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THE HEALTH ACTION FOR PSYCHIATRIC PROBLEMS IN NIGERIA INCLUDING
EPILEPSY AND SUBSTANCES (HAPPINESS) PROJECT: A PRELIMINARY MIXED-
METHOD EVALUATION

By

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A thesis submitted for partial fulfillment of the requirements for the degree of
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Abstract

Background: The Health Action for Psychiatric Problems in Nigeria Including Epilepsy and Substances (HAPPINESS) Project is a mental health capacity building intervention based in Imo State, Nigeria that incorporates the World Health Organization's Mental Health Gap Action Programme (mhGAP). So far, the HAPPINESS Project has trained 36 primary care workers (doctors, nurses, and community health extension workers) in one initial training (covering 5 local government areas) and one refresher training. The goal of this project is to leverage Imo State's widespread primary care network, to address gaps in access to mental health care.

Objective: To evaluate the impact of the HAPPINESS Project, both qualitatively and quantitatively, on primary health care workers using a mixed-methods approach.

Methods: Evaluated the quality and effectiveness of the HAPPINESS Project using semi-structured interviews with trainees, trainers, and local health officials that have supported the HAPPINESS Project (n=6). The effect of the training on trainee's perception of mental illness was evaluated using the World Psychiatric Association (WPA)'s questionnaire focused on measuring levels of stigma and discrimination towards people with schizophrenia (n=13). A paired-sample t-test was used to analyze the questionnaire.

Results: The questionnaire showed that respondents significantly improved on three of the subscales used to analyze the WPA questionnaire (socializing, normalizing, and witchcraft). No significant effect was seen on the subscale of "biopsychosocial beliefs regarding mental illness". The interviews showed a very positive response towards the HAPPINESS Project as a whole and offered ideas on how it should expand moving forward. Notable suggestions include methods of creating awareness with regards to mental illnesses, increasing the length of the training, and potentially doing separate training for different healthcare professions.

Conclusion: This study provides preliminary evidence for the successful contextualization of the mhGAP-IG to local settings. It is unique in highlighting challenges that come with initiating a mhGAP-IG implementation project and quantitatively evaluating levels of stigma among trainees. Future evaluations of the HAPPINESS Project should incorporate the analysis of patient data and patient perspectives.

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Introduction

Mental Health in Nigeria

The prevalence of mental, neurological, and substance abuse (MNS) conditions is on the rise globally. These rates are comparable between high- and low-income countries; however, in low and middle-income countries (LMIC's), there is a greater lack of capacity to address such disorders. Nigeria, Africa's most populous nation, has over 7 million people with depression and over 4 million people with anxiety (the highest number of cases compared to other countries in the African region).¹ Data from 2016 also shows the national suicide rate to be 17.3 suicides per 100 000 people. A 2006 study² that used a representative sample of 22% of the Nigerian population found that the lifetime prevalence of a mental disorder in the nation to be approximately 12%, but experts have estimated this to be much higher (20-30% in actuality). In Imo State (where the HAPPINESS Project takes place), there is currently no available state-wide data on mental illnesses; however, a study on depression prevalence among HIV/AIDS patients in the Imo State teaching hospital found that out of 271 patients, 39.1% were depressed.³ Of those, 24.5% were mildly depressed, 50% moderately depressed, and 24.5% severely depressed. For reference, another study conducted in Abia State (a southeastern Nigerian state, like Imo), found that out of 400 adults in the ambulatory clinic, 48.5% had depression.⁴

These poor mental health conditions could be a result of a multitude of environmental factors, but nationally, difficulties accessing mental health care in Nigeria present a substantial barrier. Similar to other LMICs, Nigeria has a mental health governance structure that was historically challenged and only recently improving. These lacking government health systems

and policies contribute to and exacerbate the poor availability of mental health care as well as high levels of stigma towards mental illness.

The first legislation for mental health in Nigeria was the Nigerian Lunacy Act of 1958 (originally enacted in 1916, but amended), enacted by British colonizers. This law violated the fundamental rights of people with mental illness (e.g. confines them to asylums) and prioritizes protecting the public instead of helping those with a mental illness. Moreover, the law's text also used highly derogatory language and had no mention of treatment provision and approaches.^{5,6} In 2003, a Mental Health Bill was introduced to reform the Lunacy Act, but it was not passed and later withdrawn. In contrast to the Lunacy Act, this bill acknowledged treatment, however, only in the form of confinement. Additionally, it failed to protect the rights of individuals with mental illness (e.g., no protections for involuntary treatment or potentially harmful treatment methods) and had no safeguards for sociopolitical issues (e.g. discrimination, vulnerable groups, access to social services like housing, employment, and social security). This bill was later reintroduced in 2013, with massive improvements such as provisions that protect those with mental illnesses from involuntary treatment, reduce stigmatization, and improve access to care; however, it has yet to receive legislative action.

Separately, in 1991, Nigeria created its first Mental Health Policy, which was the first to acknowledge and protect the rights of people with mental illness. More importantly, it established that mental health care needs to be integrated into primary healthcare settings and delegated that responsibility to local governments. This philosophy and emphasis on primary care, however, was not properly implemented. Saraceno et al.⁷ evaluated the policy and pointed to three main issues for poor implementation. These included insufficient training and supervision of primary care workers, insufficient funding, and a lack of political will. In 2013

a new version of this policy⁸ (called the Policy on Mental Health Service Delivery) was created, which shows a lot of promise. This policy recognizes the nuances of building capacity for mental health care within the primary healthcare system and provides specific recommendations for integrating mental health care (e.g. roles that primary, secondary, and tertiary care). Further, it encourages the use of public-private partnerships to innovate the mental health system.^{9,10}

The most recent data show that there are only 0.15 psychiatrists per 100 000 of the population in Nigeria (whereas in the US, it is 10.54 per 100 000 of the population).¹¹ Excluding the use of traditional and faith-based healers, it has been found that only 10% of people with a mental illness have access to the care they need.² While efforts to increase the number of psychiatrists are underway, it can take a while to see the impact, and there is also the issue of ‘brain drain’ whereby professionals move out of the regions where they were trained. These specialists work mostly out of a hospital and are accessed by referrals from primary healthcare clinics. Rural access to a psychiatrist is also difficult, and in the case of Imo State, there is only 1 psychiatrist for the state’s estimated population of 5.2 million.¹² Although there exist other types of mental health professionals such as clinical psychologists, psychological social workers, and occupational therapists, these are not covered under the National Health Insurance Scheme (NHIS) and are rarely used. Imo State is also populated by certain ethnic groups (e.g. Igbo and Yoruba) that commonly use traditional healers for psychiatric illnesses. In some cases, these methods may involve the abandonment of psychiatric medication, which, for some individuals, can lead to a harmful relapse. In a study by Ikwuka et al.¹³, however, it was found that most Igbo people may in fact prefer biomedical treatment when they are available, as opposed to spiritual and traditional methods. This

indicates that there is perhaps a growing openness among these groups that may be leveraged to encourage the use of psychiatric treatment for mental illnesses.

