Mental health initiatives in India (1947–2010)

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'A network of decentralized mental health services for ameliorating the more common categories of disorders is envisaged. The programme outline for such a disease would involve the diagnosis of common disorders, and the prescription of common therapeutic drugs, by general duty medical staff. In regard to mental health institutions for indoor treatment of patients, the Policy envisages the upgrading of the physical infrastructure of such institutions at Central Government expense so as to secure the human rights of this vulnerable segment of society.'[1]

INTRODUCTION

The following are the highlights of the Annual Report on Health of the Ministry of Health and Family Welfare, released in September 2010, relating to mental health: 'To increase the availability of trained personnel required for mental health care, 7 regional institutes have been funded against the 11 that were to be set up during the Eleventh Plan for the production of clinical psychologists, psychiatrists, psychiatric nursing and psychiatric social workers. Further, support has been provided to 9 institutes for 19 PG (postgraduate) departments during the year 2009–10 for manpower development. Under the programme, an amount of ₹ 408 crore has been approved for manpower development and another ₹ 150 crore is under approval for the revised district mental health programme in the states.'[2] This degree of importance and financial support to mental health is impressive.

The development of psychiatric services in India, in contrast with economically rich countries,[3,4] has occurred against the backdrop of almost no mental health services at the time of Independence. Almost all people with mental disorders live in the community, most often do not have access to any organized services, with their family providing care in whatever form it is able to do (ranging from isolation to committed care). At the time of Independence, the mental health infrastructure and specialist manpower was meagre. In 1947, India had 10 000 psychiatric beds for a population of over 300 million, compared to the UK, which, with one-tenth the population of India, had over 150 000 psychiatric beds! During the past 6 decades, a wide range of mental health initiatives have changed the situation. These efforts to address the needs of mentally ill persons and their families have been continuous and innovative, building on the strengths of the community. The first 2 decades of independent India were devoted to doubling the number of mental hospital beds and humanizing the services at hospitals.[5,6] Interestingly, one of the most important innovations occurred in a mental hospital setting—the active involvement of families in the care of mentally ill persons. This initiative, started in Amritsar by Dr Vidya Sagar, was far ahead of the times as in the rest of the world, at that point, families were considered 'toxic' to the mentally ill and were not involved in the care of the mentally ill.[7–9] This was followed by the setting up of general hospital psychiatric beds, which was 'a slow and silent change but in many ways a major revolution in the whole approach to psychiatric treatment in our lifetime'.[10] The next major development was in 1975, when a new initiative to integrate mental health with general health services, also referred to as the community psychiatry initiative, was adopted to develop mental health services.[11–18] Community psychiatry in India is now nearly 4 decades old. Starting as an isolated extension of psychiatric clinics in primary health centres, today the integration of mental healthcare in general services covers over 127 districts (about 20% of the population).

The National Mental Health Programme (NMHP) was formulated in 1982 to develop a national-level initiative for mental healthcare based on the community psychiatry approach.[19] During the past 3 decades, there have been a large number of other community initiatives to address a wide variety of mental health needs of the community through programmes on suicide prevention, care of the elderly, substance use and disaster mental healthcare, and by setting up of daycare centres, half-way homes, long-stay homes and rehabilitation facilities.[20–22] The rapid growth of psychiatry in the private sector is another important recent development. Though mainly confined to large urban centres, private sector psychiatry is providing valuable services to the community.

From a situation of nearly no services for persons with mental disorders in 1947, today there is a broad framework for mental healthcare in the public, private and voluntary sectors. In these developments, India has been influenced by the local situation as well as international developments. It is in this context that this article reviews the development of mental health programmes in India, and the strengths and limitations of the initiatives of the past 6 decades.

MENTAL HEALTH SITUATION IN INDIA: THE CHALLENGES

There were and still are multiple challenges to the provision of mental healthcare (Table 1). These are considered briefly.

A large 'unmet need' for mental healthcare in the community

The gross disparity between the number of mentally ill persons[23,24] and the available treatment facilities and trained professionals is reflected in the large 'treatment gap' in the community. Information about 'psychosis' at the community level from an all-India perspective is available from the World Health Survey (WHS), which is a unique source of data. In India, the WHS covered Assam, Karnataka, Maharashtra, Rajasthan, Uttar Pradesh and West Bengal. The coverage of 6 states and the

TABLE I. Challenges for mental healthcare in India

- Large 'unmet need' for mental healthcare in the community
- Poor understanding of psychological distress as requiring medical intervention in the general population
- Limited acceptance of modern medical care for mental disorders among the general population
- Limitations in the availability of mental health services (professionals and facilities) in the public health services
- Poor utilization of available services by the ill population and their families
- Problems in recovery and reintegration of persons with mental illnesses
- Lack of institutionalized mechanisms for organization of mental healthcare

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standard methodology used makes this an important source of information. The objective of the WHS was to provide an evidence base on health expenditure, insurance, health resources, prevalence and risk factors of morbidity, and responsiveness of the health system to inpatient and outpatient care. The health status was assessed by an individual questionnaire administered to 9994 adults of the age of 18 years and above; 27% of the respondents were from urban and 73% from rural areas. The section on morbidity included diagnostic conditions, such as depression and psychosis, and mental health symptoms, such as sleep disturbance, feeling sad, low or depressed, and worry or anxiety, and dealing with conflicts and tensions.[25] The following section relates to psychosis and depression. The reference period was 1 year prior to the study. The percentage diagnosed and treated in the 6 states is given in Table II.

Though the prevalence rates of depression are higher than those of psychoses, the rates of treatment are far lower, pointing to limited awareness in the community. The rates of treatment were lower in rural compared with urban areas (61.7% *v.* 47.5%), and higher in the higher income quartiles.

A number of studies have also reported on untreated patients in the community.[26–30] Indirect evidence of the large proportion of 'untreated' patients also comes from another field study from Andhra Pradesh, Karnataka, Kerala and Tamil Nadu—Basic Needs (India)—done as part of the care-givers in community mental health study covering 201 persons with severe mental illness, of which nearly 50% were suffering from schizophrenic illness. The duration of illness at contact was more than 2 years in 90% of subjects and over 5 years in 70%, and in over 25% the duration was over 10 years.[31] This finding is important in view of the positive benefits of improvement in the clinical condition and decrease in the burden on the family,[32–39] and poorer clinical outcome with longer duration of illness.[38,39]

'Psychological distress' requires medical intervention: Lack of awareness and stigma

There are two aspects to the current lack of knowledge of the population about mental health. First are the existing beliefs and practices. These, relevant and appropriate at different stages of the evolution of society, are often not in line with the current understanding of mental disorders and mental health. Second, stigma is an important barrier to mental healthcare.[40–47] The most recent of the stigma studies involved 27 participating countries, including India, and described the nature, direction and severity of anticipated and experienced discrimination reported by people with schizophrenia. It used face-to-face interviews with 732 participants. Negative discrimination was experienced by 47% of the participants in making or keeping friends, by 43% from family members, by 29% in finding a job, by 29% in keeping a job, and by 27% in intimate or sexual relationships. Positive discrimination was rare. Anticipated discrimination affected 64% in the matter of applying for work, and in training or education, and 55% while looking for a close relationship; 72% felt the need to conceal their diagnosis. Over a third of the participants anticipated discrimination when seeking jobs and close personal relationships, even when no discrimination was experienced.[48]

TABLE II. Prevalence of 'psychosis' and 'depression' and their treatment status in 6 states in the World Health Survey

State	Psychosis		Depression	
	Need (% diagnosed)	Covered (% treated)	Need (% diagnosed)	Covered (% treated)
Assam	1.0	39.1	3.2	32.3
Karnataka	0.7	85.2	9.2	13.0
Maharashtra	2.2	48.7	27.3	9.6
Rajasthan	3.6	36.2	7.3	29.7
Uttar Pradesh	2.7	45.5	7.4	8.2
West Bengal	1.8	66.5	11.7	17.8

Problems due to multiplicity of healthcare systems and existing beliefs

India is home to a pluralistic approach to all types of healthcare. Not only are there other systems of healthcare other than modern medicine such as Ayurveda, Unani, Naturopathy and Homoeopathy, but also people approach religious places for help, especially in case of mental illness.[49] The current approach is one of 'live and let live'. However, this leaves the situation unclear to the general public. There is a need for professionals of all systems of care to initiate a dialogue and communicate the relative suitability and effectiveness of different approaches to care in different aspects of mental health (prevention, promotion and treatment). There is no need for each of them to be equally suitable and effective in all areas. There is also a great need for linkage of services according to a need-based approach.

