressors are:

1. to be a resource in terms of technical advice for field activities by governmental, nongovernmental and intergovernmental organizations in coordination with the WHO Department of Emergency and Humanitarian Action.
2. to provide leadership and guidance to improve quality of interventions in the field.
3. to facilitate the generation of an evidence base for field activities and policy at community and health system level.

General principles

Informed by a range of documents by acknowledged experts on guidelines, principles and projects, the Department of Mental Health and Substance Dependence draws attention to the following general principles:

1. *Preparation before the emergency.*
   National preparation plans should be made before occurrence of emergencies and should involve: (a) development of a system of co-ordination with specification of focal persons responsible within each relevant agency, (b) design of detailed plans to prepare for an adequate social and mental health response, and (c) training of relevant personnel in indicated social and psychological interventions.

Return of refugees from West Timor. Photo courtesy of UNHCR/M. Kobish

2. *Assessment.*
   Interventions should be preceded by careful planning and broad assessment of the local context (i.e, setting, culture, history and nature of problems, local perceptions of distress and illness, ways of coping, community resources, etc). The Department encourages in emergency settings a qualitative assessment of context with a quantitative assessment of disability or daily functioning. When assessment uncovers a broad range of needs that will unlikely be met, assessment reports should specify urgency of needs, local resources and potential external resources.
3. *Collaboration.*
   Interventions should involve consultation and collaboration with other governmental and nongovernmental organizations (NGOs) working in the area. Continuous involvement preferably of the government or, otherwise, local NGOs is essential to ensure sustainability. A multitude of agencies operating independently without co-ordination causes wastage of valuable resources. If possible, staff, including management staff, should be hired from the local community.

4. *Integration into primary health care.*
Led by the health sector, mental health interventions should be carried out within general primary health care (PHC) and should maximise care by families and active use of resources within the community. Clinical on-the-job training and thorough supervision and support of PHC-workers by mental health specialists is an essential component for successful integration of mental health care into PHC.

5. *Access to services for all.*
Setting up separate, vertical mental health services for special populations is discouraged. As far as possible, access to services should be for the whole community and preferably not be restricted to subpopulations identified on the basis of exposure to certain stressors. Nevertheless, it may be important to conduct outreach awareness programmes to ensure the treatment of vulnerable or minority groups within PHC.

6. *Training and supervision.*
Training and supervision activities should be by mental health specialists - or under their guidance - for a substantial amount of time to ensure lasting effects of training and responsible care. Short one-week or two-week skills training without thorough follow-up supervision is not advised.

7. *Long-term perspective.*
In the aftermath of a population's exposure to severe stressors, it is preferable to focus on medium-and long-term development of community-based and primary mental health care services and social interventions rather than to focus on the immediate, short-term relief of psychological distress during the acute phase of an emergency. Unfortunately, impetus and funding for mental health programmes is highest during or immediate after acute emergencies, but such programmes is much more effectively implemented over a protracted time during the following years. It is necessary to increase donor awareness on this issue.

8. *Monitoring indicators.*
Rather than as an afterthought, activities should be monitored and evaluated through indicators that need to be determined, if possible, before starting the activity.

Intervention strategies for health officials in the field

Informed by the literature and the experience of experts and with the aim to inform current requests from the field, the Department of Mental Health and Substance Dependence advises on intervention strategies for populations exposed to extreme stressors. The choice of intervention varies with the phase of the emergency. The acute emergency phase is here defined as the period where the crude mortality rate is substantially elevated because of deprivation of basic needs (i.e. food, shelter, security, water and sanitation, access to PHC, management of communicable diseases), due to the emergency. This period is followed by a reconsolidation phase when basic needs are again at a level comparable to that before the emergency or, in case of displacement, are at the level of the surrounding population. In a complex emergency, (a) different parts of a country may be in different phases or (b) a location may oscillate between the two phases, over a period of time.

