EMPOWERING COMMUNITIES WITH THE MENTAL HEALTH GAP ACTION PROGRAMME IN NASARAWA STATE, NIGERIA (2019-2021)

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ABSTRACT

A 14% global burden of mental, neurological, and substance use disorders exists, of which 75% of the people affected in low-income countries do not have access to treatment. An assessment of the short-term results of the WHO Mental Health Gap Action Programme (mhGAP) using a cross-sectional retrospective study in Nasarawa State (2019-2021) utilized secondary data (total sampling technique) from 10 communities in 3 focal Local Government Areas. Ten Mental Health interventions utilized by mhGAP included community-based efforts by community and religious leaders, local government teams, media conducting meetings and home visits, thus increasing awareness and number of referrals to focal Primary Health Care Centres (PHCs) for care and treatment. This also helped dispel rumor and misconceptions on the causes of mental ill health. PHCs were strengthened by capacity building activities (step down mental health disorder trainings resulting in an increase of 40% in knowledge and skills of health care workers at PHCs and General Hospitals), re-activation of the Drug Revolving Fund and data management for mental health. With continued supportive supervision of healthcare workers at PHCs and communities, 29 Mental Health Self Help Groups were formed with 567 registered clients enrolled into care and treatment at the health facilities. Depression was the commonest mental health disorder diagnosed (42%), least was epilepsy (4%). This decentralized healthcare community based mental health model showed increased access and utilization (743 mental disorders diagnosed, 200 fully recovered) of mental health services.

Key Words: Mental health, Disorders, mhGAP, WHO.

1.0 Introduction

Mental health is a basic human right. A definition of good mental health encompassing the psychological and social domains varies across systems, cultures or clinical practices. One of the most extensively used definitions for mental health is the one by the World Health Organization (WHO), which defines it as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (Billington *et al.*, 2021).

Mental, neurological, and substance use disorders are common in all regions of the world, affecting every community and age group across all income countries (WHO, 2022). Mental disorders are often associated with violence and injuries and non-communicable diseases

including HIV/AIDS. Exposure to humanitarian emergencies is a potent risk factor for mental health problems and psychological trauma. In such settings, social structures and ongoing formal and informal care of persons with severe, pre-existing, mental disorders are disrupted (WHO, 2024).

Mental disorders are a public health problem. According to WHO statistics, by 2019 about one billion people suffered from mental illness (Arensman *et al*., 2020). About 7 of every 1000 families have mental disorders (Dlugosz and Liszka, 2021). The 'Global burden of disease' (GBD) is defined as a comprehensive demographic and epidemiological framework to estimate health gaps for an extensive set of disease and injury causes, and for major risk factors, using all available mortality and health data and methods to ensure internal consistency and comparability of estimates. That is, it captures the impact of disease on mental health in terms of disability-adjusted life years (DALYs). It is estimated that the value of losses due to mental disorders was roughly 1.6 trillion USD in 2019 and will grow to 3.0 trillion USD by 2030 when DALYs were valued at one times GDP per capita (Arias *et al*., 2022). Most recently, the Mental Health Atlas, released every three years, is a compilation of data provided by countries around the world on mental health policies, legislation, financing, human resources, availability and utilization of services and data collection systems. It serves as a guide for countries for the development and planning of mental health services. The Mental Health Atlas 2020 includes information and data on the progress made towards achieving mental health targets for 2020 set by the global health community and included in WHO's Comprehensive Mental Health Action Plan. It includes data on newly-added indicators on service coverage, mental health integration into primary health care, preparedness for the provision of mental health and psychosocial support in emergencies and research on mental health. It also includes new targets for 2030 (WHO, 2024).

In the context of national efforts to strengthen mental health, one needs to not only protect and promote the mental well-being of all, but also to address the needs of people with mental health conditions. WHO has recommended this be done through community-based mental health care, unlike the former strategy of institutional care (Erol *et al*., 2010). Community-based mental health care are provided through a network of integrated services at community level that may involve community mental health centers and teams, psychosocial rehabilitation, peer support services and supported living services (Cherry, 2023). Services that deliver mental health care in social services and non-health settings, such as child protection, school health services, and prisons are encouraged (Forrester *et al.,* 2018). The vast care gap for common mental health conditions such as depression and anxiety means countries must also find innovative ways to diversify and scale up care for these conditions, for example through non-specialist psychological counselling or digital self-help (Kohn *et al*., 2021).

The treatment gap for mental disorders is high all over the world, that between 76% and 85% of people in low- and middle-income countries (including Nigeria) with severe mental disorders receive no treatment for their mental health conditions, and that the corresponding figures for high-income countries are also high – between 35% and 50% (Rebello *et al*., 2021). In Nasarawa state, there were only 4 Consultant Psychiatrists, providing services for about 1.4 million persons with Mental Disorders (5.6 million projected population).