Availability of mental health services (professionals and facilities): Limitations and problems

The availability of mental health infrastructure (psychiatric beds) in India is mainly limited to large-size custodial institutions, which provide services to a limited population. These institutions are a great source of stigma. Two reviews of mental hospitals were undertaken in 1998 and 2008 to identify the lacunae in these institutions and the changes that occurred over a decade.[50,51] These evaluations illustrate the challenges these institutions present to mental healthcare. The situation of mental hospitals at the time of the first review was highly unsatisfactory: '38% of the hospitals still retain the jail-like structure that they had at the time of inception … nine of the hospitals constructed before 1900 have a custodial type of architecture, compared to 4 built during pre-independence and one post-independence … 57% have high walls … patients are referred to as "inmates" and persons in whose care the patients remain through most of the day are referred to as "warders" and their supervisors as "overseers" and the different wards are referred to as "enclosures" (p. 32) … overcrowding in large hospitals was evident (p. 34) … the overall ratio of cots:patient is 1:1.4 indicating that floor beds are a common occurrence in many hospitals (p. 37) … in hospitals at Varanasi, Indore, Murshidabad and Ahmedabad patients are expected to urinate and defecate into an open drain in public view (p. 38) … many hospitals have problems with running water … storage facilities are also poor in 70% of hospitals … lighting is inadequate in 38% of the hospitals … 89% had closed wards while 51% had exclusively closed wards … 43% have cells for isolation of patients (p. 39) … leaking roofs, overflowing toilets, eroded floors, broken doors and windows are common sights (p. 44) … privacy for patients was present in less than half the hospitals … seclusion rooms were present in 76% of hospitals and used in majority of these hospitals … only 14% of the staff felt that their hospital inpatient facility was adequate (p. 47) ... in most hospitals case file recording was extremely inadequate … less than half the hospitals have clinical psychologists and psychiatric social workers … trained psychiatric nurses were present in less than 25% of the hospitals (p. 48) … even routine blood and urine tests were not

available in more than 20% of hospitals … 81% of the hospital in-charges reported that their staff position was inadequate (p. 54)'. The report notes that 'the deficiencies in the areas described so far are enough indicators that the rights of the mentally ill are grossly violated in mental hospitals' (p. 50).

These poor conditions have had the negative effect of presenting to society at large, the mentally ill as violent, and mental illnesses as chronic and not treatable.

The WHO Atlas[52] highlights the low number of mental health professionals in India. The figures are worrisome, especially given the number of mentally ill. The average national deficit of psychiatrists is estimated to be 77%; more than one-third of the population has more than 90% deficit of psychiatrists. Only the populations of Chandigarh, Delhi, Goa and Puducherry have a surfeit of psychiatrists. Kerala and Maharashtra have less than 50% deficit, while all the other states have more than 50% deficit of psychiatrists. There is a vast and striking variation in the distribution of psychiatrists across the country.[53] The figures for psychologists, psychiatric social workers and psychiatric nurses working in mental healthcare are equally inadequate.

Also, because of limited treatment facilities and number of mental healthcare professionals practising modern medicine, there are large delays and gaps in treatment. In India, during the past few years, 4 important studies[33,36–38] have shown that about half the patients of schizophrenia are living in the community without treatment. Also, such patients have significant disability, and are a source of considerable emotional and financial burden on the family and caregivers. A recent study from Vellore reported that a large proportion of patients with schizophrenic illness had a long duration of illness at first contact, and the course of the illness and outcome of treatment were related to chronicity at first contact.[54] It is important that all these studies show that regular treatment decreases disability, as well as the burden on and costs incurred by their families. These studies also emphasize the need for community involvement in care programmes.

Difficulties in utilization of available services by the mentally ill

The practical problems faced by people with mental illness interested in continuing regular long-term care include the long distance they have to travel to treatment facilities, the lack of a caregiver to accompany them, frequent non-availability of medicines at treatment centres, changing professional team members, lack of availability of rehabilitation services for those who have recovered and difficulty of getting welfare benefits. The current system of cross-sectional care in clinics (with an emphasis on drug-dispensing) should shift to coordinated total care in the community (imparting skills for self-care, formation of self-help groups, integration and non-discrimination), the families (networking of families, imparting skills for care and rehabilitation, provision of support through mobile phones), and voluntary organizations (raising public awareness, providing support to families and rehabilitation). The focus should shift to cure, recovery and reintegration rather than only dispensing medicines.

Need for multifaceted intervention for long-standing illness

Medicines can be adequate for the treatment of acute episodes. However, for the large majority of patients with long-standing illness,[34] there is a need for a multifaceted intervention that involves the family, community and voluntary organizations and is aimed at rehabilitation and reintegration. Since all these cannot be organized by public health services, there is a need for specific programmes to support families and voluntary organizations.

Limited technical capacity

The most important lacuna in the mental health programme is the lack of continuous technical support to the programme. The technical capacity of the public mental health system of the states is limited, and the capacity and competence to monitor the mental health programme inadequate. The current efforts are fragmented, uncoordinated and sporadic. There is a need for a mental health advisory committee, consisting of professionals from different disciplines and public sector and voluntary organizations, both at the central and state levels.

NATIONAL RESPONSES TO MENTAL HEALTH CHALLENGES

During the past 6 decades, there have been a wide range of initiatives in mental healthcare. These range from humanizing mental hospitals, moving the place of care from mental hospitals to general hospital psychiatry units, the formulation of the NMHP, adoption of the District Mental Health Programme (DMHP) approach to integrate mental health with general healthcare, setting up of community treatment facilities, provision of support to families, the use of traditional systems of care, legislative revision, and public education and research to support the above initiatives (Table III).

RECOGNITION OF THE RIGHTS OF PERSONS WITH MENTAL ILLNESS

Intervention by the National Human Rights Commission

A very important development was the recognition of the human rights of the mentally ill by the National Human Rights Commission (NHRC). The NHRC carried out 2 systematic intensive and critical examinations of mental hospitals in India in 1998 and 2008.[50,51] Following the initial report, as part of the NMHP, funds were provided for upgrading the facilities of mental hospitals. This has resulted in positive changes over the past 10 years as shown by the 2008 NHRC/National Institute of Mental Health and Neurosciences (NIMHANS) report:[51]

1. Percentage of admissions through courts has decreased from about 70% in 1996 to around 20% in 2008;
2. Percentage of long-stay patients has decreased from 80%–90% to about 35%;
3. Custodial care indicators such as staff wearing compulsory uniforms has decreased (down to 21 from 28 institutions);
4. While 20 hospitals used cells in 1999, this decreased to 8 hospitals in 2008;
5. Recreation facilities have increased and were present in 29 compared to 8 in 1999;
6. Rehabilitation facilities have increased from 10 to 23 institutions;

TABLE III. National-level initiatives to address mental health needs

- Humanizing mental hospitals
- General hospital psychiatry units
- National Mental Health Programme
- Community-level services
- Family support programmes
- Use of traditional systems of care
- Legislation
- Public mental health education
- Private sector psychiatry
- Research

7. The budget has doubled in 9 institutions, 2–4 times in 13, 4–8 times in 4 and more than 8 times in 3 institutions; and
8. Use of electroconvulsive therapy (ECT) has reduced and use of modified type ECT has increased from 9 to 27 institutions.

