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Management of Mental Health Problems through Frontline Health Functionaries in Rural Rajasthan

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Background

WHO defines Mental Health as 'a state of well-being in which the individual understands his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and can contribute to his or her community'¹.

COVID-19 pandemic brought a complex array of challenges that had mental health repercussions for everyone. The pain of those affected by this pandemic directly or indirectly due to loss of lives, livelihoods and so forth is unimaginable. The personal, family, and social impact of COVID-19 is likely to last for a very long time, perhaps for life long for this generation.

Mental health is one of the key predictors of self-harm and suicide, especially among adolescents and the youth population. Unlike other illnesses, the patient himself does not consider that s/he is having health problems; rather, others would identify. Mental illnesses are stigmatized; people hide till the time it becomes unmanageable. Many a times, the patients with psychiatric disorders, are not treated in a dignified way. The sustainable development goals (SDGs) health goal included mental health under non-communicable diseases and leaving no one behind, is perceived as a historical turning point. Within the health goal, two targets (3.4 and 3.5) are directly related to mental health and substance abuse. The target 3.4 is related to reduce by one-third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

Current Situation of Mental Health

Pre COVID 19, it was estimated that lifetime morbidity was 13.9 percent in India for any mental disorder while 15.4 percent was in Rajasthan². The prevalence was found to be 10.5 per cent at the national level and 11.6 per cent in Rajasthan. To deal with this high burden, which is further burdened by COVID 19, there is a need for a proportionate number of specialists (Psychiatrists) and non-psychiatry mental health providers. The National Mental Health Survey (NMHS) 2015-16 of India revealed an alarming treatment gap of about 70-76 per cent for severe mental illness (Gururaj G et al., 2016). After COVID, one can appreciate the growing contribution of mental, neurological and substance use conditions to the overall disease burden. In India, WHO estimates that the burden of mental health problems is of the tune of 2,443 DALYs per 100,000 population, and the age-adjusted suicide rate per 100,000 population is 21.1. In India, it is estimated that, the economic loss, due to mental health conditions, between 2012-2030, is 1.03 trillion dollars³.

¹ <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>

² National Mental Health Survey of India, 2015-2016 Prevalence, Patterns and Outcomes, Supported by Ministry of Health and Family Welfare, Government of India, and Implemented by National Institute of Mental Health and Neurosciences (NIMHANS) Bengaluru: In Collaboration with Partner Institutions; 2015-2016.]

³ http://www.searo.who.int/india/topics/mental_health/about_mentalhealth/en/ access on September 6, 2019

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Availability of Mental Health care Human Resources

Availability of psychiatrists varied from 0.05 per lakh population in Madhya Pradesh to 1.2 per 100,000 population in Kerala (Garg Kabir et al., 2019) against the global average of 1.3 psychiatrists per 100 000 population (World Health Organization, 2018)⁵. Except for Kerala, all the other states fell short of this requirement and following very conservative estimates, India is short of 27,000 psychiatrists (Kabir et al 2019). However, human resources for mental healthcare also included psychiatric nurses (0.796 per 100 000 population), social workers (0.065 per 100 000 population), and psychologists (0.069 per 100 000 population). Further,, even if the psychiatrist is available, s/he is deployed at district hospital only, not at the periphery. Rajasthan is not an exception. In Rajasthan, even if only one psychiatrist is available, the priority goes to prisoners' wellbeing, and therefore, s/he is available at the prison, not at the district hospital. A shortage of trained professionals including, specialists, poses major obstacles to delivering adequate mental health care.

Efforts made by Government towards Mental Health Care

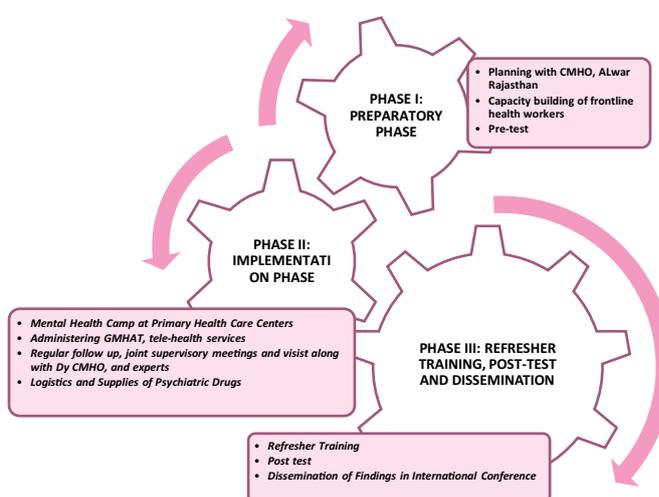
The Government is committed towards the right to access mental healthcare and treatment and therefore, brought The Mental Healthcare Act 2017, which ensures mental health services of affordable cost, of good quality, available in sufficient quantity, accessible geographically, without discrimination based on gender, sex, sexual orientation, religion, culture, caste, social or political beliefs, class, disability or any other basis and provided in a manner that is acceptable to persons with mental illness and their families and care-givers (GoI, The Mental Healthcare Act 2017 Ch2, article 2).

