Community mental health in rural India: the Shifa project in Padhar Hospital, Madhya Pradesh

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People with severe mental disorders in rural India have minimal access to mental health services. Project Shifa entails outreach to patients and families in 75 villages in rural central India. A team of local health workers led by one psychiatrist provide assessment, medications, education and follow-up services.

In low- and middle-income countries, 76–85% of people with serious mental disorders do not receive any treatment (WHO, 2013). In India, the median prevalence of mental disorders is 65.4 per 1000 individuals, equivalent to 70 million people across the country (WHO, 2011). Yet India has only 0.3 psychiatrists for every 100 000 people (less than 4000 for a population of more than 1 billion), and 75% of them work in urban areas even though 60% of the general population is rural (National Institute of Health and Family Welfare, 2010; Kumar, 2011). This paper describes an innovative project to bring community mental healthcare to rural India.

Project description

Setting

Project Shifa provides community mental healthcare in rural central India, serving a population of approximately 35 000 people in 75 villages within a radius of about 20 km. The project operates out of Padhar Hospital, a 200-bed, multispecialty, Lutheran mission hospital in the Betul district of the state of Madhya Pradesh. The hospital started a psychiatry department in June 2014, the only full-time mental health service in a radius of 200 km. The department currently consists of only a single psychiatrist. Psychiatry services at the hospital include evaluation and treatment of patients with psychiatric disorders in both out-patient and in-patient settings, as well as consultation services for patients referred from other departments in the hospital. Treatments offered include pharmacotherapy, relevant brief models of psychotherapy and electroconvulsive therapy. Detoxification and de-addiction services are also provided for the considerable number of substance users attending for treatment (particularly for alcohol and nicotine misuse).

Project Shifa is Padhar Hospital’s community mental health outreach program, and serves patients with psychiatric disorders and epilepsy in the target area. The team consists of the consultant psychiatrist, an office coordinator, 10 community field workers (multipurpose lay health workers employed by the hospital for a variety of outreach activities) and nursing students from the attached college of nursing who are on their psychiatry rotation. All team members are existing employees or students at the hospital, thus avoiding the expense of recruiting an exclusive workforce.

Clinical activities

The 75 villages covered by the project are divided into 11 clusters of approximately seven villages. The team visits one cluster area each week; it takes approximately 3 months to complete an entire round. The outreach visits are planned at one or more centralised locations in the cluster. During visits, the psychiatrist evaluates new patients screened by the field workers (lay healthcare workers trained at the hospital); patients with severe mental disorders and epilepsy receive free medications; and families receive education about management strategies, the need for compliance and supervision, and emergency contacts. The psychiatrist reviews all patients receiving medications in the field during these visits. During the intervening 3 months between visits, a field worker follows up with patients at their homes twice a month. The team also conducts home visits for patients who cannot travel. Patients with common mental disorders, including alcohol and other substance misuse, are referred to outpatient psychiatry at Padhar Hospital.

Group psychoeducational sessions are held in one cluster each month in rotation, primarily targeting patients with severe mental disorders and epilepsy along with their family members. These sessions focus on educating families about the nature of the disorders and management issues,
as well as addressing family burden, stigma and the need for integration into the family and community. The primary strategies for rehabilitation and community integration are to encourage family members to supervise the patient’s medications, identify crises in the acute phase and encourage meaningful activities. Men are involved with agricultural work and local manual employment, while women resume domestic chores and responsibilities as early as possible. The strong, cohesive joint family systems in these rural areas have embraced this strategy of empowering families to supervise treatment and rehabilitation.

All team members meet weekly to discuss progress and plans. The meetings also provide brief workshop-style training for the field workers – for example, how to manage violent, suicidal or non-compliant patients in the field. The team also generates weekly, monthly and half-yearly reports on progress, plans and challenges.

Evaluation
Field workers use the Padhar Community Mental Health Screening Instrument (PaCoMSI), a newly designed, local, family-level tool incorporating relevant terms and concepts, to screen residents. The instrument consists of 12 questions (taking less than 10 min to administer in Hindi) and greatly reduces the time taken to screen entire villages as only one competent person per household needs to be interviewed. Following screening, all screened-in patients are evaluated by the psychiatrist during outreach visits by a clinical interview using ICD-10 criteria. Preliminary data support the tool’s utility in identifying a variety of psychiatric and neurological disorders (sensitivity of 99% and specificity of 94%).