Overall, as the report notes, there were more changes in the past 10 years than in the preceding 5 decades! A persistent problem was inadequate staff in spite of creation of new positions.

There is a need to continue with this reform process in the coming years.

GENERAL HOSPITAL PSYCHIATRY UNITS (GHPUs)

In contrast to western countries, where GHPUs work with the support of mental hospitals, in India, most GHPUs provide a wide range of services fairly independently. This is in many ways a major revolution in psychiatric treatment.[10] At present, most medical college hospitals and major hospitals have psychiatry units. This has had twin advantages, namely, the services come closer to the population and services can be provided in a non-stigmatizing manner. It is also important that in India these units have become centres of research and manpower development.

NATIONAL MENTAL HEALTH PROGRAMME

The need for setting up of district psychiatric clinics was recognized in the 1960s by the Mudaliar Committee.[55] A few centres did come up following the report of the committee. However, the important national-level initiative followed the discussions of the Indian Psychiatric Society at Madurai in the early 1970s, which voiced the need to integrate mental healthcare with general healthcare. Simultaneously, in 1975, the Expert Committee on Mental Health of the WHO published a document titled 'Organization of mental health services in developing countries'.[56] The ideas generated in these discussions and documents were put to test at NIMHANS, Bengaluru and Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh, which took up pilot programmes to integrate mental health with general health services during the 1975–81 period.[11–19] The experiences of these 2 centres supported the development of the NMHP.

In the 1980s, the Government of India felt the need to evolve a plan of action aimed at the mental health component of the national health programme. For this, an expert group was formed in 1980. In February 1981, a small drafting committee met in Lucknow and prepared the first draft of the NMHP. This was presented at a workshop of experts (over 60 professionals) on mental health, drawn from all over India, in New Delhi on 20–21 July 1981. Following the discussion, the draft was substantially revised and a new one was presented at the second workshop on 2 August 1982 to a group of experts from not only the psychiatry and medical streams, but also education, administration, law and social welfare. The final draft was submitted to the Central Council of Health, India's highest health policy-making body, at its meeting on 18–20 August 1982, for adoption as the NMHP for India.[57] The Council discussed this programme at length and adopted a resolution for its implementation in the states and union territories: 'Mental health must form an integral part of the total health programme and as such should be included in all national policies and programmes in the field of health, education and social welfare. Realizing the importance of mental health in the course curricula for various levels of health professionals, suitable action should be taken in consultation with the appropriate authorities to strengthen the mental health education components. While appreciating the efforts of the Central Government in pursuing legislative action on the Mental Health Bill, the joint Conference expressed its earnestness to see that the bill takes a legal shape at the earliest.'

The objectives of the NMHP were: (i) to ensure the availability and accessibility of minimum mental healthcare for all, particularly to the most vulnerable and underprivileged sections of the population, in the foreseeable future; (ii) to encourage the application of mental health knowledge in general healthcare and in social development; and (iii) to promote community participation in the development of mental health services and to stimulate efforts towards self-help in the community.

The approaches advocated by the NMHP were: diffusion of mental health skills to the periphery of the health service system; appropriate appointment of tasks in mental healthcare; and integration of basic mental healthcare into general health services and linkage to community development and mental healthcare. The service component included 3 sub-programmes—treatment, rehabilitation and prevention.

Looking at the NMHP document of 1982, three decades later, one can say that its main strength was the envisaged integration of mental healthcare with general primary healthcare.[58] However, there were some inherent weaknesses in this otherwise sound conceptual model. The entire emphasis was on curative rather than preventive and promotive aspects of mental healthcare. Community resources such as families were not accorded due importance. Ambitious short-term goals took precedence over pragmatic, long-term planning. Most glaringly, no estimate, leave aside provision, of budgetary support was made. The administrative structures needed to implement the NMHP were not clearly outlined. These deficiencies possibly contributed to the limited progress for nearly a decade after the formulation of the document.

Progress between 1982 and 2010[58–63]

Since its adoption, the NMHP has been the guiding document for the development of the mental health programme in India. The most important progress has been in the area of development of models for the integration of mental health with primary healthcare, in the form of the district mental health programme. The DMHP, developed during 1984–90, was extended initially to 4 states, then to 25 districts in 20 states during 1995–2002 and over 125 districts in the next 7 years. The other areas that received support in the NMHP included improvement of departments of psychiatry at government medical colleges, development of human resources and improvement of mental hospitals.

After an in-depth situation analysis and extensive consultations with various stakeholders, the NMHP underwent radical restructuring aimed at striking a judicious balance between various components of the mental healthcare delivery system, with clearly specified budgetary allocations. After being approved at all levels, including by the Ministry of Health and Family Welfare, the Planning Commission, the Ministry of Finance and the Cabinet Committee on Economic Affairs (CCEA), the re-strategized NMHP was formally launched at a national workshop on 22 October 2003. The programme comprised 5 closely networked/interdependent strategic components. It had a total budget of ₹190 crore, which was later reduced to about ₹130 crore.

Five strategies of NMHP in the Tenth Five-Year Plan

1. Redesigning the DMHP around a nodal institution, which in most instances will be the zonal medical college.
2. Strengthening medical colleges with a view to develop psychiatric manpower, improve psychiatric treatment facilities at the secondary level, and promote the development of general

hospital psychiatry in order to reduce and eventually eliminate to a large extent the need for large mental hospitals with a large proportion of long-stay patients.
3. Streamlining and modernizing mental hospitals to transform them from the present mainly custodial mode to tertiary care centres of excellence with a dynamic social orientation for providing leadership to research and development in the field of community mental health.
4. Strengthening central and state mental health authorities in order that they may effectively fulfil their role of monitoring ongoing mental health programmes, determining priorities at the central/state level and promoting inter-sectoral collaboration and linkages with other national programmes.
5. Carrying out research and training aimed at building up an extensive database of epidemiological information related to mental disorders and their course/outcome; research and training on therapeutic needs of the community, and on the development of better and more cost-effective intervention models. Promotion of inter-sectoral research and providing the necessary inputs/conceptual framework for health and policy planning. Focused information, education and communication (IEC) activities, formulated with the active collaboration of professional agencies such as the Indian Institute of Mass Communication and directed towards enhancing public awareness and eradicating the stigma/discrimination related to mental illness.

The budgetary allocations for the programme were: DMHP ₹633 million; modernization of mental hospitals ₹742 million; strengthening of medical college departments of psychiatry ₹375 million; IEC and training ₹100 million; and research ₹50 million. A grant of ₹5 million was given to each medical college department of psychiatry for creating/augmenting the infrastructure, including the construction of wards and the procurement of essential equipment, with the aim of providing quality secondary care, as well as for developing postgraduate training facilities for various categories of mental health personnel. The financial package for the 37 government-run mental hospitals was for improving the clinical and infrastructural element in these institutions, which had been found to be grossly inadequate by various surveys, including the NHRC report on quality assurance in mental health in 1999. Special efforts were expected to energize the State Mental Health Authorities (SMHAs) in order to enable them to play their designated role as envisaged in the Mental Health Act (MHA), 1987 and central/state Mental Health Rules 1990. These statutory bodies form the first tier of the 3-tier monitoring system incorporated in the re-strategized NMHP.