In India, National Mental Health Policy⁶ focuses on accessible services through integrated care using the primary health care approach. One of the strategies of the NMH Policy is improved availability of adequately trained mental health human resources to address the needs of the community. The need at present is engaging community health workers and other non-specialist staff to handle mental health problems. The section 5.5.4 of the Policy reflected that ANMs, being the largest healthwork force, should be offered an opportunity for skill gradation in mental health. sSub-health center is the point in the health system to which a person first goes with a health complaint. The policy also focused on the strategy "Research" (4.9.1) – how to provide effective treatment in routine healthcare, build research capacity in implementation research.

About the Implementation Research

Implementational research was conducted to assess the change in identifying, detecting and managing mental health problems with frontline health functionaries in implementation and comparison areas of Alwar districts in partnership with the Department of Health and Family Welfare, Government of Rajasthan, IIHMR, Indian Council of Medical Research (ICMR) and University of Chester, UK during 2017-2018 with the objectives of building capacity of frontline health workers' knowledge and skills in assessing mental health problems; and applying the Global Mental Health Assessment Tool (GMHAT) by frontline health workers in routine health care. The study was a quasi-experimental "Study and Comparison Group Pre-test/Post-test Design" implemented in Rajgarh as the intervention block [two model primary health centers (Rajpura Bada and Gola ka Bas)] while the non-intervention block was Malakheda, where Chandoli and Baleta primary health centers in the Alwar district. Pre-test results show that none of mental health services were available at the primary health center level. As a result, none of the frontline health functionaries were exposed to the mental health training related.

Experts from Chester University, and the University of Liverpool in the United Kingdom have developed a computerized user-friendly holistic clinical assessment tool to assess and identify mental health problems (in 14 sections) in primary and general health care by non-specialists after some training. At the end of the diagnostic interview, an automated diagnosis emerges, and a summary profile is generated that shows the psychiatric assessment. The tool was translated into various languages including, Hindi.



⁴ Kabir Garg, C Naveen Kumar, Prabha S Chandra. [Number of psychiatrists in India: Baby steps forward, but a long way to go. Indian J Psychiatry. 2019 Jan-Feb; 61\(1\): 104-105. doi: 10.4103/psychiatry.IndianJPsychiatry 7 18. PMID: PMC6341936](https://doi.org/10.4103/psychiatry.IndianJPsychiatry)

⁵ WHO. Mental health atlas 2017. Geneva: World Health Organization, 2018

⁶ Ministry of Health and Family Welfare, GoI (2014). New Pathways New Hope. National Mental Health Policy of India



Five-day training on mental health was conducted under the project by the experts like state mental health program manager, Government of Rajasthan, deputy CMHO- Alwar, psychiatrists from the district hospital, Alwar. Besides mental health, symptoms, basic skills in using digital technology, practical exposure to GMHAT was provided to 13 FHWs from the interventional PHCs, including ANMs, public health supervisor, AYUSH Nurse; and the PHC MO In-charge. They

assessed the patients in SMS Medical College and Hospital, Jaipur in a natural setting. At the end of the training, the FHWs were provided TABs uploaded with the Android version of GMHAT in Hindi. The TABs were linked with a dedicated server hired by IIHMR to get the data from the field through the internet after successfully completing the interview. A WhatsApp group including FHWs, MOI/Cs, district, state and international psychiatrists and the project team was formed to have an expert opinion if FHWs find any difficulty. Mental health camps were organized at the primary health centers in the intervention areas to demonstrate that mental health care is available at a local level and build confidence among frontline health workers and medical officers.

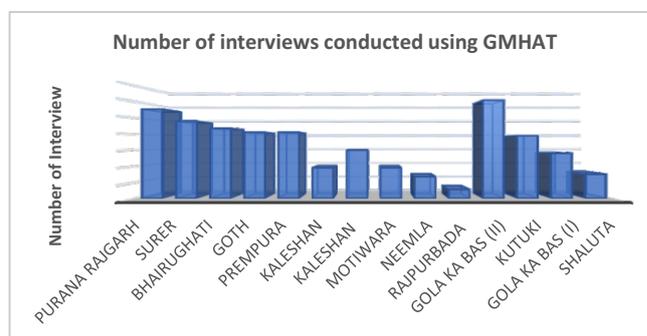
The FHWs administered GMHAT during household visits in their respective areas for those who have been observed with some unusual behavior. Later, the assessment was shared with the PHC MPI/C, and/ or experts on WhatsApp calling or during the visit to SHCs) and confirmed the illness to start medicines. The PHC medical officer-in-charge also verified, and medicines were prescribed. If PHC did not have stock of the medicines, the family was asked to purchase from outside, but the continuation of treatment was ensured.

Joint monitoring and supervisory visits were also made along with Dy CMHO to review the situation periodically. In the study duration, three new ANMs joined the system and as per the need of other frontline health workers, 3-day refresher training was organized.

Results

A total of 918 GMHAT interviews were conducted by the FHWs during 12 months period in their respective sub center areas. It ranges between 11-122 interviews. Of these, 84 (9%) were identified with one or another psychiatric illness.

