REVIEW ARTICLE

The National Mental Health Programme of India

Sushovan Roy[1] & Nazish Rasheed[2]

[1& 2]Assistant Professor, Department of Community Medicine, Hamdard Institute of Medical Sciences and Research, Jamia Hamdard, New Delhi-110062.

Abstract:

India was one of the first in the developing world to initiate a National Mental Health Programme (NMHP) in 1982. It was conceptualized to provide mental health care in the community as a part of general health care in a primary health care setting. The NMHP has seen many changes in its focus and realm over the years, picking up pertinent lessons and implementing corrective changes along the way. One of the chief turning points was the change of emphasis of the programme activities from the central/ state capital level to the district level, by introduction of the District Mental Health Programme (DMHP). This added the needed impetus to the programme. But results were not uniformly encouraging. A new initiative taken in October 2014 in the shape of a comprehensive Mental Health Policy by the central government promised a change in focus on the most necessary executive actions. Currently, we are into the 12th plan period (2012-2017), and the N/DMHP stands at the threshold of reaching its potential in considerable measure to ultimately realize the goals set for it at the outset.

Key words: *NMHP, Bellary Model, DMHP, Community Mental Health Care, Mental Health Policy.*

Introduction:

The World Health Organization (WHO) while defining health refers to both physical & mental well-being. The physical health of the individual has been the major focus of public health care delivery apparatus, especially in the developing countries. In the immediate post world-war II years most of these countries had just gained independence, their national development budgets were limited and they had high mortality and morbidity levels. So justifiably, the chief focus of public health care was on combating killer diseases like smallpox, tuberculosis, cholera, malaria, and also the vaccine preventable diseases in children. In India also the story had a similar script. But laudably, India launched the National Mental Health Programme (NMHP) in 1982. The main aim of this review paper is to objectively examine the NMHP from its inception to its current station.

Conceptual Antecedents:

Cognizance of the need to include mental health care in the general public health care system was taken by the National Institute of Mental Health and Neuro Sciences (NIMHANS), Bangalore (now Bengaluru) by starting of a "Community Mental Health Unit" in 1975 [1]. Mental health needs assessment and situation analysis in over 200 villages situated around the rural mental health centre at Sakalwara in Bangalore rural district covering a population of about 100,000 were carried out by this community mental health unit. Simple methods of identification and management of persons with mental illness, mental retardation and epilepsy in the rural community by primary care personnel were developed [2].

Address for correspondence:
Dr. **Sushovan Roy**
Assistant Professor, Department of Community Medicine,
Hamdard Institute of Medical Sciences and Research,
Jamia Hamdard, New Delhi-110062.
Email ID: roy.sushovan@gmail.com

How to cite this article: Sushovan Roy & Nazish Rasheed : The National Mental Health Programme of India; ; International Journal of current Medical and Applied sciences; 2015, 7(1), 07-15.

Access this Article Online

Website: www.ijcmaas.com

Subject: Medical Sciences

Quick Response Code

Pilot training programmes in basic mental health care for primary health care (PHC) personnel were conducted in various primary health centres in Bangalore, Kolar and Tumkur districts in Karnataka [3]. Simple mental health educational materials which could be used by multipurpose health workers in rural areas were also developed. A variety of methods for evaluating the training in mental health provided to PHC personnel were developed and tested in the field [4, 5, 6, 7]. Based on the novel experiences from its rural mental health centre, the community mental health unit at NIMHANS developed a strategy for taking mental health care to the rural areas through the existing primary health care network [8].

Around the same time a multi-country collaborative project was initiated by the WHO to propose a model for integrating mental health with general health services and providing basic mental health care by trained health workers and doctors as an integral part of primary health care. This was carried out in 7 developing countries, *viz.* Brazil, Colombia, Egypt, India, Philippines, Senegal and Sudan. The department of psychiatry at the Post Graduate Institute of Medical Education and Research (PGIMER) in Chandigarh was the centre in India and the model was developed in the Raipur Rani block in Haryana state [9, 10, 11].
The Indian Council of Medical research (ICMR) and the Department of science and Technology (DST) of Government of India funded a 4 centre collaborative study to evaluate the feasibility of training PHC staff to provide mental health care as part of their routine work. This evaluation of a mental health intervention strategy involving primary care personnel was carried out for one year covering a population of 40, 000 in a primary health centre each at Bangalore, Patiala, Calcutta and Baroda. At the end of one year period about 20% of the actual cases were identified and managed by the PHC personnel under the overall supervision of the centre staff [12, 13, 14].