Beyond the availability of suitable mental health services, there is also the issue of stigma that influences people's perception of whether they need to get help at all. In southeastern Nigeria (where Imo State is located), people commonly think of mental illness as something that should be concealed by the bearer, and if it becomes exposed to the public, it is too late and useless to treat and manage it.¹² Numerous studies have also found high levels of self-stigma among Nigerians with a mental illness and stigma at the community level.^{14,15} One study found widespread negative attitudes towards people with a mental illness, particularly rooted in the belief that these individuals are violent and dangerous.¹⁶ Most people in the study reported not being able to tolerate basic social interactions and being afraid to have a conversation with someone with a mental illness. A 2015 study examined the treatment of mentally impaired individuals by family and community members in Imo State.¹⁷ This study found that knowledge regarding mental illness was lacking, and originating from supernatural or evil causes. Moreover, these perceptions often led to inappropriate treatment and violence towards those with a mental illness.

The World Health Organization's Mental Health Gap Action Programme (mhGAP)

The Mental Health Gap Action Programme (mhGAP)¹⁸ is an initiative that was created by the World Health Organization to help national and subnational leaders scale-up mental health care in their communities. Included in this program is the mhGAP-Intervention Guide (mhGAP-IG) that contains a package of interventions for assessing and managing mental, neurological, and substance use (MNS) disorders. The main goal is to ensure that, even when

psychiatric infrastructure isn't available, people can still receive care from trained non-specialist physicians and lay healthcare workers (also known as "task-sharing" or "task-shifting"). The mhGAP-IG training materials include one introductory manual and nine disorder-specific manuals (for depression, psychoses, suicide, epilepsy, dementia, alcohol-use disorders, illicit drug-use disorders, mental disorders in children, and other significant mental health complaints). These can be used to train non-psychiatric health workers and eventually build capacity in various low resource settings.

There have been two versions of the mhGAP-IG, one in 2006 and a revision in 2013.¹⁹ The first mhGAP-IG was rolled-out in more than 90 countries around the globe, but few studies have evaluated its use. This was noted in a 2017 systematic review of available evaluations for the mhGAP use in LMICs, which found 33 evaluation studies.²¹ Keynejad et al. categorized these studies by mhGAP use in training, clinical practice, local-mhGAP adaptation, economic modeling, use as the control intervention in randomized control trials and use in a model for developing a rating scale. Overall, Keynejad et al. concluded that much more research is needed to look at mhGAP implementation in LMICs. The majority of studies (15 of them) were training evaluations, yet only 3 studies looked at local adaptation. The authors noted that future studies should evaluate protocols and highlight the challenges of contextual adaptation through qualitative studies and randomized control trials. These findings demonstrate that the present study is filling a gap in identifying implementation challenges through qualitative methods.

mhGAP-IG Implementation in Nigeria

The mhGAP-IG was designed in a generalized manner to apply to any country; thus, the creators emphasize that it needs to be adapted to local contexts to be successful. The

HAPPINESS Project, in Imo State, is one case of the mhGAP-IG's contextualization in Nigeria, but mhGAP-IG has been contextualized and implemented in other states as well (Osun, Ogun, Lagos, and Benue). The mhGAP-IG has been used and evaluated in non-healthcare settings (e.g., public schools), but for healthcare settings, only the projects in Osun and Ogun have been evaluated.

Implementation in Ogun State. In Ogun State, Abedowale et al. implemented and adapted 5 of the 9 modules of the mhGAP-IG. These modules included psychosis, depression, alcohol and substance abuse, epilepsy, and other significant mental health complaints. A total of 80 primary health care workers were recruited and trained with mhGAP-IG (4 workers from each local government area). These individuals included community health extension workers and nurses, and participation was based on expressed interest. Using self-report questionnaires given to trainees, Abedowale et al.²² evaluated the diagnostic abilities and intervention satisfaction. They showed that post-training, the self-reported rates of accurate diagnoses and appropriate treatment increased. The majority of the trained health workers were satisfied with the training and claim that the program had a positive impact on their care for patients. The majority of the workers also claimed they experienced personal fulfillment and good support from the community as well as the mhGAP-IG project team.

Implementation in Osun State. In Osun, Gureje et al. adapted and implemented all 9 modules of the mhGAP-IG. This project applied a 'cascade training model' where there are master trainers (psychiatrist) who would train facilitators (non-specialized doctors and nurses), who then train other primary care workers. In total, 198 primary care workers were trained in 8 local government areas of the state. Compared to the project in Ogun, Osun's mhGAP-IG intervention was more rigorous. They evaluated the program with regular visits by project

staff to review the project's progress as well as to offer support directly to the trained workers. An evaluation by Gureje et al. showed significant improvements in acquired knowledge and adequate retention of acquired skills after the training (with some decay).²³ A total of 96 patients were treated for mental health conditions by the newly trained workers, and 65% of these were rated to have high compliance with the mhGAP-IG. Gureje et al.²⁴ also conducted a cluster-randomized trial examining the treatment of depression using stepped-care with care enhanced by the mhGAP-IG versus the mhGAP-IG alone (as the control). Stepped-care is an approach where low severity patients are given less resource-intensive care first. This study used a stepped-care approach that involves individual problem-solving sessions, combined with mhGAP-IG. The primary outcome of this study was a 12 month remission of depression and results showed no significant differences overall, which proves that mhGAP-IG alone, can be similarly effective compared to a more resource-intensive intervention (stepped-care).