The WHO Mental Health Gap Action Programme (mhGAP) was aimed at scaling up services for mental, neurological and substance use disorders for countries especially with low- and middle-income. The programme in Nasarawa state, Nigeria asserted that with proper care, psychosocial assistance and medication, tens of millions could be treated for depression, schizophrenia, and epilepsy, prevented from suicide and begin to lead normal lives, even where resources are scarce (WHO, 2024). The assessment of successful interventions of this mhGAP

program in Nasarawa state (2019-2021) will further facilitate decision making with regards to interventions and scope for future programming in mental health, not only in the state but world-wide. This research set out to answer the question of what the successful mental health interventions in the short term as a result of the mhGAP program are, in Nasarawa state from 2019-2021, in order to identify the types of mental health disorders at focal health centers of the mhGAP program and also examine the positive results of community and facility based mental health activities of the mhGAP program. With an increasing population of mental health disorders in Nasarawa state, the lessons learnt from the mhGAP program will facilitate decisions to increase the scope and integration of community mental health services.

2.0 Materials and Methods

2.1 Study Area

Nasarawa state is situated in the North Central geopolitical zone in Nigeria, within the latitude of 9.08'20" N and longitude of 8.19'97" E. It is bounded in the north by Kaduna state, in the west by the Federal Capital Territory, east by Taraba and Plateau states and Kogi and Benue states in the south (3). It has a total of 13 Local Government Areas in which are a total of 1,035 public and private health facilities. Of these, 473 are public health facilities (450 primary healthcare centers (PHCs), 21 secondary and 2 tertiary health facilities) ("Map", 2024).

Nasarawa state commenced the implementation of the mental health intervention gaps and services (through the mhGAP programme) across 10 communities (Agyaragu, Obi town, Agwatashi, Keana Town, Giza, Kadarko, Awe old town, Madaki, Galadima Tiza, Undera) in 3 Local Government Areas (Awe, Obi and Keana) of Nasarawa state in 2019. These 10 communities were selected as 'existing' conflict torn communities of the state.

2.2 Research Design

This study is a cross-sectional retrospective study in Nasarawa State of clients with mental health problems and other forms of disabilities in 3 Local Government Areas (Awe, Obi and Keana) of Nasarawa state over three years (2019-2021).

2.3 Study Population and Sample size

All registered 743 clients with mental disorders in the focal (project sites) 10 communities where the mhGAP was implemented, were assessed.

2.4 Sampling technique

Total sampling technique was used and all clients with mental disorders identified in the 10 communities (Agyaragu, Obi town, Agwatashi, Keana Town, Giza, Kadarko, Awe old town, Madaki, Galadima Tiza, Undera) in 3 Local Government Areas (Awe, Obi and Keana) of Nasarawa state participated in the study.

2.5 Data collection technique and data analysis

A quantitative data collection method using secondary data of primary health facilities was utilized. Data retrieved from the medical records department of the hospitals was collected, collated, cleaned and entered into SPSS version 22 for analysis.

2.6 Ethical considerations

Ethical approval was obtained from the Research and Ethics Committee of the Nasarawa state Ministry of Health

3.0 Results and Discussion

Mental health disorders affect the way individuals think and behave. There are more than 200 types of mental health disorders (Cleveland, 2024). In 2024, a study in Ogun state Nigeria revealed that among ages 18-40, females were affected the most and schizophrenia and substance misuse disorder were the commonest mental health disorders (Babasola *et al*., 2024). Seven hundred and forty-three (743) clients were enrolled into the mental health programme, all from the focal 10 conflict torn communities in three LGAs of Nasarawa state, out of which majority (401) (54%) were males and the rest (342) (46%) were females. Out of the 743 clients, 200 (27%) recovered after care and treatment. This shows a significant rise from the baseline of zero (Figure 1).

Figure 1: Total number of mental health disorder clients enrolled and number recovered

Nigeria (WHO, 2022). Most common mental health disorders, treated and managed included depression, post-traumatic stress disorder, anxiety, substance misuse, epilepsy and psychosis (Figure 2). There is a significant number of mental health disorders in the three conflict ridden LGAs of Nasarawa state. Depression was the commonest mental health disorder diagnosed with 42% followed by Post –traumatic stress disorder (28%). Anxiety followed at 15%. Least was epilepsy at 4%.

