

# Innovative mental health initiatives in India: A scope for strengthening primary healthcare services

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## ABSTRACT

Mental health burden is a major health concern worldwide. In the last few decades, we are witnessing innovations that are successfully addressing gaps in the mental health service delivery in Indian context. This is an opportune time to explore existing innovative mental health initiatives in the country and integrate viable interventions to primary healthcare facilities to strengthen public mental healthcare delivery. The descriptive review of literature on innovative mental health programs in India was carried out. The initial search from google scholar and PubMed database yielded 1152 articles, of which 1114 were excluded that did not meet inclusion criteria. Full texts of 38 articles were reviewed and finally 22 studies were included for the study. Based on the review, most innovations are broadly summarized into five categories: (1) quality improvement mental health programs; (2) community-based mental health programs; 3) non-specialist mental health programs, 4) mobile-technology based mental health programs, 5) tele-mental health programs. These promising innovations in treatment and care can be customized as per the context for scale up and integrated into the primary healthcare system through District Mental Health Programme. The innovative approach not only makes mental health services more accessible and affordable but also empowering in nature by encouraging community members in early detection, prevention of mental illness and appropriate treatment referral to existing primary health care services.

**Keywords:** District mental health, India, innovative mental health programs, primary healthcare program

## Introduction

Mental disorders contribute not only to significant morbidity and disability but also add economic burden to the country.<sup>[1]</sup> Limited access to mental health services, shortage of mental health specialists, lack of awareness on mental health, stigma, lower literacy, and poverty coupled with the unwillingness or inability of families to care for their mentally ill members, appear to be the main contributory factors to mental health burden.<sup>[2-7]</sup> Moreover, widely prevalent religious beliefs associated with mental illness pose significant obstacles in seeking appropriate mental health care services.<sup>[8]</sup> In order to address these concerns, numerous policy and programmatic initiatives have been taken by the Government<sup>[7]</sup>

which yielded some results. For example, policy level actions such as the first Mental Health Policy 2014<sup>[9]</sup> and passing the Mental Healthcare Act 2017 superseding the Mental Health Act, 1987.<sup>[10]</sup> Both these legislations, with limitations, provide overarching directions on broader issues for ensuring mental health promotion, adequate human resource, and provisioning prevention and treatment services through public health system. Programmatic attempts were made to create additional capacity for mental health workforce through establishing centers of excellence, emphasizing community-based mental healthcare and expanding District Mental Health Programmes—DMHP under the National Mental Health Programme—NMHP.<sup>[11,12]</sup> Moreover, we are witnessing various innovations successfully addressing gaps in the delivery of mental healthcare in India. But these efforts are scattered and not enough to address the dire demand. It is therefore opportune time to explore and consolidate existing innovative mental health programs and

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integrate viable interventions to primary healthcare services. This paper synthesizes promising innovations for improving mental health care practices and discusses assimilation of lessons learnt into the mainstream primary healthcare system.

## Method

We searched literature from PubMed, google scholar and other database using combinations of the following MeSH terms: “community mental health programs” or “mental health projects” or “innovative in mental health programs” or “mental healthcare at primary health center” and “India”. The studies included in the review were those, which studied mental healthcare service delivery in the community or at the primary health center, innovative mental health care programs in India. Original articles, case reports, program descriptions from Mental Health Innovation Network, systematic reviews, and randomized control trials conducted in India between January 2001 to August 2018 were included in the review. Non-English publications or any other documents from India and studies from other countries were excluded. Therefore, we may have missed some innovations.

The flow chart [Figure 1] outlines the process of selection of studies for the review. The initial search yielded 1152 articles, of which 1051 were excluded based on the title and abstract rejection, and 63 were duplicates. Total 38 articles were fully reviewed out of which 16 articles were excluded based on the

irrelevant data to our study and unavailability of a full-text articles. Accordingly, 22 studies including program description that met the inclusion criteria and were included for the review.

## Results

The evidence from 9 states (Chhattisgarh, 1; Gujarat, 3, Maharashtra, 1; Jammu and Kashmir, 2, Goa, 2; Madhya Pradesh, 3; Tamil Nadu, 3; Karnataka, 2; Andhra Pradesh, 1) and 3 multi-state studies and 2 multi-country programs were reviewed. Authors have reviewed different types of literature for the study. Figure 2 presents the types of literature reviewed for the current study.