Birth of the NMHP:

The experience and knowledge accrued from the above pilot studies became the basis for drafting of the National Mental Health Programme (NMHP). It was written by an expert drafting committee which consisted of some of the leading, senior psychiatrists in India then and was reviewed and revised in two national workshops attended by a large number of mental health professionals and other stakeholders during 1981-82. It was finally adopted for implementation by the Central Council of Health and Family Welfare (CCHFW), Government of India in August 1982 [15]. India thus became one of the first countries in the developing world to formulate a national mental health programme.

The objectives of the NMHP were:

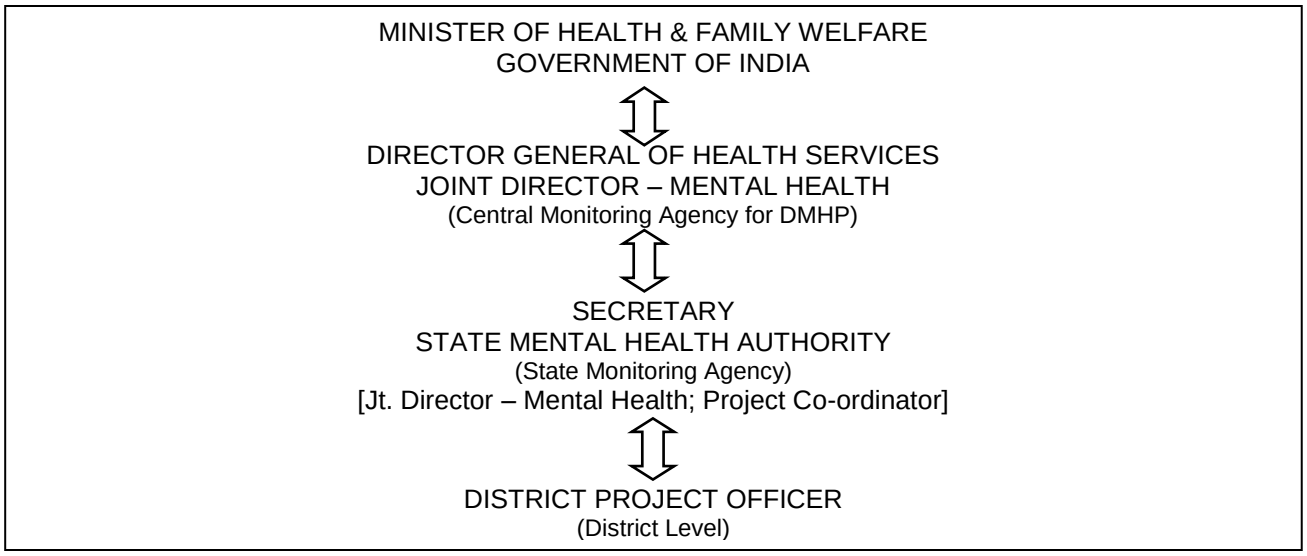
- To ensure availability & accessibility of minimum mental health care for all (particularly the vulnerable & underprivileged sections)
- To encourage application of mental health knowledge in general health care and in social development
- To promote community participation in the mental health services development and to stimulate self-help efforts in the community.

To realize these objectives the following approaches were envisaged:

- Integration of the mental health care services with the existing general health services.
- Utilization of the existing health services infrastructure to deliver minimum mental health care services.
- Provision of appropriate task oriented training to the existing health staff.
- Linking of mental health services with the existing community development programs.

The original NMHP guidelines carried many ambiguities. Most importantly, no budgetary estimates or provisions were made for the implementation of the programme. There was lack of clarity regarding who should fund the programme – the central government of India or the state governments who perpetually had inadequate funds for health care. Although the draft of the programme was discussed in great detail by the mental health profession and revised before its final adoption by the CCHFW, there were mostly lukewarm responses and in some instances, virtual rejection of the programme by psychiatrists. Great doubts were expressed about the feasibility of implementing the programme in larger populations and in real world settings as almost all the pilots and feasibility projects were carried out by only research and training institutes and in smaller populations of up to 40, 000. The need for planning the implementation of the programme at a district level was stressed upon by majority of such critiques.