Common mental disorders (depression, anxiety, personality disorders, etc.) were found to be 24 percent followed by severe mental disorders (15%) and learning difficulties (14%). The effectiveness of diagnosis done by FHWs was determined by measures of "sensitivity (ability to identify correctly those who have the disease)" and "specificity (ability to identify correctly those who do not have the disease)".



Clinical Diagnosis by Psychiatrists X Screening results by Frontline Health Workers

		Assessment results by FHWs		
		Have psychiatric illness	Do not have psychiatric illness	Total
Clinical diagnosis by psychiatrists	Have psychiatric illness	59 (96.7%)	13 (56.5%)	72 (85.7%)
	Do not have psychiatric illness	2 (3.3%)	10 (43.5%)	12 (14.3%)

$Sensitivity = \frac{True\ Positive}{(TP+FN)} = \frac{59}{59+2} = 0.96 \times 100 = 96\%$
 $Specificity = \frac{True\ Negative}{(TN+FP)} = \frac{10}{10+13} = 0.43 \times 100 = 43\%$

The results revealed that the FHWs were able to diagnose (clinical) the psychiatric illness using GMHAT in 96 percent of cases correctly, and telehealth consultation with psychiatrists remained successful.

The Way forward

Ayushman Bharat announced transforming existing sub-centers and primary health centers as Health and Wellness Centers (HWCs) to deliver comprehensive primary health care, including screening and basic management of mental health ailments (GoI, 2018). HWCs are under transformation in Rajasthan even in 2021. Some of the activities like the NCD survey have been started, still no services are initiated for mental health ailments despite the availability of operational guidelines for mental, neurological and substance use (MNS) disorders care at HWCs as a part of comprehensive primary health care⁷. At the different levels, mental health care can be delivered through the different types of the activities (Exhibit 3). The guidelines included the Patient Health Questionnaire (PHQ 9) and sample screening and diagnostic tools. Based on the implementational research findings in Alwar, the use of GMHAT by FHWs may be scaled up to start delivering mental health services while non-professionals like ASHAs and community groups help in mental health promotion at the individual level (Exhibit 2). The FHWs may administer GMHAT at the home visits, or when the community visits the Sub health center/ HWCs as a community identification and detection tool (CIDT). In case, the chronic illness is diagnosed, the patient can be referred as per the guidelines.

Before the mental health training, we had a minimal idea about mental health. The training has explained not only about mental health but how we can diagnose it. The training was imparted in easy and simple language, and we were able to understand everything without any hesitation. At the field level, we found that mental health is as essential as physical health. Most people were diagnosed with anxiety, and depression. The experts also visited our field and supported us. After training, the fear of speaking in front of a renowned expert completely vanished.

AANMs, Rajgarh block, Alwar, Rajasthan

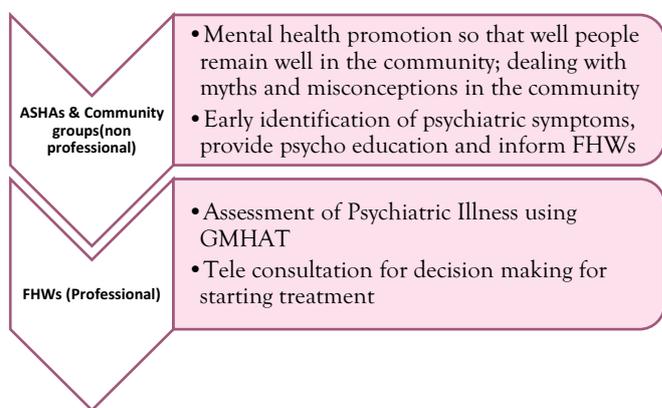
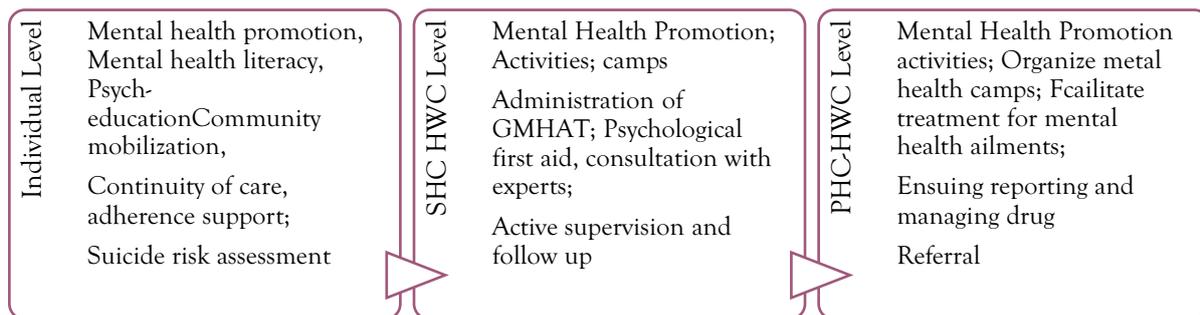


Exhibit 3: Mental health care through HWCs



Acknowledgement

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⁷ https://ab-hwc.nhp.gov.in/download/document/Final_MNS_Operational_Guidelines_-_Web_Optimized_PDF_Version_-_19_11_20.pdf