Most Innovations can be broadly summarized into five categories: (1) quality improvement of mental health programs; (2) community-based mental health programs; (3) non-specialist care programs, (4) mobile technology-based mental health programs, and (5) tele technology-based mental health programs. Table 1 provides details of innovative mental health programs in each category. The following section describes key intervention outcomes under each category.

### Quality improvement of mental health programs

Studies highlight the improvement in the quality and human rights conditions of patients accessing healthcare services using WHOQR tool kit<sup>[13]</sup> in Gujarat and WHO mhGAP framework<sup>[14]</sup> for the training MH professionals for awareness generation, early detection and reduce the treatment gaps in hard to reach areas in Jammu-Kashmir. Mental healthcare pilots addressed the need of high-risk groups with appropriate mental health interventions in Gujarat was found effective in improving coverage and access to mental healthcare services by vulnerable population.<sup>[15]</sup> Involving multiple stakeholders in service delivery is a pragmatic and sustainable strategy. Furthermore, early intervention with adherence management and psychosocial care has been emerged as an effective approach to deal with psychosis.<sup>[16]</sup> Finally, collaborative care model (psychosocial services, non-specialist care and specialist services) for making mental health services available at community and primary healthcare level found not only acceptable but effective in reducing treatment gaps, improving treatment adherence and quicker rehabilitation of mentally ill patients in their family and the society.<sup>[17]</sup>