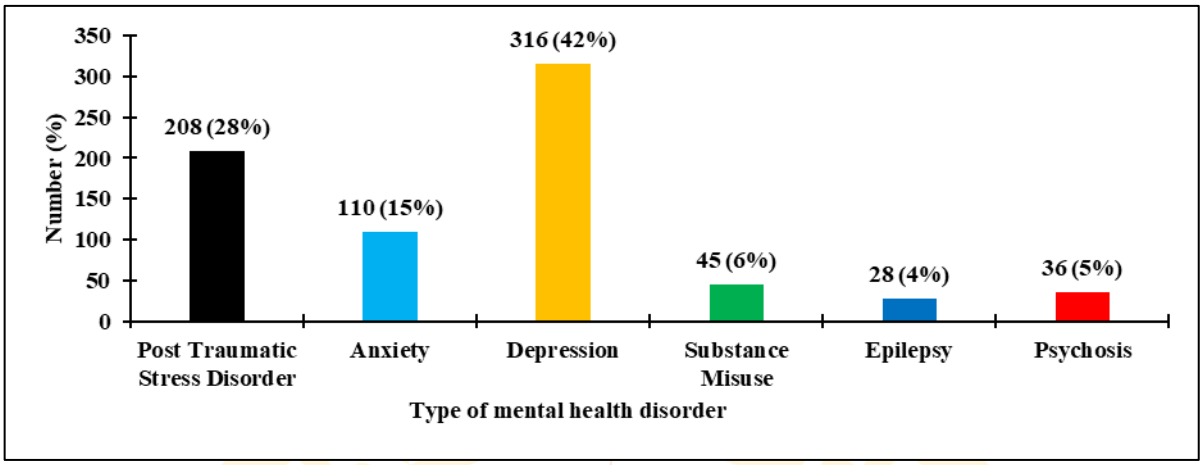

Figure 2: Distribution of clients with mental health disorder (y-axis) per type of mental health disorder (x-axis)

The World Health Organization (WHO) estimates that a whopping 20% of Nigerians, or around 40 million people, are affected by mental illness (WHO, 2022). Globally, out of one billion people living with mental health disorders, 81 % are in low- and middle-income countries like

Mental health includes a person's psychological, emotional and social wellbeing. It is a vital part of a person's life from infancy to adulthood. In the USA, symptoms of mental health disorders usually improve with treatment, which may include medication, psychotherapy, alternative therapies or brain stimulation therapy (Cleveland, 2024). On the other hand, in Nigeria, the strong cultural values make the social interaction (how you feel, behave and interact with others) a major part of the treatment process. The community based mental health model interventions were developed based on the importance of the traditional practices, and the social being of a person (Soroye *et al*., 2021; Castillo *et al*., 2019).

Mental health services in Nigeria consist mainly of large government psychiatric hospitals and there are very few mental health professionals to serve the large population of the country (Eaton, 2017). In the community based mental health model, as seen in this study, health facility interventions integrated into general services at PHCs and linked to community interventions showed improved utilization of mental health services (Table 2). Targets for indicators focusing on community based and facility interventions in the program were surpassed, indicating success of such interventions.

Mental Health Self-help Groups (SHGs): twenty nine (29) SHGs were formed by the trained three doctors and community stakeholders after advocacy visits to the gatekeepers of the respective 10 communities. Every mental health patient enrolled in the PHC were registered into a Self-Help Group, headed by a 'recovered' mental health client. This encouraged the members who were mental health clients share experiences for recovery, encourage adherence for treatment, decide on a 'support' partner within the family, share the directory of contacts for emergencies, discuss challenges faced, and proffer solutions for the path of recovery. On the other hand, any person recognized as a client for mental health care and treatment would be referred/linked by the SHG to the PHC. A list of members of each SHG was developed together with the list of contacts of important health care personnel in case of emergencies.

SHG meetings were held every quarter. A total of 567 members were registered by these SHGs during the three-year period.

Mental Health Training of Trainers (TOT): A TOT workshop was held for three days for three (3) health care workers (HCWs), all doctors (one from each of the focal LGA general Hospital) with the overall consultant in Psychiatry (from Dalhatu Araf Specialist Hospital (DASH) - a tertiary hospital). These trainers would step down to other health care workers in the focal PHCs.

Mental Health Step- down Trainings to Healthcare Workers: Six monthly (6) step down three-day participatory trainings have been held to train 15 health care workers in each training on mental health disorders- detection/identification, diagnosis, care and treatment including referrals. Importance of community based mental health interventions and implementation of such interventions was also done to strengthen the capacity (knowledge and skills) of health care workers.

The first set of six trainings was mainly for health care workers (Nurses/midwives, Community Health Extension Workers (CHEWs)) from the select PHCs, focusing on the community-based approach to mental health. By conducting pre and posttests during the trainings, knowledge (average) increased by 40% (57% had scored above 50 at pretest and 97% above 50 in posttest). Due to the success of the trainings, these trainings were followed by a training that had a total of 15 participants (Nurses/midwives, Doctors) from the departments/units of Obstetrics and Gynecology, Family Medicine, and HIV of DASH and General Hospitals, focusing on workers dealing with HIV/AIDS patients. This decision was taken due to the presence of neurological complications of HIV/AIDS seen in a significant number of patients with AIDS.