The aforementioned studies finds positive evidence for mhGAP-IG use in the Nigerian context. The evaluation in Ogun focused on the trainees themselves, similar to the present study. The evaluations in Osun focused on trainees' acquired skills and knowledge and looked at the training's effect on the improvement of depression among patients. However, there are still many research gaps to be addressed. In both cases, the more nuanced individual perceptions of trainees were not investigated. Additionally, neither studies look at the role of stigma among health care workers who are trained by the mhGAP-IG. The present study aims to fill both of these gaps, and contribute to the body of literature on mhGAP-IG implementation in the Nigerian context.

The HAPPINESS Project – Leveraging Nigeria’s Primary Health System

In Imo State, where the HAPPINESS Project takes place, individuals must travel 4-6 hours to see a psychiatrist. There is, however, a robust primary healthcare system spread throughout the region that the project takes advantage of. This system constitutes primary health centers (PHCs) that serve around 10 000 people each. Results from Nigeria’s 2013 General Household Survey found that 75% of rural respondents resided within 2 kilometers of a public PHC.²⁵ More specifically, according to a 2018 opinion poll of 3346 habitants in Imo State, 35% of the respondents were located 3-5 kilometers away from a PHC, and 26% were less than 3 kilometers away from a PHC.²⁶ PHC’s are well-staffed with non-specialized physicians, registered nurses, community health extension workers (CHEWs), and community health workers (CHWs). The HAPPINESS Project uses the mhGAP-IG to train PHC workers from 3 local government areas within Imo State to address MNS disorders in these communities.

The project team (composed of psychiatrists from both Imo State University and Yale University) chose 5 of the 9 disorder-specific modules within the mhGAP-IG to contextualize (issues that are of top priority in Imo State). These include depression, schizophrenia and other psychotic disorders, epilepsy, alcohol-use disorders, and illicit drug-use disorders. In addition to adapting and applying the mhGAP-IG to the local cultural context, they’ve also added stigma reduction components since this was crucial for highly stigmatized illnesses like epilepsy.

Trainees were recruited by interest and they attended a 5-day course that was 7-8 hours per day (with regular breaks). Through an agreement with Imo State, trainees were to be compensated for their regular wages while attending the course. The project implementation plan also involves a biannual refresher training (every 6 months), and access to psychiatrists (in-person or on Whatsapp) for inquiries. In the HAPPINESS Project’s initial implementation in 3

local government areas, 36 health care professionals have been trained, and these PHC workers have gone to assess, treat, and refer 100 patients. Since its conception, the HAPPINESS Project has also implemented a drug revolving fund (DRF) to ensure there is access to high-quality psychiatric medications for those who need it. The DRF is funded by CBM international, and it keeps a constant stock of psychiatric medications at the clinics participating in the HAPPINESS Project. Medications are sold at a price that is slightly above what they were purchased (that is still low compared to the market price), and the generated profit goes to benefit the trainees and clinics.

Methods

The purpose of this study is to evaluate the HAPPINESS Project using a combination of qualitative and quantitative methods. This involved evaluating key informant interviews as well as responses from a questionnaire that measures stigma. Specifically, the project focuses on examining the effectiveness of the training from the perspectives of both trainees and local leaders that were a part of implementing the project.

Interviews

A total of 6 semi-structured key-informant interviews and 2 group interviews were conducted (n=11). These included 4 nurses, 1 non-specialist primary care doctor, 4 state health officials (from various organizations in Imo State; all doctors themselves), and 2 mental health specialists (psychologist or psychiatrist). These interviews were conducted on both a one-to-one or group basis by two interviewers (one interviewer per session). Most interviews were conducted in-person after the first refresher training in September 2019, and the rest were conducted virtually, a couple of months following the refresher. Each interview ranged from 20-

60 minutes using an interview guide that asked a series of questions about the interviewee's experience with the HAPPINESS Project (what they liked and disliked), and what they thought could be done to better integrate it into primary care. **Figure 1** provides an overview of the interview guide that was used (includes the main questions that were asked). Informants were not compensated for their time for the interviews and participation was voluntary.

Interviews were transcribed by the thesis author (who was not the interviewer) with the assistance of the interviewer's notes in cases where audio was difficult to decipher. Coding was done using the Dedoose software (Version 8.3.17) and Microsoft Word by the thesis author. After the first round of reviewing transcripts, initial parent and child codes were formed. This initial codebook was reevaluated to ensure clarity and that the merging of categories and themes was done where necessary. After the final codebook was formed, codes were applied to the previous transcribed interviews. Transcriptions that corresponded to each category and theme were analyzed to generate findings and conclusions regarding the HAPPINESS Project training.

Figure 1*Interview Guide Overview*

1. Please give me a brief description of your job and what your average workday look like? (When do you come in, where do you spend most of your day, who do you interact with the most? What takes up most of your time?)
2. Did you participate in the HAPPINESS project training and refresher training? If so, what are your initial thoughts about the training/refresher training?
3. Are there any aspects of the training that you think need to be changed (i.e. timing, schedule, duration, content, trainers, etc.)?
4. How has the training affected your work with patients?
5. How was your experience with the Drug Revolving Fund? Was it helpful?
6. What is your perception of the quality of supporting materials (i.e. training modules and other documents)?
7. In your opinion, how well was the HAPPINESS project integrated into primary care?
8. What kinds of incentives are there to help ensure that the implementation of the HAPPINESS project is successful?

Questionnaires

All trainees were asked to respond to a pre- and post-training questionnaire that contained 43 question prompts which the respondent would answer with “agree” or “disagree”. These questions were taken from the World Psychiatric Association’s initiative for reducing stigma and discrimination for schizophrenia²⁷ and were used in this study to measure the attitudes and beliefs towards mental illness among the trainees. Out of 34 respondents, only 13 were usable due to missing answers. Trainees were not additionally compensated for their response to the survey, but these were conducted by-hand (on paper) during the workshop, and trainees were already being paid regular wages for their participation in the workshop.

Questionnaire responses were analyzed using the same methodology as Iheanacho et al.’s study²⁸. Of the 43 questions, 30 questions were included in the analysis and categorized into four subscales (shown in **Figure 1**). Subscales were not shown to the respondents and questions were ordered differently than in Figure 1. These subscales included acceptance of socializing with people with mental illness, favorable attitudes towards normalized activities and relationships with people with mental illness, beliefs in witchcraft as a cause of mental illness, and endorsement of a biopsychosocial perspective of mental illness. A paired-sample t-test was conducted on each of the four subscales using the R Statistical Software and Microsoft Excel. Variances for each of the subscales were considered unequal except for the biopsychosocial subscale; however, deeming the variance equal or unequal did not affect the results of the t-test.