Figure 1: Administrative levels of the NMHP



Changing Gears to the DMHP:

Realizing that the NMHP was not likely to be implemented on a larger scale without demonstration of its feasibility in larger populations, the NIMHANS in 1985 developed a programme to operationalize and implement the NMHP in a district. Bellary district with a population of about 20 lakhs (2 million), located about 350 km away from Bangalore was chosen for the pilot development of a district level mental health programme. Besides training for all primary care staff, the other components of the district mental health programme at Bellary were: i)provision of 6 essential psychotropic and anti-epileptic drugs (chlorpromazine, amitriptyline, trihexyphenidyl, injection fluphenazine deaconate, phenobarbitone and diphenyl hydantoin) at all primary health centres and sub centres, ii)a system of simple mental health case records, and iii) a system of monthly reporting, regular monitoring and feedback from the district level mental health team. At the district headquarters, the mental health team consisted of a psychiatrist, clinical psychologist, a psychiatric social worker and a statistical clerk. The psychiatrist ran a mental health clinic at the district hospital to review patients referred from the primary health centres. The psychiatrist could admit up to 10 patients at the district hospital for brief in-patient treatment, if and when necessary. The mental health programme was reviewed every month at the district level by the district health officer during the monthly meeting of primary health centre medical officers. During the period 1985 – 1990, the feasibility of delivering basic mental health care at the district, taluk and primary health centre levels by trained primary health centre workers was demonstrated in whole district of Bellary in Karnataka State [17, 18, 19, 20].

This study continued till 1995, and the following conclusions were made:

Mental health care delivery was possible in the primary health care setting.

Primary care physicians could be adequately trained to provide such care.

Appropriate supervision / support from the program officer / psychiatrist empowers the public health care system to provide pertinent mental health care to the population.

This pioneering exercise resulted in the formulation of the "Bellary Model" of the District Mental Health Programme (DMHP), which formed the crux of the NMHP. The Ministry of Health and Family Welfare, Govt. of India formulated District Mental Health Programme (under National Mental Health Programme) as a fully centrally funded 5 year pilot scheme. The programme was to be implemented in two phases, the Phase I was to be taken up during 1996-97, and the Phase II was to be a continuation of the programme during the IX Five Year Plan period (1997-2002).

The DMHP was started in 27 districts across the country in 1996. The objectives of the DMHP were more precise and directional:

- To provide sustainable basic mental health services to the community.
- To integrate mental health services with primary health care services.

- Early detection and treatment of mental illness in the community itself.
- To obviate the need for the patient / relatives to travel large distances to tertiary care facilities in big cities.
- To ease pressure on psychiatry departments in teaching / mental hospitals.
- To reduce the stigma of mental illness by change of attitude through public health education.
- Treatment and rehabilitation within the community, of patients discharged from psychiatry units, by adequate provision of medicines and strengthening family support system.
- To detect / manage / refer epilepsy cases; ensure supply of anti-epileptics; reduce the stigma / misconceptions about epilepsy in the community.

The DMHP was conceptualized to be multifarious in its ambit of endeavor, with the following components:

Service provision by:

- Expansion of the DMHP to 500 districts of India.
- Provision of staff and equipment for 10 beds for acute mental health care in each district hospital.
- Appointing 1 program officer per district, who is a medical officer (M.O.) with at least 5 years of experience and trained for 3 months in mental health care / education and then 6 months in 2 years as a program officer.
- Availability of essential psychotropic drugs at the Primary Health Care (PHC) level and the more sophisticated ones like Lithium / Olanzapine / Valproate at the district level.

Training programmes:

- The medical officers and para-medical staff to be trained at the district headquarters by the psychiatrist / program officer5000 Taluk level medical officers to be trained for 6-12 months for a certificate course
- Public education on mental health issues:
- Information, Education and Communication (IEC) activities in districts to be upgraded with Rs. 25 crores (250 million) / year

School mental health programs to be implemented by imparting life skills education using initiated teachers and mental health workers / professionals.

Improvement of health care manpower and facilities by:

- Increasing the number of post-graduate (PG) psychiatry trainees by adding 50 M.D. and 25 D.P.M. seats all over India
- Modernizing and up staffing of mental hospitals.
- Recruiting psychiatric social workers (PSW) to consolidate the community psychiatry approach
- Providing valuable data for surveillance / monitoring / research.