Mental Health diagnosis and counseling: This service was introduced at PHC level, as an important component of Primary Health Care services. Fifteen (15) focal PHCs had trained HCWs identify, diagnose and counsel mental health patients. Trained non-specialists in mental health conducted psychological counselling to scale up care for mental health disorders. The use of Standard Operating Procedures and Flow Charts for mental health facilitated early detection and treatment of mental health disorders. They also helped link them to SHGs closest to their abode. Scaling up of this intervention at PHCs will help in early case detection, and treatment of mental health disorders and. It will increase access for mental health disorders in terms of proximity to their residences.

Community Home visits and Community Monthly Meetings: Monthly meetings and home visits helped to promote access to mental health services, create awareness on mental health and provide treatment and care for those enrolled into health facilities. It also dispelled rumors, reduced stigma and discrimination and misconceptions on the causes of mental ill health. These meetings increased sensitization to mental health issues of community stakeholders (traditional leaders, religious leaders, youth leaders, women leaders, market leaders, government SBCC teams and the media). Messages to increase knowledge on mental health disorders and to reduce stigma against individuals with mental health disorders were used.

Table 2: Types of Mental Health Interventions done on the mhGAP programme in Nasarawa state and achievements

S/NO	TYPE OF MENTAL HEALTH INTERVENTIONS	INDICATOR	TARGET	ACHIEVED
1.	Mental Health Self-help Groups (SHGs)	No. of SHGs	15	29
2.	Mental Health Training of Trainers (TOT) (3 HCW trained)	No. of TOT	1	1
3.	Mental Health Step- down Trainings to Healthcare Workers	No. of Community based MH Stepdown trainings	3	7
		No. of HCWs trained	60	105
4.	Mental Health diagnosis and counseling	No. of PHCs strengthened to offer MH services	15	15
5.	Community Home visits	No. of Home visits conducted	36	36
6.	Community Monthly Meetings	No. of MH Meetings	36	36
7.	Mental Health Supervisory visits	No. of Supervisory Visits	36	36
8.	Establishment of two way referral way system in focal PHCs	No. of PHCs	15	15
9.	Strengthening of Mental Health Drug Revolving Fund within 15 PHCs	No. of HCWs trained	15	27
10.	Strengthening of Mental Health M and E system	No. of LGA M & E officers trained	3	7

Key: No.: Number; SHGs: Self-help Groups; TOT: Training of Trainers; MH: Mental Health; HCWs: Health Care Workers; PHCs: Primary Healthcare Centers; LGA: Local Government Areas; M & E: Monitoring and Evaluation.

Mental Health Supervisory visits: Consultant Psychiatrist conducted two cycles of periodic case reviews of treatment outcome to 513 patients at the health care facilities and reported improvement in the wellbeing of over 90% of patients with mental health illness especially, epilepsy. Improved supervision of HCWs for mental health services improved the quality of the services offered to clients and patients.

Establishment of two-way referral way system: A two-way referral system was established to help in the continuum of care, for patients who needed to be referred to higher level institutions for rehabilitation. Apart from this, a referral system was developed so that focal community persons in communities would be contacted for them to visit the mental health patient undergoing treatment in their homes.

Strengthening of Mental Health Drug Revolving Fund within 15 PHCs: Seed grant was given to buy required medications (anti-psychotics, anticonvulsants, antidepressants, etc) for mental health disorders and this would be revolved within the facility through the months, the

profit being taken to buy more drugs, strengthening the Drug Revolving Fund (DRF) within the PHC. This would ensure continuous and increased access to medicines.

Strengthening of Mental Health M and E system: Training of the 3 LGA M and E officers and the 15 focal persons in the PHCs (1/PHC) would strengthen data management for mental health and ensure data is fed into the DHIS 2 platform. Community interventions to increase awareness on mental health (explaining causation, achieving community leaders support, culturally sensitive messaging to reduce stigma towards mental health disorders) in the communities as in this study and in the Eaton study showed better utilization of services (Eaton, 2017; Adegoke, 2023).

In Nigeria, only about 15% of patients with severe mental illnesses have access to mental health care (Cleveland, 2024). This was more challenging because of the COVID-19 pandemic on people living with mental illness[20]. The decentralised community based mental health services model has proven that the access to mental health services can improve significantly health-related quality of life, increased physical activity, reduced homelessness risk factors, and reduced behavioral health hospitalizations (Aborode *et al*., 2022). This study has also showed improved utilization of mental health services with the community based mental health model, unlike before this study, where the facility (government owned) interventions were only used.

4.0 Conclusion

The community based mental health model for mental health disorders prevention, care and treatment scale up services and interventions has its numerous benefits. Efforts should be made to include all communities in the other LGAs in Nasarawa state.

Conflict of Interest

Authors declare that no conflict of interest exist.

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