The team also uses a specially designed, simple outcome evaluation tool based on available clinical and field records to document the progress of the project. This tool, which is designed so that it can easily be used by lay workers as well as mental health professionals, generates ratings in four domains: treatment compliance, symptom reduction, functional improvement and community integration. The outcome evaluation data are used to monitor each patient and also to identify the strengths and weaknesses of the project every 6 months.

The team is also currently engaged in community-based research activities, including descriptive work on post-encephalitic neuropsychiatric syndromes being encountered in the field, and the profile of suicide attempters presenting to Padhar Hospital.

Results
As of May 2016, 522 patients were registered under the project, and nearly 200 had received medications in the field and were in long-term community follow-up (most of the others had been referred to the hospital for treatment of common disorders). The most recent outcome evaluation, in February 2016, included 439 patients diagnosed before November 2015. The evaluation drew three conclusions, as follows.

First, the emphasis on patients with severe conditions resulted in 100 out of 127 (approximately 80%) patients with potentially disabling conditions such as schizophrenia, epilepsy and bipolar disorder achieving symptom improvement and a better level of occupational and social functioning. Second, for patients with developmental disorders, 30 out of 86 (35%) showed some improvement in functional status and community integration. Third, people with common mental disorders such as depression, anxiety and substance use disorders had less positive results, with only 45 out of 154 (30%) achieving symptom reduction.

Discussion
Our parsimonious interpretations are as follows. The very positive outcomes among patients with the most severe disorders may be explained by the team delivering the interventions in patients’ villages and homes, empowering families, providing intensive follow-up by field workers, and encouraging a rapid return to functioning in meaningful roles. The unexpected outcomes achieved among patients with developmental disabilities – a group of disorders traditionally assigned bleak prognoses even with intensive interventions – demonstrate that a low-resource, minimally staffed program can have some impact on these challenging disorders, perhaps by identification and treatment of coexisting treatable neuropsychiatric syndromes. The far less impressive outcomes among patients with common mental health disorders may reflect the fact that many of those referred to the hospital did not attend and were lost to follow-up.

Project Shifa has several key strengths. Using indigenous lay health workers and families enhances family unity and naturally incorporates local culture (Chatterjee et al., 2005; Mulley et al., 2015). The emphasis on outreach and functioning align with modern psychiatric rehabilitation practice (Corrigan, 2016). The project’s cost-effectiveness arises from using inexpensive medications, multipurpose lay health workers and involving families in the care of patients. Taken together, these strategies have restricted the average cost per patient to less than US$5 per month. These approaches are consistent with recommendations for global mental healthcare in low- and middle-income countries (Collins et al., 2011; Becker and Kleinman, 2013; Drake et al., 2014b). Another unexplored but cost-effective approach may be to use smartphones, telehealth and other technology tools to increase patient education, communication and self-management (Drake et al., 2014a).

The project also has important limitations. Reliance on a single motivated mental health professional to head the project means that the project is fragile. Clearly, the state needs an
infrastructure, including standardised training, and more professionals to sustain and expand the model. Another approach could be to train available medical officers to take up the role of the mental health professional in resource-poor rural areas like those covered by the project. The Shifa approach requires devoted families living within supportive villages, which may not always be present, particularly in war-torn areas. The data collected within the project are based on non-standard measures and rating techniques that need validation. Finally, the emphasis on helping people with the most severe disorders – which is necessary due to the scarce resources – inevitably results in less attention to others who also need help.

Conclusions

Project Shifa demonstrates a cost-effective approach to psychiatric care and rehabilitation in rural India. Other healthcare teams in India and in other low- and middle-income countries, which face similar challenges, might find some of the strategies employed by the project useful. By relying on a lay workforce of health workers and families, using low-cost medications and a home-based approach, the project has demonstrated that psychiatric outreach, treatment and rehabilitation can be effectively implemented at very low cost in a sizeable rural area with only a single available trained mental health professional.

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