Appraisal at Twelve:

Twelve years after its launch, an appraisal of the DMHP was done in 2008. The following constraints for the effective implementation of DMHP were identified: [21].

- Lack of an inbuilt and dedicated monitoring and implementing mechanism for programme
- Shortage of skilled manpower in Mental Health i.e. Psychiatrists, Clinical Psychologists, Psychiatric Social Workers & Psychiatric Nurses. This is a major constraint in meeting the mental health needs and providing optimal mental health services at the community level. Due to shortage of manpower in mental health, the implementation of DMHP suffered adversely in previous years.
- Lack of awareness /stigma about Mental Illness
- Lack of facilities for treatment of mentally ill
- Lack of coordination between implementing departments of DMHP i.e. Medical Education and Health in the states.
- Lack of Community involvement.

At the end of the 11th plan (2007-12) DMHP had been implemented in only 200 districts across the country. Most of the goals remained unmet and progress occurred inconsistently both in magnitude and geographic spread.

While taking stock of the DMHP at the conclusion of the 11th plan, the following observations could not be ignored:

- There was no comprehensive approach to include clinical psychologists for counselling
- Inclusion of the community leaders, grass-root workers like the ANM's, *Anganwadi* workers was mostly absent
- Lack of coordination between the DMHP & local medical colleges was evident
- Lack of initiative from psychiatrists/clinical psychologists to actively participate in the NMHP remained as before

- Awareness programs for reducing the stigma of mental illness by change of attitude through public education were few and between.
- There was poor understanding among lay population that psychological distress and ailments require medical intervention for control and cure.
- Existing cultural beliefs about nature of mental illness & its amelioration precluded people from seeking medical help.
- Multiple healthcare systems claimed to cure mental illness, adding to the confusion of the public.
- Almost negligible number of community surveys on mental illnesses and associated factors had been conducted.
- There was a lack of adequate monitoring of community mental health indicators.
- Protocol for early detection & treatment of mentally ill patients within the community was inadequately disseminated.
- There was very little provision to treat & rehabilitate mentally ill patients discharged from the mental hospitals within the community.
- Main emphasis remained on the curative services for the mental disorders and preventive measures were largely ignored.

Table 1: State/Union Territory wise deficit in availability of psychiatrist in India, compared to the NIMHANS recommended 1psychiatrist per 100,000 populations [23].

S. No.	State / Union Territory	Deficiency of psychiatrists (%)
1.	Kerala	25.16
2.	Maharashtra	49.74
3.	Mizoram	55.56
4.	Tamil Nadu	57.81
5.	Sikkim	60.00
6.	Karnataka	62.43
7.	Punjab	63.22
8.	Tripura	70.97
9.	Manipur	75.00
10.	Nagaland	75.00
11.	Andhra Pradesh	76.22
12.	Meghalaya	78.26
13.	Gujarat	80.79
14.	Haryana	81.43
15.	Jharkhand	81.48
16.	Himachal Pradesh	86.89
17.	Rajasthan	86.73
18.	Assam	89.10
19.	West Bengal	89.65
20.	Arunachal Pradesh	90.00
21.	Chhattisgarh	92.75
22.	Uttaranchal	92.86
23.	Uttar Pradesh	93.07
24.	Odisha	94.82
25.	Jammu & Kashmir	96.00
26.	Bihar	96.62
27.	Madhya Pradesh	98.01

Importantly, various barriers to acceptance of the DMHP by the community at large were also identified:

Social Stigma:

Mental Illnesses still carried with them very strong social stigma.

Families tried hide the fact that a mentally ill person was a member, thus precluding their seeking help openly.

The abnormal behavior was tolerated till violence / social embarrassment ensued beyond endurance.

Lack of Awareness:

Generally the lay public was not aware that these are medical illnesses amenable to treatment/cure by modern medical methods. Commonly village shamans/faith healers/traditional medical healers were approached for panacea.

How Things Stand Today:

According to the official statistics of the Government of India, current prevalence of mental disorders in India varies from 6% to 7% for common mental disorders and 1% - 2% for severe mental disorders. Importantly, the treatment gap for severe mental disorders is 50% and for common mental disorders is over 90 per cent [21]. The NIMHANS, Bengaluru recommends 1 psychiatrist per 100,000 population. The contemporary situation is far from satisfactory, as presented in the table below: [23].