Rwandan returnees. Photo courtesy of UNHCR/A. Hollman

1. Acute emergency phase

During the acute emergency phase, it is advisable to conduct mostly social interventions that do not interfere with acute needs such as the organization of food, shelter, clothing, PHC services, and, if applicable, the control of communicable diseases.

1.1 *Valuable early social interventions may include:*

- Establish and disseminate an ongoing reliable flow of credible information on (a) the emergency; (b) efforts to establish physical safety for the population, (c) information on relief efforts, including what each aid organization is doing and where they are located; and (d) the location of relatives to enhance family reunion (and, if feasible, establish access to communication with absent relatives). Information should be disseminated according to principles of risk communication: e.g., information should be uncomplicated (understandable to local 12-year olds) and empathic (showing understanding of the situation of the disaster survivor).

- Organize family tracing for unaccompanied minors, the elderly and other vulnerable groups.
- Brief field officers in the areas of health, food distribution, social welfare and registration regarding issues of grief, disorientation and need for active participation.
- Organize shelter with the aim to keep members of families and communities together.
- Consult the community regarding decisions where to locate religious places, schools and water supply in the camps. Provide religious, recreational and cultural space in the design of camps.
- If at all realistic, discourage unceremonious disposal of corpses to control communicable diseases. Contrary to myth, dead bodies carry no or extremely limited risk for communicable diseases. The bereaved need to have the possibility to conduct ceremonious funerals and - assuming it is not mutilated or decomposed - to see the body to say goodbye. In any case, death certificates need to be organized to avoid unnecessary financial and legal consequences for relatives.
- Encourage the re-establishment of normal cultural and religious events (including grieving rituals in collaboration with spiritual and religious practitioners).
- Encourage activities that facilitate the inclusion of orphans, widows, widowers, or those without their families into social networks.
- Encourage the organization of normal recreational activities for children. Aid providers need to be careful not to falsely raise the local population's expectations by handing out types of recreation materials (i.e., football jerseys, modern toys) that were considered luxury items in the local context before the emergency.
- Encourage starting schooling for children, even partially.
- Involve adults and adolescents in concrete, purposeful, common interest activities (e.g., constructing/organizing shelter, organizing family tracing, distributing food, organizing vaccinations, teaching children).
- Widely disseminate uncomplicated, reassuring, empathic information on normal stress reactions to the community at large. Brief non-sensationalistic press releases, radio programmes, posters and leaflets may be valuable to reassure the public. Focus of public education should primarily be on normal reactions, because widespread suggestion of psychopathology during this phase (and approximately the first four weeks after) may potentially lead to unintentional harm. The information should emphasise an expectation of natural recovery.

12 *In terms of psychological interventions in the acute phase the following is advised:*

- Establish contact with PHC or emergency care in the local area. Manage urgent psychiatric complaints (i.e., dangerousness to self or others, psychoses, severe depression, mania, epilepsy) within PHC, whether or not PHC is run by local government or by NGOs. Ensure availability of essential psychotropic medications at the PHC level. Many persons with urgent psychiatric complaints will have pre-existing psychiatric disorders and sudden discontinuation of medication needs to be avoided. In addition, some persons will seek treatment because of mental health problems due to exposure to extreme stressors. Most acute mental health problems during the acute emergency phase are best managed without medication following the principles of 'psychological first aid' (i.e., listen, convey compassion, assess needs, ensure basic physical needs are met, do not force talking, pro or mobilise company from preferably family or significant others, encourage but do not force social support, protect from further harm).

Afghan refugees. Photo courtesy of UNHCR/A. Reiss

- Assuming the availability of volunteer/non-volunteer community workers, organize outreach and non-intrusive emotional support in the community by providing, when necessary, aforementioned 'psychological first aid'. Because of possible negative effects, it is not advised to organize forms of single-session psychological debriefing that push persons to share their personal experiences beyond what they would naturally share.
- If the acute phase is protracted, start training and supervising PHC workers and community workers (for a description of these activities, see section 2.2).