Substantial funds were allocated for scientifically formulated IEC initiatives at the central level. A multidisciplinary workshop, involving experts from the fields of mass communication, advertising, media and other related fields, developed focused strategies in this area. Recognizing the need for research support and noting that research often receives step-motherly treatment in the matter of funding, the re-strategized NMHP dedicated a budget for operational research, relevant to planning more effective/cost-effective interventions or models of community-based mental healthcare. Such research was expected to provide important inputs, relevant to policy reform and improved programme implementation. Simplified, transparent and non-bureaucratic machinery for implementing this research agenda was created. A 3-tier machinery for monitoring at the state level (by the SMHA and a designated nodal officer), continuing online performance appraisal at the central level by a working group headed by a Joint Secretary-level officer in the Directorate General of Health Services and periodic review by a High-Level Steering Committee in the Ministry of Health and Family Welfare, chaired by the Secretary (Health), was put in place. A provision was also made for mid-term evaluation of programme implementation by an independent external agency.

Mental health in the Eleventh Five-Year Plan (2007–2013)[62,63]

There is an acute shortage of manpower in the field of mental health, namely, psychiatrists, clinical psychologists, psychiatric social workers and psychiatric nurses. This is a major constraint in meeting mental health needs and providing optimal mental health services to people. The existing training infrastructure in India produces about 320 psychiatrists, 50 clinical psychologists, 25 psychiatric social workers and 185 psychiatric nurses per year. Due to the shortage of manpower in mental health, the implementation of the DMHP suffered in the previous plan periods. During the Eleventh Five-Year Plan, there has been a substantial increase in the funding support for the NMHP. The total amount of funding allotted is ₹472.91 crore (a 3-fold increase from the previous plan). The areas identified for support consist of the following:

- Manpower development, in the form of the establishment of centres of excellence in the field of mental health (₹338.121 crore), will be undertaken. Centres of excellence in the field of mental health will be established by upgrading and strengthening identified existing mental health hospitals/institutes for addressing the acute manpower gap and provision of state-of-the-art mental healthcare facilities in the long run. These institutes will focus on the production of quality manpower in mental health.
- A scheme is envisaged for the development of manpower in mental health (₹69.80 crore). Support would be provided for setting up/strengthening 30 units of psychiatry, 30 departments of clinical psychology, 30 departments of psychiatric social work and 30 departments of psychiatric nursing, with support of up to ₹51 lakh to ₹1 crore per postgraduate department.
- Spill-over activities of the Tenth Plan will be completed. These include upgradation of the psychiatric wings of government medical colleges/general hospitals and modernization of government mental hospitals (₹58.03 crore). Up to ₹50 lakh will be provided per college.
- It is planned to modernize state-run mental hospitals. A grant of up to ₹3 crore per mental hospital would be provided.
- The implementation of the existing DMHPs will be continued as per existing norms (₹6.9 crore).
- There are plans to integrate the NMHP with the National Rural Health Mission (NRHM).

DMHP at the national level

The implementation of the DMHP is the most important public health initiative in mental health and has a direct impact on the needs of persons with mental disorders living in the community. At the national level, the DMHP is in operation in 127 districts. The DMHP has the following objectives:

1. To provide sustainable basic mental health services to the community and to integrate these services with other health services
2. Early detection and treatment of patients within the community itself
3. To see that patients and their relatives do not have to travel long distances to go to hospitals or nursing homes in the cities

4. To take pressure off the mental hospitals
5. To reduce the stigma attached to mental illness by promoting a change of attitude and through public education
6. To treat and rehabilitate mental patients discharged from mental hospitals within the community.

However, published papers and independent evaluation of the DMHP indicate that the DMHP is, to a large extent, ineffective in practice.[64–72] The reasons for this unsatisfactory state of affairs include:

1. *Limited development of the DMHP in its operational aspects by the central agency.* The core idea of integration has not been fully developed to an operational level for the states to be able to follow the guidelines. The components of the programme, such as training manuals, treatment guidelines and IEC activities, have been developed to a limited extent and their dissemination is poor.
2. *Limited capacity for implementation at the state level*. In most states, the mental health programme is the responsibility of non-psychiatrists and is often one of many other responsibilities. As a result, the technical inputs required for the programme have not been invested in the programme. This is all the more important as central guidance has been inadequate.
3. *Lack of coordination between the DMHP team and the medical college where the team is located.* This is a serious barrier to the integration of mental health with general healthcare. The teaching centres do not have knowledge of public health and do not work with field personnel to make the programme effective. Examples of this disconnect can be seen in the training in medical colleges in which the DMHP team is not involved. Medical colleges are not giving the expected technical support as they do not accept the idea of integration of mental health with primary healthcare.
4. *Inadequate technical support from professionals.* In the initial stages of the programme, NIMHANS, Bengaluru and a few other centres provided technical inputs and field experiences of implementing the programme on a regular basis. A number of centres (Bengaluru, Delhi, Ranchi) developed training manuals for primary healthcare personnel. The ICMR, New Delhi set up a Centre for Advanced Research in Community Mental Health to develop supports for the NMHP. A number of inputs, such as record system, health education material and manuals for different categories of health personnel, were developed for the programme. However, all these developments needed further field-level application as well as modification when the DMHP moved from a demonstration project to the programmatic stage of expansion to a large number of centres. This should have been a continuous process, but it was not so. This is also one of the reasons why the programme is psychiatrist-centred rather than centred around medical officers/health workers.
5. *Lack of emphasis on creating awareness in the community.* As noted in the DMHP evaluation, IEC activities were the most important and least emphasized till recent times. However, in the past few months, many national and state-level mental health messages have been broadcast on radio and television. These should go a long way in increasing the demand for and utilization of services.
6. *Lack of mental health indicators.* The programme did not develop simple indicators to address the objectives and there was emphasis only on training and drug supply, and not the clinical outcome.
7. *Lack of monitoring.* There was no Central/state-level technical advisory committee to monitor the programme and carry out evaluations in a regular and continuous manner.

COMMUNITY-LEVEL MENTAL HEALTH SERVICES

Two activities are required to address the needs of the community. First, systematic studies are needed to evaluate the community intervention initiatives for mental health. The second is the setting up of community-level facilities, largely by voluntary organizations.

Four studies have addressed the situation of persons who suffer from schizophrenia and live in the community, and the effectiveness of community-level interventions.[32–39] These studies show the benefits of regular treatment in decreasing the patient's disability, the burden on the family and the costs incurred by the family. These studies also emphasize the need for community involvement in the care programmes.

Another important development over the past 27 years is the availability of a wide variety of community care alternatives, essentially from the voluntary sector.[20–22,73] These initiatives have included the establishment of day care centres, half-way homes, long-stay homes and centres for suicide prevention, and also address care of the elderly, disaster mental healthcare, and school and college mental health programmes. All these have been accepted by communities, suggesting the need for such community care services. Such services, when provided in a user-friendly manner, are more likely to be used by the public. However, there is an urgent need to consolidate the experiences of the work in this area, in terms of the needs of those who seek help from these facilities, the nature of interventions, the outcome of care, the needs of the staff and human rights. There is also a need to develop mechanisms to meet the demand for institutional care, to standardize the norms for setting up of these facilities and to develop mechanisms to ensure the human rights of persons receiving care from these facilities.

The availability of a wide variety of both medical and non-medical care models is another development in the past 2 decades. Specifically, the growing role of non-governmental organizations (NGOs) which provide services for suicide prevention, disaster care and school health programmes, in which non-specialists and volunteers play an important role, has tremendous importance for India as NGOs can bridge the gap of human resources.