Lakshadweep has the embarrassing distinction of not having a single psychiatrist. The all India average deficit of psychiatrists is 77.64%. It is estimated that in India there is one psychiatrist for every 10 lakh (1 million) population. India has 23% of required psychiatrists, 25% of psychiatric nurses and only 3% of clinical psychologists and psychiatric social workers. In absolute numbers, they add up to 3,500 psychiatrists, 500 clinical psychologists, 300 psychiatric social workers and about a 1,000 psychiatric nurses [24]. These statistics betray the grim reality of the lack of interest in community mental health care in the mental health care professional. India is churning out inadequate numbers of psychiatrists per year, mainly due to lack of motivation to specialize in psychiatry and deficiency of number of post-graduate seats in the discipline [23]. This phenomenon has a 'trickle-down' effect on the other allied mental health care professions as well.

India is often described as a land of stark contrasts, so predictively there are a few exceptions to the above disappointing scenario, as shown in the following table.

Table 2: State/Union Territory wise surplus in availability of psychiatrist in India, compared to the NIMHANS recommended 1psychiatrist per 100,000 populations [22].

State/Union Territory	Surplus of psychiatrists (%)
Chandigarh	**244.00**
Goa	**86.00**
Puducherry	**50.00**
Delhi	**13.00**

Important to note here is the fact that most of the above except Goa, are either Union Territories (Chandigarh) or centrally influenced small states (Puducherry and Delhi), which do not in any way reflect the circumstances prevailing in rest of the Indian nation.

For examining the present state of affairs of the NMHP we refer to the latest annual report of the Ministry of Health & Family Welfare, Government of India. According to itthe contemporary circumstances of some important facets of the programme are as follows: [22].

Mental Health Policy:

On 10th October 2014, the central Ministry of Health & Family Welfare launched the 'National Mental Health Policy' (MHP) with the vision of promoting mental health, preventing mental illnesses enabling recovery and socio-economic inclusion of persons affected by mental illness by providing accessible, affordable and quality health and social care to all persons in their life span. The goal is to reduce stress, disability, morbidity and premature mortality associated with mental health problems.

DMHP: The programme covers 241 Districts at present. Some recent initiatives are:

- Newly incorporated promotive and preventive activities for positive mental health:
- School Mental Health Services: Life skills education in schools, counseling services.
- College Counselling Trained Services: Through teachers and counselors.
- Work Place Stress Management: Formal & informal sectors, including farmers, women etc.
- Suicide Prevention Services: Counselling centre at District level, Sensitization workshops, IEC, Helplines etc.

Establishment of Centre of Excellence in Mental Health (CEMH): Currently, 11 Mental Health Institutes have been funded for developing in to CEMHs. The plan is to expand to another 10 CEMHs in the 12th plan, with adequate allocation of funds.

Establishment/Up-Grading of Post-graduate (PG) Training Departments: At present 27 PG Departments in mental health specialties viz. Psychiatry, Clinical Psychology, Psychiatric Nursing and Psychiatric Social Work are being supported by the centre for their establishment/up-grading. The 12th plan envisages providing similar support to another 93 PG departments

Information Education & Communication (IEC) Activities: At the national level an intensive mass media campaign on awareness generation regarding mental health problems and reduction of stigma attached to mental disorders has been undertaken by the NMHP

State Mental Health Authorities (SMHAs): Funds have been provided to 32 SMHAs in 32 states/UTs

Monitoring & Evaluation: In the current plan period, a nationwide survey to ascertain the number of mentally ill patients and availability of mental health resources has been entrusted to the NIMHANS, Bengaluru.

The Way Forward:

Currently the 12th plan (2013-17) is running with revised guidelines for the DMHP. Some of these bear the influence of an independent and objective review of the DMHP carried out in 2009 [25]. The important observations and suggestions made at the conclusion of that study were:

- To make mental health care more accessible to those who most require them, the services would have to be strengthened at the sub-centre, Primary Health Centre (PHC) and Community Health Centre (CHC) levels.
- To ensure continuity of the programme beyond the 11th Five Year Plan, the financial responsibility for the programme will have to be gradually shifted from the central government to the state governments and mental health services will have to be integrated in the State and District Implementation Plan.
- There is an urgent need to enhance the capacity in the country to train mental health professionals.
- The various staff positions in DMHP will have to be made more attractive to motivate and retain professional staff. The DMHP staffs also require training in programme management and organizational activities.
- Relevant non-pharmacological interventions will have to be introduced into the programme and the PHC staff trained adequately.
- The community participation and Information Communication and Education (ICE) components of NMHP need strengthening.
- The involvement of Non-Governmental Organizations (NGOs) should be actively solicited and ensured to add impetus to the programme activities.
- Plans and proposals are most likely to lead to action, only if they are accompanied by: detailed specifications and clear instructions of what needs to be done, what the likely barriers are to implementing the proposal, how these barriers could be overcome and how progress towards specific goals could be measured.
- Besides everything else, a set of specific, measurable outcome indicators for the DMHP will have to be urgently developed and used for regular and continuous reporting and morning of the programme.

Apart from the above, one very important suggestion was to integrate of the NMHP with the National Rural Health Mission (NRHM). NRHM was launched by Government of India in 2005 to carry out imperative changes in the basic health care delivery system for better delivery of primary health care. Currently the NRHM along with the National Urban Health Mission (NUHM) constitute the National Health Mission (NHM). The main focus of the NRHM is on decentralization of the management of health programmes to the district level. By induction of management and financial personnel into district health system, NRHM efficiency is enhanced. NRHM emphasises on community participation and ownership of assets. The NRHM aims to enhance the involvement of Panchayati Raj institutions by making them the owners, thus enabling them to exercise adequate control to manage public health services. The mission promotes access to improved healthcare at household level through the female health activist who is referred to as "Accredited Social Health Activist" (ASHA). Every village/large habitat will have one ASHA [25].

The integration of DMHP with the NHM has been initiated and is expected to contribute numerous advantages to the DMHP such as optimal use of existing infrastructure at various levels of health care delivery system and sustenance of DMHP beyond the expiry of the period of central assistance by its

integration in the district health system. An integrated IEC under NHM, involvement of NHM infrastructure for training related to mental health at the district level, use of NHM machinery for procurement of drugs to be used in DMHP and building of credible referral chains for appropriate management of cases detected at lower levels of the health care delivery system are all additional advantages of integration of DMHP with NHM. However, specific details and mechanisms of such integration are yet to be developed comprehensively.

Conclusions:

The story of the NMHP has, on one hand many features common to most public health programmes of India, but on the other, some very prominent peculiarities as well. Common with other sister programmes is the grand planning with impressive aims and objectives, yet tardy and indifferent execution due to the inadequate and inconsistent funding/support of both material and human resources. The customary "Ivory Tower" perspective and "Arm Chair" strategic planning is a classic "Top to Bottom" approach which sadly has proved to be grossly ineffectual. It is being increasingly realized now that a paradigm shift to a "Bottom to Up" approach is imperative. However, the NMHP has a peculiar "bottom". There is a general absence of a felt need in the community for modern medical mental health care. Competitors like shamans, "ojhas", "tantriks", priests and astrologers promising panacea for all maladies of the 'mind and spirit' have existed in the community for ages, and are still widely sought after. Poor literacy levels in general and lack of modern scientific education in particular, has ossified the minds of the people. The basic principle of marketing is to create or identify a robust demand for the commodity. Public awareness and attitudes towards mental illness in most of rural India does not indicate a pining for any modern medical intervention. Thus intensive, wide-spread and locally relevant IEC activities have to be the basis of the DMHP execution.

In the absence of reasonably sensitive and specific indicators of the effectiveness of the DMHP, one has to rely on the crudest. If one looks at the number of districts currently covered by the DMHP out of the aimed 500, the figure is 241(2014-2015). So one may be tempted to state that even after 18 years of existence the program has achieved less than 50% of its goals and objectives. But what is not immediately apparent is the natural and expected 'learning curve' phenomenon. Currently, the bulk of the 'learning' has been done and corrective changes identified for implementation as evidenced by the latest health ministry report. So one can take satisfaction in the fact that some comprehensive course correction has been made. But no concrete mechanisms of monitoring the programme by valid indicators have been incorporated in any significant quantum. We still have little more than two years before the current 12th plan period concludes. What is the achievement *vis a vis* the set goals can be seen with some surety only then. And as someone had said, *"_ _ _ manypromises to keep and miles to go_ _ _!".*

References:

1. Isaac MK (eds). A decade of rural mental health centre, Sakalwara. Bangalore: National Institute of Mental Health and Neuro Sciences; 1986
2. Kapur RL, Isaac MK. An inexpensive method of detecting psychosis and epilepsy in the general population. The Lancet 1978; 1089.
3. Isaac MK, Kapur RL, Chandrasekar CR et al. Mental health delivery in rural primary health care - development and evaluation of a pilot training programme. Indian Journal of Psychiatry 1982; 24:131-138
4. Sriram T.G, ChandrasekarC.R, Moily S et al. Standardisation of multiple-choice questionnaire for evaluation medical officers training in psychiatry. Social Psychiatry and Psychiatric epidemiology 1989; 24:327-331.
5. Sriram T.G, Moily S, KumarG.S et al. Training of primary health care medical officers in mental health care. Errors in clinical judgement before and after training. General Hospital Psychiatry 1990; 12:384-389.
6. Sriram T.G, ChandrasekarC.R, Isaac M.K et al Development of case vignettes to assess the mental health training of primary care medical officers. Acta Psychiatrica Scandinavica.1990; 82:174-177.
7. Sriram TG, ChandrasekarC.R, Isaac M.K et al Training primary care medical officers in mental health care: an evaluation using multiple-choice questionnaire. Acta Psychiatrica Scandinavica, 1990; 81:414-417.
8. Isaac M.K, Kapur,R.L. .A cost effectiveness analysis of three different methods of psychiatric case finding in the general population. British Journal of Psychiatry 1980; 137:540-546.
9. Srinivasa Murthy R, Kaur R, Wig NN. Mentally ill in a rural community: Some initial experiences in case identification and management, Indian Journal of Psychiatry 1978; 20:143 -147.
10. Srinivasa Murthy R, Wig. N.N. A training approach to enhancing mental health manpower in a developing country. American Journal of Psychiatry 1983; 140 :1486-1490
11. Sartorius, N. Harding, T. The WHO collaborative study on strategies for extending mental health care, I: The genesis of the study. American Journal of Psychiatry 1983; 140:1470-1479.
12. Indian Council Medical Research–Department of Science Technology. Collaborative Study on Severe

Mental Morbidity. New Delhi: Indian Council of Medical research, 1987
13. Isaac MK. Severe Mental Morbidity. ICMR Bulletin; 18: (12) 1-8.
14. Indian Council of Medical research. Mental health research in India (Technical monograph on ICMR research studies in India). New Delhi; Indian council of Medical Research, 2005: 5-7
15. Director General of Health Services (DGHS): National Mental Health Programme for India. New Delhi, Ministry of Health and Family Welfare; 1982
16. Isaac M.K, Srinivasa Murthy R, Chandrasekar C.R et al. Decentralised training for PHC medical officers of a district - the Bellary approach. In Varghese A (eds) Continuing Medical Education Vol. VI. Calcutta: Indian Psychiatric Society; 1986.
17. Isaac MK. District Mental Health Programme at Bellary. Community Mental News – Issue No. 11 and 12. Bangalore: Indian Council of Medical Research – Centre for Advanced Research on Community Mental Health; 1988.
18. Nagarajiah, Reddamma K, Chandrasekar C.R et al. Evaluation of short-term training in mental health for multipurpose workers. Indian Journal of Psychiatry 1994; 36:12-17.
19. Naik A.N, Parthasarathy R. Isaac M.K. Families of rural mentally ill and treatment adherence in district mental health programme, International Journal of Social Psychiatry 1996; 42:168-172.
20. Naik AN, Isaac M, Parthasarathy R et al. The perception and experience of health personnel about integration of mental health in general health services. Indian Journal of Psychiatry 1994; 36: 18-21.
21. Ministry of Health & Family Welfare, Government of India: Annual Report: 2013-14
22. Ministry of Health & Family Welfare, Government of India: Annual Report: 2014-15
23. M. Thirunavukarasu, P. Thirunavukarasu. Training and National deficit of psychiatrists in India – A critical analysis. Indian J Psychiatry 52, Supplement, January 2010.
24. Sinha K. India takes up fight against mental disorders at WHO summit. Times of India, Jan 24, 2012.
25. Indian Council of Marketing Research. Evaluation of District Mental health Programme - Final Report, 2009, Report submitted to Ministry of Health and Family Welfare, Government of India, New Delhi, 2009.