Figure 2

WPA Questionnaire Questions (paraphrased) and Subscales

A. Socializing

- I would have a former psychiatric patient as a friend.
- I would live with a next door neighbor who is a former psychiatric patient.
- I am not afraid of people with mental illnesses.
- I am not afraid of making conversation with people with mental illness.
- I would have conversation with neighbors who previously had mental illness.

I would invite a previously mentally ill person in my house.
 I would marry a person who was previously mentally ill.
 I am not ashamed if someone in my family was diagnosed with mental illness.
 I am not upset working on the same job with a mentally ill person.
 I would not avoid conversation with a neighbor who is mentally ill.

B. Normalizing Relationship

Mental illness is an illness like any other illness.
 The best therapy for mentally ill people is to be a part of society.
 People with mental illness do not tend to be retarded.
 I would be willing to work with somebody with a mental illness.
 People with mental illness are far less of a danger than people think.
 I would maintain a friendship with a person with mental illness.
 Residents should not be afraid of people coming to their neighborhood to receive mental health
 Mentally ill people can work in regular jobs.
 Persons who show signs of mental illness should not be immediately hospitalized.
 Mental illnesses are caused by poverty.

C. Witchcraft

Mental illness is not caused by someone putting a curse on you.
 Mental illness is not caused by witchcraft.
 Mental illness is not caused by possession by an evil spirit.
 Mental illness is not caused by God's punishment.
 Mentally ill people can be treated outside of a hospital.

D. Biopsychosocial

Virtually anyone can become mentally ill.
 Mental illness is caused by a brain disease.
 Mental illness is caused by physical abuse.
 Mental illness is caused by biological factors.
 Mentally ill people are not dangerous because of violent behavior.

Results

Questionnaires

Table 1 and **Table 2** show the questionnaire respondent demographics for the initial respondents ($n=34$) and the sample included in the analysis ($n=13$). The average age of the initial sample was approximately 45 years old ($SD = 7.73$), and approximately 43 years old ($SD = 8.74$) for the analyzed sample. The average years of education were approximately 19 years ($SD = 3.77$) for the initial sample and approximately 18 years ($SD = 2.68$) for the analyzed sample.

The initial respondents and the analyzed sample were predominantly female (85% and 92%, respectively). The initial respondents were mostly doctors, then community health extension workers (CHEWs), then nurses (53%, 35%, and 12%, respectively). There were no

community health workers. The analyzed sample was also predominantly doctors, then CHEWs, then nurses (62%, 31%, and 8%, respectively). Most people were born in rural areas (79% for the initial respondents, 92% for the analyzed sample), and none were born in semi-urban areas. For the initial respondents, 39% were currently living in a rural area, 33% in an urban area, and 27% in a semi-urban area. For the analyzed sample, 23% were currently living in a rural area, 38% in an urban area, and 38% in a semi-urban area. Thus, our analyzed sample of 13 people was less rural-living than the initial respondents of 34 people.

Table 1*Sample Characteristics (age and education)*

	Initial Respondents (n=34)	Analyzed Sample (n=13)
Average Age	45.09 (7.73)	43.08 (8.74)
Average Years of Education	18.94 (3.77)	17.77 (2.68)

Note: Average age and years of education for the original set of respondents (n=34) and the final sample (n=13) included in the analysis. Values are self-reported from the WPA questionnaire. Numbers in the parentheses are the standard deviations.

Table 2*Sample Characteristics (gender, job, current and birth location)*

	Initial Respondents (n=34)	Analyzed Sample (n=13)
Gender		
Male	15%	8%
Female	85%	92%
Job		
Community Health Extension Worker	35%	31%
Community Health Worker	0%	0%
Doctor	53%	62%
Nurse	12%	8%
Born		
Urban	21%	8%
Rural	79%	92%
Semi-urban	0%	0%
Currently Live		
Urban	33%	38%
Rural	39%	23%
Semi-urban	27%	38%

Note: Demographic information collected from the WPA questionnaire for the original set of respondents (n=34) and the final sample (n=13) included in the analysis.

Table 3 shows the results from the paired two-sample t-test. Overall, there were fewer stigmatizing attitudes and beliefs towards people with a mental illness after the training,

compared to before. This is demonstrated by the mean responses of each subscale (pre- versus post-), but also by the t-test results. Respondents significantly improved on three of the subscales (socializing, normalizing, and witchcraft). Significantly, they reported more acceptance of socializing with people with a mental illness, $t(12) = 3.07, p = 0.01$, more favorable attitudes towards normalized activities and relationships with people with a mental illness, $t(12) = 2.98, p = 0.011$, and less of a belief that witchcraft was a cause of mental illness, $t(12) = -2.55, p = 0.025$. There was no significant effect of the training on the biopsychosocial subscale, $t(12) = 0.74, p = 0.472$.

Table 3
Change in Attitudes and Beliefs of People with Mental Illness

Subscale	Pre-Training Mean	Post-Training Mean	T-Value	P-Value	95% CI
Socializing	1.72 (0.24)	1.88 (0.10)	3.07	0.010	[0.05, 0.28]
Normalizing	1.61 (0.23)	1.79 (0.10)	2.98	0.011	[0.05, 0.32]
Witchcraft	1.37 (0.34)	1.12 (0.10)	-2.55	0.025	[-0.46, -0.04]
Biopsychosocial	1.58 (0.21)	1.69 (0.16)	0.74	0.472	[-0.12, 0.24]

Notes: Subscale means are based on an answer of 1 for disagree and 2 for agree to questionnaire statements. For the socializing subscale, 1 indicates less acceptance of socializing with people with a mental illness (and 2 indicates more acceptance). For the normalizing scale, 1 indicates less favorable attitudes towards normalized activities and relationships with people with mental illness (and 2 indicates more favorable). For the witchcraft subscale, an answer of 1 indicates a belief that witchcraft does not cause mental illness (and 2 indicates a belief that it does). Numbers in the parentheses are the standard deviations.