FAMILY SUPPORT

India is a pioneer in the area of involving family members in the care of the ill. This has been so since the early 1950s. In India, most people with mental disorders live with their families. The family takes care of them, ensures the provision of services, and plans and provides for their future. Thus, our family care model is very important. The role of the family becomes crucial when one takes cognizance of the acute shortage of affordable professionals, rehabilitation services and residential facilities, whether in the private or government sector, in India. One should also take note of the absence of welfare facilities or benefits for persons with mental disorders. During the 1970s and 1980s, efforts were made to understand the functioning of families with an ill person and their needs.[74–78] During the past decade, families have been playing a more active role, with the formation of self-help groups, and professionals have been agreeing to work with families in partnership.[79] However, many of the leads provided by pilot studies in this area have not been carried forward and family care programmes, though successful, have not received the support of

professionals and planners—such support could help make these initiatives a routine part of psychiatric care.[80]

HUMAN RESOURCE DEVELOPMENT

The other major development is the growth in human resources. At the time of the formulation of the NMHP, the number of psychiatrists was under 1000 and in the past 27 years, it has more than tripled, to about 3500. However, the number of trained clinical psychologists, psychiatric social workers and psychiatric nurses, is inadequate and this is unfortunate because they form a vital part of the team. The Eleventh Five-Year Plan specifically addresses this need by funding the setting up of centres of excellence, as mentioned earlier. Another lacuna is the very limited training in psychiatry for undergraduate medical students.

LEGISLATION

Some of the changes mentioned above have been supported by legislation for mental healthcare, namely, the Narcotic Drugs and Psychotropic Substances (NDPS) Act 1985, the MHA 1987 and Persons with Disability Act 1995. All these legislations have changed the penal approach to mental healthcare to an approach centering around promotion, prevention and rights. The Persons with Disability Act 1995 is important because for the first time, mental illness has been included as one of the disabilities. The recent UN Convention on Rights of Persons with Disabilities (UNCRPD) 2006[81] adds a new dimension to the rights of the mentally ill. It is expected that some of the other existing laws will be changed to bring them in harmony with the current thinking and approach towards the mentally ill in India.

TRADITIONAL SYSTEMS OF CARE FOR MENTAL HEALTH

Indian psychiatrists have examined and utilized the traditional healthcare systems for the care of mental disorders, using Yoga and Ayurveda,[82–86] Indian philosophy[87–91] and traditional healers.[92–94] Systematic research has been done on yogic practices and their effect in different mental disorders in the past 2–3 decades. There is a resurgence of academic interest in the effects of different types of yogic practices and the mental health relevance of the *Bhagavad Gita*. In January 2009, the Indian Psychiatric Society published a volume on *Spirituality and Mental Health*, containing over three dozen articles on various aspects of spiritualism and mental health. Initially, yoga and meditation were used in a wide range of mental disorders. In addition, the special relationship between the patient and the therapist in the Indian context and its advantages were explored. This was followed by a comparison of standard treatment with yoga in psychoneuroses, anxiety, drug addiction and psychogenic headache. There were also a number of studies on various aspects of transcendental meditation and its physiological effects. All this leads one to conclude that there will be further examination of spirituality, in general, and the impact of yoga and meditation, in particular, in the coming years, using a wide variety of physiological and psychological tools.

PSYCHIATRY IN THE PRIVATE SECTOR

One of the striking features of Indian psychiatry has been the growth of psychiatry in the private sector. This development has taken services to smaller towns and taluks. However, at present, the public and private systems are not working in coordination. There is scope for the involvement of the private sector in providing basic data regarding care seekers by systematically recording their work so as to provide an understanding of the magnitude of mental health needs, treatment utilization and related issues; working in medical colleges and district hospitals as honorary consultants; training primary healthcare personnel; monitoring the district level mental health programmes; supporting NGOs in their mental health initiatives; supporting special populations in jails and homes; and educating the public on mental health.

RESEARCH

The other major contribution of professionals has been in mental health research. The ICMR, New Delhi, gave a big push to mental health research in the 1980s. This research has not only brought to light the importance of understanding mental disorders such as schizophrenia in the cultural context, but has also shown the feasibility of developing models involving schools, primary healthcare and general practitioners, as well as working with families. This new knowledge has continuously supported the development of mental health programmes.[95–97]

REVIEW OF THE PROGRESS

In reviewing the progress, it would be inappropriate to view the wide variety of developments from the current perspective. Each of the successes and failures will have to be placed in its historical perspective. An overview of the developments of the past 6 decades shows that a large number of initiatives have been taken. These have largely been in response to a specific need during a specific time period. For example, in the 1950s, the lack of human resources in mental hospitals was addressed by involving families in the caregiving programmes. In the 1960s, the availability of drugs for the treatment of mental disorders resulted in mental illnesses being treated alongside other illness with the setting up of psychiatric units in general hospitals. During the 1970s, the growth of public sector health services and the influence of the Alma Ata declaration guided the development of community mental health programmes and the formulation of the NMHP in 1982. During the 1980s and 1990s, the need for non-mental hospital facilities for rehabilitation resulted in the establishment of community care facilities in different parts of India, mainly by voluntary organizations. The recognition of the human rights of mentally ill persons is reflected not only in improvements in mental hospitals, but also in the revision of mental health legislation. Each of these initiatives has been started and guided by professionals with a vision and has been taken during a particular time period and to address a specific need.

LACUNAE

While these efforts have been noteworthy, there have been lacunae in some areas. The NMHP has been criticized for the following reasons: (i) it has a top–down approach; (ii) it is not based on the cultural aspects of the country; (iii) it is not effective; (iv) it is driven by WHO policies; and (v) it does not involve community leaders.[69–71] This criticism is not valid as can be seen from the review of developments during the past 4 decades. Community psychiatry in India has been driven by the realities of the country (e.g. involvement of families from the 1950s, when the rest of the world was viewing the family as 'toxic'). The development of models of care was based on a decade of field work, carried out by 2 academic centres, which was aimed at understanding and meeting the needs of the community, and not in response to the WHO. These 2 centres based their interventions on 'community voices' and these have been well documented. The development of the policies of WHO was as much influenced by Indian professionals as Indian psychiatry was driven by WHO. Indeed

during the past 30 years, Indian professionals have played important roles in WHO as regular staff at Geneva and the regional offices. As pointed out in recent books titled *Mental Health by the People* and *NGO Innovations in India*, community psychiatry in India is not a 'single-model' programme, but consists of a wide variety of initiatives involving community resources.[20–22]

The DMHP will have to be the flagship programme of the NMHP because (i) at present, a large proportion of the mentally ill are without care and have poor awareness of mental disorders, especially in rural areas; (ii) a large proportion are already seeking help from the existing primary healthcare facilities; (iii) most people in rural areas will not travel long distances to seek help; (iv) those seeking help will not continue to take help unless it is available close to their place of residence; (v) limited specialist manpower limits the reach of specialist services; (vi) it is possible for health personnel to provide essential mental healthcare; and (vii) when care is provided patients can recover/function better, with a better quality of life, and the burden on the family and society is reduced.

It is important that these aspects are given importance in the coming years. The DMHP, by taking services as close as possible to the place of stay of the people, has the greatest potential to provide care to those who need it. However, at present, the technical inputs required to organize the programme, the training of primary healthcare personnel, support and supervision of health personnel by mental health professionals, and administrative support needed to monitor and periodically evaluate the programme are inadequate.

THE FUTURE

The importance of mental health as part of public health and the current limitations in the provision of mental healthcare are reflected in the lay press and professional writings. For example, mental health was described as a 'depressing scene' (*Frontline*, 10 April 2009). *The Tribune*, Chandigarh published a series of articles titled, 'Mental disorders go unattended in country' (14 September 2009), 'Mental health fights for its space' (20 September 2009) and an editorial, 'Restoring mental health' (14 September 2009). Leading psychiatrists have written on 'Making psychiatry a household word',[98] 'Tasks before psychiatry today',[99] 'Public mental health, an evolving imperative' and 'Mental health care—a universal challenge'.[100–102]

As the NMHP enters the fourth decade of implementation, there is a new awareness of mental health issues among the public. A good illustration is the response of the public, press, planners, professionals and judiciary to certain events. In the mid-1980s, a dramatic event occurred at the Ranchi Mental Hospital, when patients escaped and the pitiable living conditions in mental hospitals were highlighted by the media. However, there was no public reaction to the event. In contrast, the Erwady tragedy in 2001 not only evoked a sense of horror, but also resulted in the examination of human rights of the mentally ill in all its aspects. Parliament, the state legislatures, the Supreme Court and the high courts took up the matter actively to usher in reforms in mental health.