2. Reconsolidation phase

2.1 *In terms of social interventions, the following activities are suggested:*

- Continue relevant social interventions outlined above in section 1.1.
- Organize outreach and psycho-education. To educate the public on availability or choices of mental health care. Commencing no earlier than four weeks after the acute phase, carefully educate the public on the difference between psychopathology and normal psychological distress, avoiding suggestions of wide-scale presence of psychopathology and avoiding jargon and idioms that carry stigma.
- Encourage application of pre-existing positive ways of coping. The information should emphasize positive expectations of natural recovery.
- Over time, if poverty is an ongoing issue, encourage economic development initiatives. Examples of such initiatives are (a) micro-credit schemes or (b) income-generating activities when markets will likely provide a sustainable source of income.

2.2 *In terms of psychological interventions during the reconsolidation phase, the following activities are suggested:*

- Educate other humanitarian aid workers as well as community leaders (e.g., village heads, teachers, etc) in core psychological care skills (e.g., 'psychological first aid', emotional support, providing information, sympathetic reassurance, recognition of core mental health problems) to raise awareness and community support and to refer persons to PHC when necessary.
- Train and supervise PHC workers in basic mental health knowledge and skills (e.g., provision of appropriate psychotropic medication, 'psychological first aid', supportive counselling, working with families, suicide prevention, management of medically unexplained somatic complaints, substance use issues and referral). The recommended core curriculum is WHO/UNHCR's (1996) *Mental Health of Refugees.*
- Ensure continuation of medication of psychiatric patients who may not have had access to medication during the acute phase of the emergency.
- Train and supervise community workers (i.e., support workers, counsellors) to assist PHC workers with heavy case loads. Community workers may be volunteers, paraprofessionals, or professionals, depending on the context. Community workers need to be thoroughly trained and supervised in a number of core skills: assessment of individuals', families' and groups' perceptions of problems, 'psychological first aid', providing emotional support, grief counselling, stress management, 'problem-solving counselling', mobilising family and community resources and referral.
- Collaborate with traditional healers if feasible. A working alliance between traditional and allopathic practitioners may be possible in certain contexts.
- Facilitate creation of community-based self-help support groups. The focus of such self-help groups is typically problem sharing, brainstorming for solutions or more effective ways of coping (including traditional ways), generation of mutual emotional support and sometimes generation of community-level initiatives.

Gevgeli, Makedonska Republican Hospital. Photo courtesy of UNHCR/A. Hollman

Above interventions are suggested for implementation in synergy with ongoing mental health system development priorities:

- Work towards developing or strengthening feasible, strategic plans for national-level mental health programmes. The long-term goal is to downsize existing psychiatric institutions ('asylums'), strengthen PHC and general hospital psychiatry care, and strengthen community and family care of persons with chronic, severe mental disorders.
- Work towards proper and relevant national mental heath legislation and policy. The long-term goal is a functional public health system with mental health as a core element.

WHO resource materials

The following list of WHO resource materials covers: (i) mental health documents that are likely relevant to all populations whether or not exposed to extreme stressors and (ii) specific mental health documents relevant to populations exposed to extreme stressors.

WHO (1990). *The introduction of a mental health component into primary care.* WHO: Geneva.
http://www5.who.int/mental_health/download.cfm?id=0000000040
Note: This classic document covers integration of mental health care into PHC.

WHO (1994) *Quality assurance in mental health care Checklists, glossaries, volume 1.* WHO: Geneva.
http://whqlibdoc.who.int/hq/1994/WHO_MNH_MND_94.17.pdf

WHO (1996). *Mental health of refugees.* Geneva: World Health Organization in collaboration with the Office of the United Nations High Commissioner for Refugees.
http://whqlibdoc.who.int/hq/1996/a49374.pdf
Note: This document is written for PHC and community workers to treat a variety of mental health disorders and problems in refugee camp settings.

WHO (1997). *Quality assurance in mental health care. Checklists, glossaries, volume 2.* WHO: Geneva.
http://whqlibdoc.who.int/hq/1997/WHO_MSA_MNH_MND_97.2.pdf
Note: These two documents cover quality assurance, monitoring and evaluation of mental health services in a variety of settings.