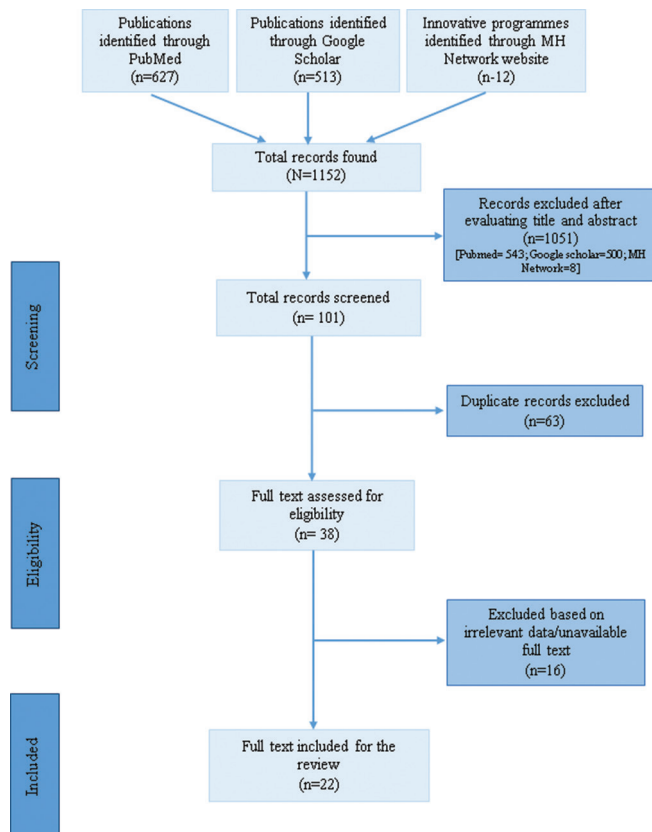


Figure 1: PRISMA table of selection of studies for the review

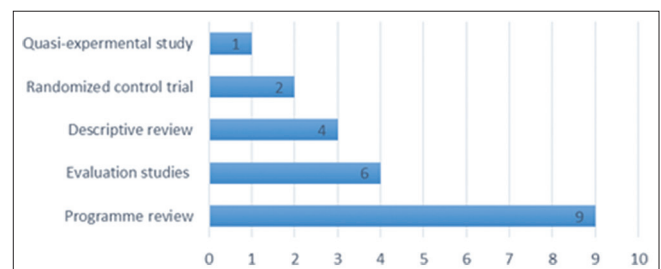


Figure 2: Types of literature reviewed

**Table 1: Innovative mental health programs**

Categories	Total studies	Innovations
Quality improvement in mental health programs	5	Use of WHOQR tool in Gujarat WHO's mhGAP in Kashmir Mental health care pilots in Gujarat Early interventions for psychosis in Tamil Nadu Models of Mental Healthcare integration into primary and community care
Community-based mental health programs	6	A community-based rehabilitation programme for psychotic disorders in Madhya Pradesh Community mental health initiative in Tamil Nadu Community based mental health intervention for women in Karnataka Community-based intervention for people with schizophrenia and their caregivers (COPSI) The community mental health development projects in India Dava-Dua project in Gujarat
Non-specialist mental health programme	5	Atmiyata Intervention in Maharashtra The low-cost model for improving healthcare services in Kashmir Health Activity Program delivery by lay health counsellor in Goa Lay health counsellor for brief psychological intervention in Goa Programme for Improving Mental Health care (PRIME) in Madhya Pradesh India and other 4 countries
Mobile technology-based mental health programs	3	Mh2: Mobile for mental health in Gujarat Systematic Medical Appraisal, Referral and Treatment (SMART) mental health project in Andhra Pradesh Digital technology (text and phone) for treating and preventing mental disorders in LMIC (including India)
Tele-mental health programs	3	Tele-psychiatry in Chennai, Tamil Nadu Mobile tele-psychiatry in Pudukkottai Tamil Nadu Tele-mentoring program -NIMHANS ECHO in Chhattisgarh
Total studies	22	

### Community-based mental health interventions

Studies have addressed effectiveness of community-based mental health interventions (psychoeducation, adherence management, psychosocial rehabilitation, support for livelihood, and referral) in addition to facility-based care (psychotropic medicines) showing the benefits of regular treatment in decreasing the patient's disability, the burden on the family and the costs incurred by the family.<sup>[18-20]</sup> Further, mental health interventions (psychoeducation, peer support and referral) with women from self-help groups engaged in income-generation activities have a positive impact on their mental health.<sup>[21]</sup> Women reported a reduction in psychological distress, bodily aches and improved quality of their sleep by relaxation and sharing their problems with peers. Such an initiative not only enhances economic development but also protects the social capital of rural women. It is important to note that active involvement of family and community in the programme is emphasized for the success of the community-based mental health care program.<sup>[19-22]</sup> Dava-Dua project<sup>[23]</sup> in Gujarat is an example of a combination of "magical-religious ailment" and "modern psychiatric interventions" for the treatment of mental illness. The project provides psychiatric treatment for those who are visiting a Mira Datar Dargah of Unava (one of the Taluka of Sabakantha District) for a cure, making psychiatric services not only accessible but also advocating fair treatment of psychiatric patients by sensitizing and training faith healers.

### Non-specialist care programs

The effectiveness of various community-based interventions by non-specialists has also been examined. Community champions

from self-help groups and farmers' club found to be effective in facilitating mental healthcare services in rural and remote areas, which significantly increased adherence, follow-ups, and reduced disability.<sup>[24]</sup> Other studies found that trained lay health worker,<sup>[25]</sup> lay counsellors<sup>[26,27]</sup> non-specialist health workers<sup>[28]</sup> effectively provide basic mental healthcare services in rural areas significantly increase access to psychiatric services. Such low-cost skill transfer based contextual mental health service delivery model is feasible, acceptable, and cost-effective.

### Mobile technology-based programs

The George Institute for Global Health's SMART Mental Health program—a digital mental health application for screening, management, referral and treatment of depression, stress and suicidal risk in rural patients through primary health center in Andhra Pradesh revealed positive treatment outcomes.<sup>[29]</sup> Another remarkable program is the use of mobile technology by non-specialist community mental health workers for screening, management, and referral services in Gujarat significantly reduced the cost of service delivery.<sup>[30]</sup> Digital technology-based mental health interventions (diagnosis, treatment, and prevention) with online, text messaging, and telephone support<sup>[31]</sup> have promising outcomes in low-resource settings. Mobile technology can play an important role in scaling up and integrate mental health services with the primary health center.

### Tele mental health programs

Tele-psychiatry<sup>[32]</sup> and mobile telepsychiatry<sup>[33]</sup> for reaching out to vulnerable communities for the early detection and treatment of psychosis is an effective approach to reduce treatment gaps.