It is in this altered and enlightened setting that the future should be planned.[103] First, the scope of mental health should include the treatment of mental disorders along with their prevention and the promotion of mental health. There is a need to think of a paradigm shift in the way that 'mental health' and 'mental disorders' are presented to the general population. Till now, professionals have felt comfortable with the 'deviancy model', which has not allowed the community to see mental health as relevant to each and every individual. This is unsatisfactory as it does not cover all the mental health concerns of the community. It is time for us to move to the 'normalcy model', in which everyone recognizes both their vulnerability as well as their ability to address matters of mental health.[103] Such a shift from illness to behaviour is occurring in other areas of health (e.g. nutrition, physical activity). Interestingly, practitioners of self-help techniques such as yoga, meditation, art of living and vipassana are popularizing these measures and gaining more acceptance than psychiatric services. This requires a radical rethink of the scope of mental health, the roles of professionals and people, and the sharing of skills, and most importantly, a greater partnership with all stakeholders.

The provision of community-level, decentralized services should be given primacy in mental health programmes. The DMHP has to be at the centre of the mental health programme. The current 'extension clinic' approach has to be replaced with true integration of mental healthcare with primary healthcare personnel (similar to that in the case of tuberculosis, leprosy, etc.). There is an urgent need to develop specific indicators to monitor the DMHP. Similarly, there is a need to enhance technical inputs to organize the training of primary healthcare personnel, and to provide essential medicines, support and supervision to health personnel by private sector mental health professionals, administrative support necessary for monitoring and periodically evaluating the programme, and public mental health education. There should be technical advisory committees at the national and state levels to guide the DMHP constantly.

Third, the importance given to the development of human resources for mental healthcare in the Eleventh Five-Year Plan, in the form of the establishment of centres of excellence, constitutes an important initiative. This should be supported with the creation of employment opportunities for the additional professionals trained at these centres to prevent brain drain of trained professionals.

Fourth, the public–private partnership needs to be improved and enhanced. The involvement of the private sector can range from giving support to train personnel, monitoring work locally, taking up specific care programmes such as the maintenance care of chronic patients, to sharing of information on their clinical work so that the state/country statistics reflect the total picture and not that of the public sector alone. A serious dialogue should take place in the coming years, and activities for private sector involvement should be identified. Funding support must be made available for such activities.

Fifth, there is a need to support NGO initiatives, especially in the areas of (i) setting up of self-help groups of patients/families, (ii) imparting public mental health education to reduce stigma, (iii) providing financial and technical support for the establishment of a spectrum of rehabilitation facilities such as day care, half-way and long-stay homes and sheltered workshops, and (iv) promoting income-generating activities by patients and families.

Sixth, awareness must be increased among the public of the fact that mental disorders are common, treatable illnesses, and people should also be made aware of the importance of acceptance by the family and the community, as well as of rehabilitation. India has a tradition of giving importance to mental health, evidence of which can be found in Hindu philosophy. Yoga, meditation and spiritual ways of understanding adverse life situations are part of the daily life of Indians. There is a need to disseminate new knowledge on these practices and strengthen those that are helpful in order to benefit persons in need.

Seventh, mental disorders and mental health issues are both

universal and local. Sociocultural factors come into greater play in the sphere of mental health issues than in physical disorders. Research has to be a continuous part of the mental health programme. The ICMR should immediately take an initiative similar to that of the 1980s. This could yield rich dividends.

Eighth, there is an urgent need to create structures to support mental health programmes. This would include full-time staff and an office for the Central Mental Health Authority and technical mental health advisory groups at the Central and state levels. Transparency of the funding mechanisms must be ensured and all information should be made available to the public. It is by creating these structures that we will avoid the problems faced in the past decades by the DMHP and mental hospitals, and in the sphere of undergraduate medical education and support to voluntary organizations.

In conclusion, the development of mental health services all over the world, in rich and poor countries alike, has been the product of larger social situations, specifically, the importance society has given to the rights of disadvantaged/marginalized groups. Economically rich countries have addressed the community needs for mental healthcare by moving from institutionalized to community care, building on the strengths of their social institutions. India has begun this process and made important progress. There is a need to continue the process by widening the scope of mental health interventions, increasing the involvement of all available community resources, and basing the interventions on the historical, social and cultural roots of India. This will be a continuing challenge for professionals and people in the coming years. The story of mental healthcare is an unfinished one. Much has occurred during the past 6 decades but much more needs to be done to complete the story.