Interviews

The interviews highlighted perspectives on specific aspects of the HAPPINESS Project, but also, more generally, existing barriers within the context of Imo State. Many themes overlap but were separated into those that described contextual barriers and those that described the impact of the intervention itself and future directions. Some interviewees' specific job titles are omitted to preserve anonymity (as there are few of these roles in Imo State). Primary care nurses

and doctors will be noted as primary care workers. Psychiatrists and psychologists will be referred to as mental health specialists.

Barriers to Mental Health Care

Although interviewees only consisted of providers, all of them noted several barriers to accessing mental health care in Imo State. These barriers were highlighted when interviewees were asked about their job and day-to-day functions, as well as when they were comparing their practice before and after the HAPPINESS Project's implementation.

Physical Barriers. The main physical or resource-related barriers to care include a lack of funding and poor supply and access to mental health professionals.

Lack of funding was commonly mentioned as a barrier to see a mental health worker or to acquire medications that are prescribed for treatment. There are very few mental health specialists in Imo State; thus, people living in more rural areas have difficulty accessing treatment. Moreover, people must be screened and referred before they can access care from a mental health specialist (they may not self-refer). The following quote by a mental health specialist lists the main barriers that are experienced by people who are seeking care:

“There is no insurance to cover mental health in the country so treatment is basically out of pocket. The barriers to care [includes,] the distance [and] accessibility to care. Most of the patients live in the rural areas, [but] the facilities are located in the urban areas. So there is a very large distance for them to [travel] to access care, which is very expensive. [Other barriers] I mention, d is that out of pocket expenditure in the current economic situation and lack of knowledge and lack of awareness about mental health. A lot of people still believe that they are caused by spiritual power, and the severe lack of manpower, nurses, doctors, social welfare workers, therapist, I don't think there's any in the state now, clinical psychologists are very few. Those are part of the barriers we face”

With regard to the supply of mental health workers, there are very few programs in Nigeria that train and produce psychiatrists. Brain drain was also noted as a challenge:

“We have two colleges, the National college and the West African college for training of a specialist. And then when you graduate, the training averages 4-6 year for you to become a fellow of the college and when you graduate you become a psychiatrist, a general psychiatrist. After which you can subspecialize into different specialties. Currently in the country there’s only training in child and adolescent psychiatry, etc.,...in the western part of Nigeria. The other subspecialties for now, are not available...” - Mental Health Specialist

“because of brain drain, most of the personnel are outside of the country” - Mental Health Specialist

Within Imo State, there are no training programs for psychiatrists, and thus, it may be less likely that local people will become psychiatrists. Brain drain is referring to the fact that Nigerians who do get trained may seek better job opportunities in other countries. Aside from mental health specialists, there are already limited numbers of health workers (potential trainees for the HAPPINESS Project) and they are overburdened already. Many trainees noted working full days, 7 days a week, and frequently working overtime:

“(I work) from 8 o’clock. The official time is (to) 4 o’clock, but I go beyond that if I have a patient or if [anyone] calls me on the phone that they’re coming, I have to wait for them. So specifically I don’t have times when I don’t see anybody and leave. – Psychiatric Nurse

Lack of Awareness. A severe lack of mental health awareness was heavily noted by all the interviewees as a common challenge in providing adequate care and early diagnosis. This was rooted in the high levels of misinformation and stigma among the general population and local community leaders. This theme is also highlighted when respondents are asked about their practice before and after the HAPPINESS Project, as well as what they hope to see in the future (see “Early Detection”). The following quote by a primary care worker details the severity of stigma that people are facing:

“Most of them are scared. They don’t want to tell their neighbors, or (their) son or (their) daughter or (their) friend...that they are having this problem, so that they don’t

stigmatize them. So they tend to hide this problem, and this problem is killing the patients. So it's a very big problem, so I think that has been a stumbling block"

Another theme related to a lack of awareness is that underlying mental illnesses are often ignored and go undetected because mental health is the last priority. At the health system level, resources and attention tend to go towards acute and chronic physical illnesses and conditions, rather than mental health. This lack of awareness leads to a delay in receiving the correct and suitable care. One state health official demonstrates this in the following quote:

"The person that comes with the thing that is malaria, that's the reason why they came to the health center. Or they may have typhoid fever, meanwhile the issue (that remains) is depression"

Issues related to lack of awareness are further detailed in the "Early Detection" section. That section expands on this gap and highlights why respondents believe that increased awareness is necessary for moving forward with the HAPPINESS Project.

The HAPPINESS Project's Impact

New Skills. The respondents cited many changes to the way trainees took care of patients after the training workshops. Although no community health workers (CHWs) and community health extension workers (CHEWs) were represented in the interviews, their gains from this workshop are expected to be substantial as they would have had the least training in the domain of mental health.

All respondents (who were trainees) noted a drastic improvement in their ability to detect, diagnose and treat mental illness. For instance, the workshop teaches them how to record and use Patient Health Questionnaire-9 (PHQ-9) and Brief Psychiatric Rating Scale (BPRS) scores to assess the severity of certain mental illnesses. Trainees also expressed an improvement in their

ability to provide the correct medication dosage to their patients. Many respondents noted their substantially improved abilities to help patients with a mental illness. For instance, one primary care worker said:

“Before the training, I was referring my patients with MNS conditions. But after the training, I am now able to diagnose and treat my patients. Like, treating (those that present) with psychosis. After treating them, they become better and go back to their families. They gained back their responsibilities”

A psychiatric nurse also notes marked improvements in her ability to diagnose and treat patients with a mental illness, despite being a nurse who is specialized in mental health:

“We (found) it difficult before, to give diagnosis but after the training most of us, even those who are not psychiatric nurses can now identify the mentally ill...we now make the right diagnosis. Even when I can't do it myself, I'll call (the mental health specialist) and (they'll) give the right diagnosis. We give the right diagnosis, we give the right drug... with this project, it's actually really improved my knowledge and gave me wider knowledge of psychiatry, so I'm impressed and happy”

“Some of them (used to) react to the dosage but nowadays, since this training, none of my patients have reacted to dosage, because I give them the right drug dosage now”

One respondent also noted an increased use of counseling:

“you need to initiate psychosocial treatment or intervention, or educate them, and counsel them, try to let them realize that it's not the end of the world, (and) that they should not be hopeless... that they can still get better and live their normal life” – Primary Care Worker

As well, many of them shared their realization in the importance of counseling and building trust between them and the patient:

“I think the most important thing is counseling. Every patient needs counseling. Because one out of every 10 patients, you have an MNS condition, even silently ... so we counsel them...they tend to open up things that you may not have really known. Or they have an issue that they never wanted to say. We need to create that good relationship with the patient and try to let them know that everything I discuss with you is private, is between you and (inaudible), except when they give you consent to discuss these things [with others]” – Primary Care Worker

“the way I interact with my patients, it makes them more relaxed when they come to me... instead of me looking at them as in their issue cannot be managed. But from the lecture and the training, I realize that a little psychotherapy, a little direction, can make them feel better than they were”- Primary Care Worker

Lastly, many respondents indicated feeling confident to apply what they learned in the training workshop, to practice:

“I have confidence, it gives me confidence. Before (the HAPPINESS project), I referred people or [consulted] with somebody else... if it's a far-away place I will talk through phone. But this time around, I have someone around that always visits office. I feel happy when (the project supervisor) [is] around, if I have patients I will say (to the project supervisor), talk to them, take care of them. And (the project supervisor) does” – Psychiatric Nurse

Notably, there was one occasion where the psychiatric nurse advocated for their patient, who would have been arrested by the police if they did not step in:

“he had a problem with somebody and they started beating him, the police arrested and they locked him up, so I went to the police station and I told the cops in charge, I said, please don't beat this person, he is a mentally ill patient, he doesn't know what he's doing... he's not mentally sound, this and that, and I said he's my patient... I stood my ground because I know what I am saying...”

The training equipped the nurse with confidence that was rooted in their new and more expansive knowledge of mental illnesses. This allowed them to “stand their ground” and advocate for protecting their patient.

Ideological Changes. The training also led to a changed attitude with regards to mental illness (this was also demonstrated in the analysis of the WPA questionnaire). Many developed a sense of empathy and respect for patients. This went on to change the way they interacted with patients, as well as how they treated the patient:

“So what I usually do is, um... most of them need privacy (for the) patient doctor relationship, (we need) to create that perfect environment for them. So, you know, seek their consent...so I ask, are you okay? Do you need somebody to stay with us?...First, I'll keep the patient's relative outside. You know, just to create, uh, just to make the patient feel

comforted. And first off, I need to let them know that whatever we're going to discuss, (will) be confidential, must be between me and the patient” – Primary Care Worker

“I'll go ahead to ask them if they permit me to bring in a colleague or a nurse...and if they say no, I don't go ahead, I respect their decision” – Primary Care Worker

These primary care workers described how they altered the environment and treatment approach to make patients feel more comfortable and that their autonomy was being respected. They also contrasted pre-workshop versus post-workshop ideas about people with MNS disorders in the following quote:

“(I) felt that (before), (we were) not really tending to MNS ... because of, probably because of their environment and how violent they can be. You know? But after that training, I was able to ... show love to these patients. They can be understanding to you, can listen to you or... instructions...the training made me realize that we are all one...they have the same problem...it's just a sickness that needs to be treated”

This mentality of “they are just like us” and that the patient has an illness that needs to be treated is evidence that some respondents may have developed a biopsychosocial view of mental illness (this was investigated via the WPA questionnaire with insignificant results, however). There was also an emphasis on integrating patients back into society after treatment. A primary care worker describes the importance of community reintegration in the following quote:

“also social supports, trying to engage them in their workplace, are they still working? What can I do? What can I help them to ensure they go back to their work because, you know, one of the classical, symptoms, is the loss of pleasureability, there's this dead silence. So you have to engage them on that situation”

Community integration and returning to regular life is one of the key components of the “recovery approach”, which has long been used to guide the creation and delivery of mental health services.²⁹

Drug Revolving Fund (DRF). The DRF was not evaluated in detail, as the focus is more on evaluating the mhGAP-IG; however, each interviewee was asked about their thoughts about the DRF. In general, all respondents were very favorable towards the DRF. They noted that there

was a lot of paperwork involved, but it led to drastic improvements in the ability of patients to pay for and adhere to treatment. The following quotes show, from multiple perspectives, that the DRF is beneficial for patients and affordable:

“It’s going to [add more paperwork]...the DRF, it’s going to. As people come, they are coming, by the time people are receiving treatment and seeing an improvement in their health, it’s adding value” – State Health Official

“... financial constraint is another problem because you have a family that doesn’t have money to afford medications...so if you have no money, you can’t be treated. So I think the program can help to either reduce the funding from bill of these patients or trying to subsidize so everyone can access treatment irrespective of your income”- Primary Care Worker

“They don’t complain even though financially, things are not suitable for most people even though it is very, very affordable for them, but some of them take it with ease, some come and pay half and half. But in my clinic...I told them don’t ever stay at home because you don’t have money to take your drugs. Please take your drugs, please be stable. By the time your patient is stable and improving, the patients’ relatives will not hesitate to pay for the drugs...they pay for it” – Psychiatric Nurse

The main limitation of the DRF is that it only covers oral drugs that are found on the country’s essential drug list. This removes part of the cost barrier to accessing treatment, but it is still limiting:

“We are limited by, we have an essential drug list, and we don’t go beyond that. They limit what they are allowed to prescribe. So if the case goes beyond what they can handle then they refer” – Primary Care Worker

Additionally, there are also situations where health workers must administer a drug via intramuscular injection (IM), as opposed to *per os* (by mouth; PO). This is an issue when health workers encounter violent patients:

“I’m using the drug revolving fund. But the problem with that, [we don’t] get access to injectables, we only have oral drugs. And like...Yes, most psychotic patients find it hard to take oral drugs initially. If you can inject them, they will calm down and then start taking oral drugs” – Primary Care Worker

Barriers to Address for Project Expansion

Physical Barriers. The previously mentioned physical barriers must be addressed, as many may interfere with the success of the HAPPINESS Project. Many respondents noted the need for basic health care tools in many of the clinics:

“we’ve talked about the stethoscope, we’ve talked about weight scale, height measurement...(it is important that) the environment is enough to see the patients... so that they are comfortable” – Primary Care Workers

“Like, are there things lacking in the health centers? Maybe you can provide it and make the center better. Maybe by the time the thing comes, after the training, they can also move to the places and find out what can (make it better)” – State Health Official

Additionally, a mental health specialist, who is a supervisor on the project, identified funding and physical access to the centers via available routes, as a barrier to their role in the project:

“We have some barriers, primarily in terms of funding. Funding is a big issue, and then accessing the centers, the routes are very, very bad”

Supervision Shortage. Post-training supervision is a key component of project implementation:

“Before (the happiness project), I referred people or consult with somebody else... if it’s a far-away place I will talk through (the) phone. But this time around, I have someone around that always visits (the) office. I feel happy when (the project supervisor) around, if I have patients I will say, talk to them, take care of them. And (the project supervisor) does” – Psychiatric Nurse

However, with few specialists available, supervision is strained:

“We do supervision, the circuits. Because we need to supervise them. Not just training them and leaving them, they need to be supervised... I’m the only clinician at the training part of the training now. Though we have a project coordinator who goes twice a month to collect data.” – Mental Health Specialist

The supervisor is further challenged by access to the centers:

“We need to supervise them. Not just training them and leaving them, they need to be supervised. So it’s been difficult doing the supervision because of the state of the routes, the routes are very bad. We don’t have a project vehicle, which is a very urgent need. The roads and centers cannot be accessed using a normal (vehicle)” – Mental Health Specialist

Currently, the supervisors in the HAPPINESS Project are made available to trainees for questions (through Whatsapp) and they also conduct regular visits to each clinic. This component of the project is key to trainee support but may present challenges for project scale-up (if no additional supervisors are recruited).

Future Project Goals and Necessary Changes

Early Detection. A large majority of respondents talked about the urgency of taking measures to ensure people get diagnosed and treated as early as possible. Many people with a mental illness get exposed to alternative treatments (notably, at churches), which are viewed as improper treatment. These treatments often involve violence and are very harmful to individuals.

“I also experienced a case where this patient had this condition and the parents took the patient to somewhere where they were flogged...in general in rural [settings], creating awareness that once someone, your child or your daughter, or your son is having this problem, or someone you’re familiar with is having this problem, please don’t do this. You can’t... look at (the) difference, there are fully steps you can take to ensure that this patient gets treated.” – Primary Care Worker

Many respondents view increasing awareness as a key element to early detection and proper treatment. Raising awareness and educating the public is essential to combating stigma as a barrier to treatment. Entire communities, people with a mental illness, as well as their families, should be educated on what mental illness is and that it is treatable if people are taken to the correct facilities:

“it also made me to realize that whenever I see families, families – don’t chain (your) loved ones because of these conditions...I need to intervene as quickly as possible, you know, let them know that this is not the right way to do it” – Primary Care Worker

“probably tell the villagers...those mentally ill patients, that are in treatment, you should accept them, be friendly with them, and give them a chance to talk in the meeting, even if they talk off points, but give them a chance to say something, contribute...And probably to teach them the signs (to) notice earlier. Because a mentally ill patient may not know because some of them lack insight. Even when you tell them, they say no. So when they see such people...they bring them to the clinic and they better. They shouldn’t be hiding them because of stigma or what people will say, they should help the patients” – Psychiatric Nurse

As evidenced by these perspectives, the person who has a mental illness may not realize they have a mental illness. Thus, it is up to the community and people around them to not impose and exacerbate stigma, to recognize that someone may have a mental illness, and should consider seeking professional help. Moreover, a reduction of stigma in the communities will be conducive to helping individuals recover. Another respondent describes the perspectives of family members in the following quote:

“most of the time they go to the churches. Months, years, before they are referred to the clinic. But by the time they come to the clinic, you tend to them, before two months you hear their relatives say, oh god, we wasted a lot of time, so we, before discovering this place, oh thank you, thank you” – Psychiatric Nurse

In addition to informing the family and communities, respondents propose that people from churches should be informed about how psychiatric or psychological methods of treatment should be used over the church’s methods:

“pastors or the churches can be educated more on these conditions, so whenever they see cases like these, they should quickly refer them to the appropriate center. That will help a lot” – Primary Care Worker

“for the community leaders or religious leaders, or for the public or workers in the government...they are not going to be involved in treatment. (They should know) identification. When you see this sign...it’s this...give them the signs.” – Mental Health Specialist

Overall, the goal of informing churches and families is to ensure that they can identify those who have a mental illness and encourage them to visit a clinic.

Training Structure and Components. Respondents suggested several improvements to the training itself, including the training materials and tools, training structure, and training length.

With regards to the training materials and tools, participants found them to be very helpful (i.e. the adapted mhGAP training materials):

“[regarding the mhGAP modules], sometimes I consult it, it’s always in my office. I consult it when I have a new patient. Because from what they’re manifesting, if I’m ever unable to give the right diagnosis, and because of network problem down here, if I’m ever unable to reach doc, I will consult the book from, what they are manifesting, from the signs” – Psychiatric Nurse

Notably, the Whatsapp forum was transformative, especially when there were no mental health specialists present:

“in the Whatsapp, you see them saying we gave (a drug) to this patient, these are the symptoms, I’ve tried...so even the Whatsapp platform has also helped improve the welfare of the patients” – State Health Officials

This provided a quick way for trainees to ask for help and seek advice from specialists and fellow trainees. Some respondents also suggested making a website to collect information:

“this program has been so helpful, but I still want to know more. Um, you should create a platform, we already have one [the Whatsapp forum], but I don’t know if we have everyone. We should have access to a website where we can see materials to improve our knowledge about MNS conditions that would be great” – Primary Care Worker

Most respondents believed that the training was rushed and that there was too much information, but they liked the way it was being taught (e.g. using role-play). For this reason, many suggested a 7-day training, with a refresher every 3 months. Respondents also indicated that the training should continue to provide travel stipends and lodging for the duration of the training:

“residential training is good, and you know the cost. They have to take care of the logistics and also pay for the, you know, you also have to pay the transports and all the other out of pocket expenses” – State Health Official

“if you increase it to 7 days, of course, it would be better, but it needs to be an in-house training so that some of the rural health centers (can attend)” – State Health Official

Some respondents expressed that some trainees felt rushed because they were coming in with different expertise. Thus, many suggested training different professions separately:

“So I think the training can be increased, you can have a separate training for doctors and nurses, then you have for the CHEWs, you also have a separate training for them because for those you need to be slow...some of the CHEWs, they’re going to start from the basics, so they need time” – State Health Official

“I think that doctors should be trained differently, separate from nurses and also CHEWs because this one uses SOP’s [standard operating procedures] that doctors that use to treat. So the content really shouldn’t be the same” – State Health Official

Each profession may learn at different speeds, and the training could accommodate by training them separately. Additionally, each profession has different standard operating procedures (SOPs), meaning they have different skills and scope of practice for treating patients. On the other hand, however, one primary care worker expressed their desire to share information between different types of professions:

“It is a good idea to train people together. So knowledge can be shared”

Trainee Retention. In addition to the previously mentioned provisions including providing travel and lodging for trainees, training only those who are motivated, and having adequate resources within clinics, respondents also mentioned potential avenues for ensuring retention.