Tele-mentoring based on NIMHANS ECHO model<sup>[34]</sup> for consultation, training, and education is effective not only for building the capacity of mental health professionals but also conducting regular review meetings with district mental health programme staff.

## Discussion

Mental health services in India is gearing up attention as far as policy and legislative provisions are concerned; however, programmatic gaps and slow implementation command strategic actions,<sup>[5]</sup> which prevent us achieving Universal Health Coverage goals. There exists an opportunity to generate discourse on the integration of innovations to improve mental health services within primary healthcare practices through District Mental Health Programme.

Mental health is now part of comprehensive primary healthcare. It is also anticipated that the community would begin to use the health and wellness centre (HWC) as the first point of contact with the primary health centre (PHC) serving as the first referral point. In this context, innovations like mobile tele-mental healthcare service, mobile phone for mental health risk identification, referral, follow-up as well as for data management at HWC is feasible. PHCs can be equipped with essential psychotropic drugs and teleconferencing or video conferencing for specialist consultation by psychologists and psychiatrists on a fortnightly or monthly basis from District or State level healthcare facility. Using tele-mental health technology (NIMHANS ECHO model), district level general health, and mental health personnel can be trained periodically. The District Hospitals and Hospital for Mental Health can be strengthened by collaborative care model (community-based care and facility-based care services) under district mental health program with a telepsychiatric mobile van, adequate financial resource, and the training. These hospitals can be linked with civil service organizations (CSO) offering mental health care services, PHC and HWC. Such programming, complimented with focused information, education, and communication (IEC) activities to eliminate mental health stigma/discrimination and improve access to mental health services can aid the effective implementation of the DMHP.<sup>[13,20]</sup>

Increasing mental health hospitals or specialists' workforce is neither sustainable nor sufficient,<sup>[21]</sup> therefore, a strong collaboration between the primary healthcare and district mental health programs as well as training of existing staff on mental health is warranted.<sup>[4]</sup> In this vein, training of community health workers and medical officers on mental health and lay counseling can be important strategy. At the same time, mechanism for continuing education and training certified by State Mental Health Authority is needed to sustain capacity of these non-specialists healthcare professionals. Although non-specialist care providers at HWCs cannot prescribe medication, perhaps facilitate access to non-specialized mental health care services and link high-risk cases to specialized services. Further, as qualified mental health

personnel are insufficient to meet the high demands, the pool of community champions (religious leaders, school teachers, youth leader, etc.) and lay counsellors can be formed with short-term skill-based training certified by the State Mental Health Authority. Selected faith healers can be trained streamlined and integrated into the service delivery of the sector by training them as lay counselors.

For enabling public health system, it is critical to examine the role of the existing public health professionals, mental health professionals and administrators in facilitating integration of mental health care services to PHC, develop state integrated health information and monitoring mechanism, common indicators for mental health and build the capacity of the team. Apart from these, integrating innovative mental health programs into the State Programme Implementation Plan can be potentially effective opportunity to strengthen the mental healthcare services in the State. This can be done in a phased manner with adequate technical and managerial personnel at the State, access to funds,<sup>[5,35,36]</sup> adequate stock of essential psychotropic drugs at PHCs,<sup>[37]</sup> monitoring and supportive supervision of the implementation of DMHP. Authors agree with the strategic recommendation to develop regional resource centers –RRC for mental health<sup>[21]</sup> or provide technical human resource support to facilitate the integration of innovations into State Mental Health Plan, develop DHMP and effectively implement DHMP in all districts. The resource center can also assist in developing standard operating procedures for quality mental health care, epidemiological research, cost-effective studies and health system research to help improve future treatment, inform policy change and strategic programmatic decisions.

The CSOs are also important resources because they have been involved in the care and should continue their work.<sup>[20,33]</sup> The growing role of CSOs in providing mental health services through the half-way home, daycare centers, suicide prevention, disaster care, and school health programs has a tremendous impact on mental health outcomes.

## Conclusion

The innovative approach leveraging technology not only makes it more accessible and affordable but also very empowering by encouraging community members to be more effective in caregiving for others in the community. This also promotes the democratization of mental health care. Integrating innovative mental health programs to primary care is utilitarian, which is equitable and has a long term perspective to achieve “good mental health for all.”

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## Conflicts of interest

There are no conflicts of interest.

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