REFERENCES

1 Ministry of Health and Family Welfare, Government of India. *National Health Policy*, 2000.
2 Ministry of Health and Family Welfare, Government of India. *Annual Report to the People on Health*. New Delhi:Ministry of Health and Family Welfare, Government of India; September 2010.
3 Thornicroft GJ, Szmukler G. *Textbook of community psychiatry*. Oxford:Oxford University Press; 2001.
4 Thornicroft G, Tansella M, Law A. Steps, challenges and lessons in developing community mental health care. *World Psychiatry* 2008;**7:**87–92.
5 Dube KC. Unlocking of wards: An Agra experiment. *Indian J Psychiatry* 1963;**5**: 2–7.
6 Sharma S. *Mental hospitals in India*. New Delhi:Directorate General of Health Services, Government of India; 1990.
7 Vidyasagar. Challenge of our times: Presidential Address. *Indian J Psychiatry* 1973;**15:**95–103.
8 Carstairs GM. *Community action for mental health care*. WHO/SEARO/MENT/ 22:1974.
9 Srinivasa Murthy R. Family and mental health care in India. *Alumni J Christian Medical College* 2007;**41:**19–30.
10 Wig NN. General hospital psychiatric unit—right time for evaluation. *Indian J Psychiatry* 1978;**20:**1–9.
11 Murthy RS, Kala R, Wig NN. Mentally ill in a rural community: Some initial experiences in case identification and management. *Indian J Psychiatry* 1978;**20:**143–7.
12 Wig NN, Srinivasa Murthy R, Harding TW. A model for rural psychiatric services—Raipur Rani experience. *Indian J Psychiatry* 1981;**23:**275–90.
13 Chandrashekar CR, Issac MK, Kapur RL, Parthasarathy R. Management of priority mental disorders in the community. *Indian J Psychiatry* 1981;**23:**174–8.
14 Kapur RL, Chandrashekar CR, Shamasundar C, Isaac MK, Parthasarathy R, Shetty S. Extension of mental health service through psychiatric camps: A new approach. *Indian J Psychiatry* 1982;**24:**237–41.
15 Isaac MK, Kapur RL, Chandrashekar CR, Kapur M, Pathasarathy P. Mental health delivery through rural primary care—Development and evaluation of a training programme. *Indian J Psychiatry* 1982;**24:**131–8.
16 Gautam S. Development and evaluation of training programmes for primary mental health care. *Indian J Psychiatry* 1985;**27:**51–62.
17 Indian Council of Medical Research–Department of Science and Technology (ICMR–DST). *A collaborative study of severe mental morbidity*. New Delhi: ICMR; 1987.
18 Isaac MK, Chandrasekar CR, Srinivasa Murthy R, Karur BV. Decentralised training for PHC medical officers of a district. The Bellary approach. In: Verghese A (ed). *Continuing medical education, Vol. VI*. Calcutta:Indian Psychiatric Society; 1986.
19 Srinivasa Murthy R. Community mental health in India. In: *Mental health in India—Essays in honour of Prof. N.N. Wig*. Bangalore:Peoples Action for Mental Health; 2000:150–76.
20 Ranganathan S. *The empowered community: A paradigm shift in the treatment of alcoholism*. Madras:TTR Clinical Research Foundation; 1996.
21 Patel V, Thara R (eds). *Meeting mental health needs in developing countries: NGO innovations in India*. New Delhi:Sage (India); 2003.
22 Srinivasa Murthy R (ed). *Mental health by the people*. Bangalore:Peoples Action for Mental Health; 2006.
23 Gururaj G, Isaac MK. Psychiatric epidemiology in India: Moving beyond numbers. In: Agarwal SP (ed). *Mental health: An Indian perspective*. New Delhi:Directorate General of Health Services; 2004:37–61.
24 Bada Math S, Chandrashekar CR, Bhugra D. Psychiatric epidemiology in India. *Indian J Med Res* 2007;**126:**183–92.
25 Arokiasamy P, Guruswamy M, Roy TK, Lhungdim H, Chatterji S, Nandraj S. *Health system performance assessment: World Health Survey 2003, India*. Mumbai:International Institute for Population Sciences (IIPS), World Health Organization, World Health Organization–India Office; July 2006.
26 Janardhan A, Raghunandan S. *Caregivers in community mental health—a research study*. Bangalore:Basic Needs (India); 2009.
27 Ramalakshmi V, Padmavati R, Kamath S, Joseph A. Admission into a residential facility for chronic mentally ill. *Indian J Social Psychiatry* 1998;**14:**37–40.
28 Padmavati R, Rajkumar S, Srinivasan TN. Schizophrenic patients who were never treated—A study in an Indian urban community. *Psychol Med* 1998;**28:**1113–17.
29 Srinivasan TN, Rajkumar S, Padmavati R. Initiating care for untreated schizophrenia patients and results of one-year follow-up. *Int J Soc Psychiatry* 2001;**47:**73–80.
30 Philip M, Gangadhar BN, Jagadisha, Velayudhan L, Subbakrishna DK. Influence of duration of untreated psychosis on the short-term outcome of drug-free schizophrenia patients. *Indian J Psychiatry* 2003;**45:**158–60.
31 Srinivasan Tirupati N, Thara R, Padmavati R. Duration of untreated psychosis and treatment outcome in schizophrenia patients untreated for many years. *Aust NZ J Psychiatry* 2004;**38:**339–43.
32 Venkatesh BK, Thirthalli J, Naveen MN, Kishorekumar KV, Arunachala U, Venkatasubramanian G, *et al*. Sex difference in age of onset of schizophrenia: Findings from a community-based study in India. *World Psychiatry* 2008;**7:** 173–6.
33 Chatterjee S, Patel V, Chatterjee A, Weiss HA. Evaluation of a community-based rehabilitation model for chronic schizophrenia in rural India. *Br J Psychiatry* 2003;**182:**57–62.
34 Srinivasa Murthy R, Kishore Kumar KV, Chisholm D, Thomas T, Sekar K, Chandrashekar CR. Community outreach for untreated schizophrenia in rural India: A follow-up study of symptoms, disability, family burden and costs. *Psychol Med* 2005;**35:**341–51.
35 Thara R, Padmavati R, Aynkran RA, John S. Community mental health in India: A rethink. *Int J Mental Health Systems* 2008;**2:**11.
36 Thirthalli J, Venkatesh BK, Kishorekumar KV, Arunachala U, Venkatasubramanian G, Subbakrishna DK, *et al*. Prospective comparison of course of disability in antipsychotic-treated and untreated schizophrenia patients. *Acta Psychiatr Scand* 2009;**119:**209–17.
37 Thirthalli J, Venkatesh BK, Naveen MN, Venkatasubramanian G, Arunachala U, Kishore Kumar KV, *et al*. Do antipsychotics limit disability in schizophrenia? A naturalistic comparative study in the community. *Indian J Psychiatry* 2010;**52:** 37–41.
38 Saravanan B, Jacob KS, Johnson S, Prince M, Bhugra D, David AS. Outcome of first-episode schizophrenia in India: Longitudinal study of effect of insight and psychopathology. *Br J Psychiatry* 2010;**196:**454–9.
39 Farooq S, Large M, Nielssen O, Waheed W. The relationship between the duration of untreated psychosis and outcome in low- and middle-income countries: A systematic review and meta-analysis. *Schizophr Res* 2009;**109:**15–23.
40 Wig NN. Stigma against mental illness. *Indian J Psychiatry* 1997;**39:**187–9.
41 Srinivasa Murthy R. Perspectives on the stigma of mental illness. In: Okasha A, Stefanis CN (eds). *Perspectives on the stigma of mental illness*. Geneva:World Psychiatric Association; 2005:112–30.
42 Thara R, Islam A, Padmavati R. Beliefs about mental illness: A study of a rural south Indian community. *Int J Ment Health* 1998;**27:**70–84.
43 Kulhara P, Avasthi A, Sharma A. Magico-religious beliefs in schizophrenia: A study from north India. *Psychopathology* 2000;**33:**62–8.
44 Thara R, Srinivasan TN. How stigmatising is schizophrenia in India? *Int J Soc Psychiatry* 2000;**46:**135–41.
45 Padmavati R, Thara R, Corin E. A qualitative study of religious practices by chronic mentally ill and their caregivers in South India. *Int J Soc Psychiatry* 2005;**51:**139–49.
46 Charles H, Manoranjitham SD, Jacob KS. Stigma and explanatory models among people with schizophrenia and their relatives in Vellore, South India. *Int J Soc Psychiatry* 2007;**53:**325–32.
47 Loganathan S, Srinivasa Murthy R. Experiences of stigma and discrimination