WHO (1997). *Promoting independence of people with disabilities due to mental disorders: A guide for rehabilitation in primary health care.* WHO: Geneva.
http://whqlibdoc.who.int/hq/1997/WHO_MND-RHB_97.1.pdf
Note: This is a manual with guidelines for treatment of mental disability by the PHC worker.

WHO (1998). *Mental disorders in primary care.* WHO: Geneva.
http://whqlibdoc.who.int/hq/1998/WHO_MSA_MNH/EAC_98.1.pdf
Note: This document contains an educational programme to assist PHC providers in the diagnosis and treatment of mental disorders.

WHO (1998). *Diagnostic and management guidelines for mental disorders in primary care: ICD-10 Chapter V Primary Care Version.* WHO: Geneva.
http://www.who.int/msa/mnh/ems/icd10/icd10pc/icd10phc.htm

WHO (1999). *Declaration of cooperation. Mental Health of refugees, displaced and other populations affected by conflict and post-conflict situations.* WHO: Geneva.
http://www.who.int/disasters/cap2002/tech.htm
Note: This declaration summarises guiding principles for projects for populations exposed to extreme stressors.

WHO (1999, revised 2001). *Rapid assessment of mental health needs of refugees, displaced and other populations affected by conflict and post-conflict situations. A community-oriented assessment.* WHO: Geneva.
http://www.who.int/disasters/cap2002/tech.htm
Note: This document outlines qualitative assessment of the context of the refugee situation. The document focuses on preparation, scope of assessment and reporting.

WHO (2000). *Preventing suicide: A resource for primary health care workers.* WHO: Geneva.
http://www5.who.int/mental_health/download.cfm?id=0000000059
Note: This booklet summarises basic knowledge on suicide prevention for the PHC worker.

WHO (2000). *Women's mental health: An evidence based review.* WHO: Geneva.
http://www5.who.int/mental_health/download.cfm?id=0000000067
Note: This report provides the latest research evidence pertaining to the relationship between gender and mental health, with a focus on depression, poverty, social position and violence against women.

WHO (2001). *World Health Report 2001. Mental health: New understanding, new hope.* WHO: Geneva.
Note: This is an authoritative and comprehensive review on the epidemiology, burden, risk factors, prevention and treatment of mental disorders world-wide. This report provides the framework for organizing country mental health programmes.
http://www.who.int/whr2001/2001/main/en/pdf/whr2001.en.pdf (English version) or
http://www.who.int/whr2001/2001/main/fr/pdf/whr2001.fr.pdf (French version)

WHO (2001). *The effectiveness of mental health services in primary care: The view from the developing world.* WHO: Geneva.
http://www5.who.int/mental_health/download.cfm?id=0000000050
Note: This is a review and evaluation of the effectiveness of mental health programmes in PHC in developing countries.

WHO (2002). *Working with countries: Mental health policy and service development projects.* WHO: Geneva.
http://www5.who.int/mental_health/download.cfm?id=0000000404
Note: This document describes a variety of technical assistance activities of mental health policy-making and service development at the country level.

WHO (2002). *Nations for Mental Health: Final report.* WHO: Geneva.
http://www5.who.int/mental_health/download.cfm?id=0000000400
Note: This document summarises WHO's recent strategies: to raise awareness to the effects of mental health problems and substance dependence, to promote mental health and prevent disorders, to generate capital for mental health promotion and care provision and to promote service development.

WHO (2002). *Atlas: Country profiles of mental health resources* WHO: Geneva.
http://mh-atlas.ic.gc.ca
Note: This updated, online searchable database provides available information on mental health resources in most countries of the world, including countries with large populations exposed to extreme stressors.

Further information and feedback

For further information and feedback, please contact Dr Mark Van Ommeren (vanommerenm@who.int, fax: +41-22 791 4160), resource person within WHO on mental health in emergencies, in the team Mental Health: Evidence and Research (Coordinator: Dr Shekhar Saxena).

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