endured by people suffering from schizophrenia. *Indian J Psychiatry* 2008;**50:** 39–46.
48 Thornicroft G, Brohan E, Rose D, Sartorius N, Leese M; INDIGO Study Group. Global pattern of experienced and anticipated discrimination against people with schizophrenia: A cross-sectional survey. *Lancet* 2009;**373:**408–15.
49 Sebastia B. *Restoring mental health in India—pluralistic therapies and concepts*. New Delhi:Oxford; 2009.
50 National Human Rights Commission. *Quality assurance in mental health*. New Delhi:NHRC; 1999.
51 Nagaraja D, Murthy P (eds). *Mental healthcare and human rights*. New Delhi:National Human Rights Commission; 2008.
52 World Health Organization. *Mental health atlas*. Geneva:World Health Organization; 2005.
53 Thirunavukarasu M, Thirunavukarasu P. Training and national deficit of psychiatrists in India—A critical analysis. *Indian J Psychiatry* 2010;**52:**S83–S88.
54 Saravanan B, Jacob KS, Johnson S, Prince M, Bhugra D, David AS. Belief models in first episode schizophrenia in South India. *Soc Psychiatry Psychiatr Epidemiol* 2007;**42:**446–51.
55 Mudaliar AL. *Health survey and planning committee*. New Delhi:Government of India; 1962.
56 World Health Organization. Organization of mental health services in developing countries. Sixteenth Report of the WHO Expert Committee on Mental Health. *World Health Organ Tech Rep Ser* 1975;**564:**1–41.
57 Director General of Health Services. *National Mental Health Programme for India*. New Delhi:Ministry of Health and Family Welfare; 1982.
58 Agarwal SP, Goel DS, Salhan RN, Ichhpujani RL, Shrivatsava S (eds). *Mental health—An Indian perspective (1946–2003)*. New Delhi:Directorate General of Health Services, Ministry of Health and Family Welfare; 2004.
59 Reddy GNN, Channabasavanna SM, Murthy RS, Narayana Reddy GN, Srinivasa Murthy R. Implementation of national mental health programme for India. *NIMHANS J* 1986;**4:**77–84.
60 Srinivasa Murthy R, Wig NN. Evaluation of the progress in mental health in India since independence. In: Mane P, Gandevia K (eds). *Mental health in India: Issues and concerns*. Bombay:Tata Institute of Social Sciences; 1993:387–405.
61 Srinivasa Murthy R. Mental health programme in the 11th 5-year plan. *Indian J Med Res* 2007;**125:**707–12.
62 Government of India. *Implementation of National Mental Health Programme during the Eleventh Five Year Plan—approval of the manpower development component*. New Delhi:Ministry of Health and Family Welfare, 24 April 2009 (mimeo 23 pages).
63 Planning Commission. *Towards faster and more inclusive growth—An approach to the 11th Five Year Plan (2007–2010)*. New Delhi:Yojana Bhavan, Government of India, December 2006, p. 72.
64 Anant Kumar. District mental health programme in India: A case study. *J Health Dev* 2005;**1:**24–35.
65 Kumari P, Nigar N, Khess CRJ. District mental health programme: A critical appraisal. *Indian J Soc Psychiatry* 2007;**23:**88–96.
66 Krishnamurthy K, Gowri Devi M, Anand B, Thejam P, Rao YSSR. District mental health programme—Role of medical officers. *Indian J Psychol Med* 2003;**26:** 23–7.
67 Jain S, Jadhav S. Pills that swallow policy: Clinical ethnography of a community mental health program in northern India. *Transcult Psychiatry* 2009;**46:**60–85.
68 Waraich BK, Lok Raj, Chavan BS, Badhan R, Panda SN. Decentralisation of mental health services under DMHP. *Indian J Psychiatry* 2003;**45:**161–5.
69 Kapur RL. The story of community mental health in India. In: Agarwal SP, Goel DS, Ichhpujani RL, Salhan RN, Shrivatsava S (eds). *Mental health—An Indian perspective (1946–2003)*. New Delhi:Directorate General of Health Services, Ministry of Health and Family Welfare; 2004:92–100.
70 Jacob KS. Community care for people with mental disorders in developing countries: Problems and possible solutions. *Br J Psychiatry* 2001;**178:**296–8.
71 Jacob KS, Sharan P, Mirza I, Garrido-Cumbrera M, Seedat S, Mari JJ, *et al*. Mental health systems in countries: Where are we now? *Lancet* 2007;**370:**1061–77.
72 Indian Council for Market Research. *Evaluation of the district mental health programme—Final report*. New Delhi, 2009.
73 Kalyanasundaram S, Verghese Mathew (eds). *Innovations in psychiatric rehabilitation*. Bangalore:Richmond Fellowship Society, India; 2000.
74 Suman C, Baldev S, Srinivasa Murthy R, Wig NN. Helping the chronic schizophrenic and their families in the community—initial observations. *Indian J Psychiatry* 1980;**22:**97–102.
75 Pai S, Kapur RL. Impact on treatment intervention on the relationship between the dimensions of clinical psycho-pathology, social dysfunction and burden on families of schizophrenic patients. *Psychol Med* 1982;**12:**651–8.
76 Pai S, Roberts EJ. Follow-up study of schizophrenic patients initially treated with home care. *Br J Psychiatry* 1983;**143:**447–50.
77 Pai S, Kapur RL. Evaluation of home care treatment for schizophrenic patients. *Acta Psychiatr Scand* 1983;**67:**80–8.
78 Pai S, Channabasavanna SM, Nagarajaiah, Raghuram R. Home care for chronic mental illness in Bangalore: An experiment in the prevention of repeated hospitalization. *Br J Psychiatry* 1985;**147:**175–9.
79 Srinivasan N. *We are not alone—Family care for persons with mental illness*. Bangalore:Action for Mental Illness (ACMI); 2008.
80 Shankar R, Rao K. From burden to empowerment: The journey of family caregivers in India. In: Sartorius N, Leff J, López-Ibor JJ, Maj M, Okasha A (eds). *Families and mental disorders*. Chichester, England:John Wiley and Sons; 2005:259–90.
81 United Nations. *Convention of the rights of persons with disabilities*. 2006.
82 Vahia NS, Doongaji DR, Jeste DV, Kapoor SN, Ardhapurkar I, Nath SR. Further experience with the therapy based upon concepts of Patanjali in the treatment of psychiatric disorders. *Indian J Psychiatry* 1973;**15:**32–7.
83 Balakrishna V, Sanghvi LD, Rana K, Doongaji DR, Vahia NS. The comparison of psychophysiological therapy with drug therapy. *Indian J Psychiatry* 1977;**19:** 87–91.
84 Janakiramaiah N, Gangadhar BN, Naga Venkatesha Murthy PJ, Harish MG, Subbakrishna DK, Vedamurthachar A. Antidepressant efficacy of Sudarshan Kriya Yoga (SKY) in melancholia: A randomized comparison with electroconvulsive therapy (ECT) and imipramine. *J Affect Disord* 2000;**57:**255–9.
85 Duraiswamy G, Thirthahalli J, Nagendra HR, Gangadhar BN. Yoga therapy as an add on treatment in the management of patients with schizophrenia—a randomised controlled trial. *Acta Psychiatr Scand* 2007;**116:**226–32.
86 Vedamurthachar A, Janakiramiah N, Hegde JM, ShettyTK, Subbakrishna DK, Sureshbabu SV, *et al*. Antidepressant efficacy and hormonal effects of Sudarshana Kriya Yoga (SKY) in alcohol dependent individuals. *J Affect Disord* 2006;**94:** 249–53.
87 Wig NN. Indian concepts of mental health and their impact on care of the mentally ill. *Int J Ment Health* 1990;**18:**71–80.
88 Venkoba Rao A. *Culture, philosophy mental health*. Mumbai:Bharatiya Vidya Bhavan; 1997.
89 Gautam S. Mental health in ancient India and its relevance to modern psychiatry. *Indian J Psychiatry* 1999;**41:**5–18.
90 Jeste DV, Vahia IV. Comparison of the conceptualization of wisdom in ancient Indian literature with modern views: Focus on the Bhagavad Gita. *Psychiatry* 2008;**71:**197–209.
91 Srinivasa Murthy R. Hinduism and mental health. In: Verhagen PJ, Van Praag HM, López-Ibor Jr JJ, Cox JL, Moussaoui D (eds). *Religion and psychiatry—Beyond boundaries*. Oxford:Wiley-Blackwell, World Psychiatric Association; 2010: 159–80.
92 Kapur RL. The role of traditional healers in mental health care in rural India. *Soc Sci Med* 1979;**13:**27–31.
93 Trivedi JK, Sethi BB. A psychiatric study of traditional healers in Lucknow city. *Indian J Psychiatry* 1979;**21:**133–7.
94 Trivedi JK, Sethi BB. Healing practices in psychiatric patients. *Indian J Psychiatry* 1980;**22:**111–15.
95 ICMR. *Strategies for mental health research*. New Delhi:Indian Council of Medical Research; 1982.
96 ICMR. *Mental Health Research in India (1982–2005)*. New Delhi:Indian Council of Medical Research; 2005.
97 Murthy RS. Mental health in the new millennium: Research strategies for India. *Indian J Med Res* 2004;**120:**63–6.
98 Reddy IRS. Making psychiatry a household word. *Indian J Psychiatry* 2007;**49:** 10–18.
99 Singh AR. The task before psychiatry today. *Indian J Psychiatry* 2007;**49:**60–5.
100 Desai NG. Taking psychiatry to the public in the Third World: Potential and pitfalls. *Indian J Psychiatry* 2005;**47:**131–2.
101 Desai NG. Public mental health: An evolving imperative. *Indian J Psychiatry* 2006;**48:**135–7.
102 Desai NG. Responsibility of psychiatrists: Need for pragmatic idealism. *Indian J Psychiatry* 2006;**48:**211–14.
103 Wig NN. The future of psychiatry in developing countries: The need for national programmes of mental health. *NIMHANS J* 1989;**7:**1–11.