Currently, the HAPPINESS Project already only recruits trainees who will be staying in their location for at least two years. Additionally, the DRF has a slight price markup (that is still lower than prices at other pharmacies) that goes to the trainees. The HAPPINESS Project team is

also currently working with the local university to turn this training into a certificate program. This way, trainees are getting rewarded for the time and effort they spent on building new skills in mental health.

Project Expansion. The respondents were directly asked about how the HAPPINESS Project could be expanded. They offered specific input with regards to additional training topics, increasing awareness, training more people, as well as partnering with other leaders and organizations.

For additional topics, many wanted the training to go deeper into the existing illnesses to further help trainees differentiate between mental illnesses:

“MNS conditions can be confusing. So, it can really be confusing, and we need to understand every aspect of these conditions. I think they need to go deeper. So we can be able to differentiate. Um, these conditions, everybody sees it, then most of the times it can look like the symptoms” – Primary Care Worker

“I want to know the difference between depression and anxiety, and manic depression. I want to know the differences. Manic depression and depression and anxiety” – Psychiatric Nurse

Many mental illnesses have similar signs and symptoms; thus, respondents believe that more in-depth training would help workers improve identification and diagnosis. Other topics that some respondents desired include child mental disorders, neurocognitive behavioral therapy, and other neurological disorders that weren't included in the workshop.

For raising awareness about mental illness, they suggested paper advertising (e.g. flyers and brochures), as well as media advertising (e.g. TV and radio). The content should include basic information about mental illness but also advocate for bringing one's family members (who may have a mental illness) to clinics rather than churches. Additionally, they suggested partnering with local government leaders to help spread awareness.

All respondents agreed that there should be more trainees in the future. This could involve an expansion beyond the 5 local government areas (LGAs), to the rest of the total 27 LGAs, or the inclusion of more variety of trainees (e.g. village health workers):

“I still see those 5 local governments, meanwhile we have 27 local governments. So the training can (be increased) so that all 27 local governments can benefit” – Mental Health Specialist

It is also important to consider that training should only be for those who are motivated and passionate about mental health. Respondents believe that people without motivation will be passive learners and not gain a lot from the training. There is also a worry that people will misrepresent their roles after being trained as being a mental health specialist:

“Somebody can just try this training and put on his or her bag and walk into the village and say, you know, now I am a psychiatric doctor, if anybody, please come to this address. Those are the things you people have to avoid and you use those within the health system. That’s my own advice, it’s an opinion. If you use people that are not into health, they can’t do what I’m doing, in the villages...with formal training, yes, doctors, nurses, community health workers, yes” – Psychiatric Nurse

Lastly, project expansion also involves forming more partnerships with potential funders, the local community, and the local government. It is believed that with more links to associations and departments, there is more chances to help people with a mental illness. At the local level, members of the HAPPINESS Project have already reached out to traditional rulers, committees, and councils, with highly positive results so far. Some respondents also suggested reaching out to local schools and churches. The overall goal of reaching out to local entities is to raise awareness and increase the number of people who access clinics for mental health care. Traditional rulers were commonly noted as they are the interface between LGA’s and the community. They are elected or appointed, but they do not have a limit on how long they can hold the position. Thus, they would be useful in getting community buy-in.

Discussion

Compared to the mhGAP-IG implementation projects in Osun and Ogun (see the “mhGAP-Implementation in Nigeria” section), the present study goes beyond identifying whether the training was effective in improving the skills the participants (which the studies in Osun and Ogun were focused on) and identifies challenges that arise in initiating an mhGAP-IG implementation project, as well as how external factors (e.g. awareness) contribute to the success of the project. Specifically, the quantitative component revealed a reduction of stigma among trainees, and the qualitative component robustly revealed social and physical barriers to implementation. These findings are helpful not only for the growth of the HAPPINESS Project but also for other project teams who are initiating or looking to improve their own mhGAP-IG interventions.

This study fills the mhGAP research gap that was identified by Keynejad et al., which is the focus on local adaptation.²¹ The barriers that were identified in the implementation of this project are also consistent with cultural and contextual challenges to the mhGAP-IG training and implementation, which were identified in a recent report.²⁰ This report was written by people who've implemented mhGAP-IG in six different countries (Chad, Ethiopia, Nigeria, Guinea, and Haiti). They identified key challenges including the local perception of mental disorders, the healthcare system, available support for trainees, prior knowledge of trainees, trainee recruitment and the larger socio-political context. This similarity further confirms that the detailed perspectives uncovered in this study could apply to different low-resource settings.

Overall, the HAPPINESS Project was successful in training its participants. From the findings presented, it is highly evident that trainees gained new skills and are providing better care. This was seen in interviews where respondents listed many newly gained skills (e.g.

diagnosing, counseling, etc.). Interview respondents also reported more empathy and respect for patients, which was also demonstrated by the WPA questionnaire finding that the project increased awareness and reduced stigma among the trainee population.

A pervasive theme in this study is the idea of awareness and its impact on the ability of health care workers to treat people with a mental illness. These ideas are demonstrated in Figure 3. Interviewees commonly noted the importance of ensuring increasing awareness in the future implementation of the HAPPINESS Project. Lack of awareness is what leads to the delayed detection of a mental illness, which leads to poor management of mental illness. First, the lack of awareness is rooted in misinformation and high levels of stigma. Interviews showed that misinformation leads to the inability of people to identify a mental illness (and recognizing it as a medical illness that needs to be treated) as well as the belief that mental illness is caused by spirits and must be addressed by churches. Second, high levels of stigma within the community also leads to the alienation of individuals who display symptoms, which may exacerbate their illness but also delay care-seeking (and prevent them from acquiring proper illness management).

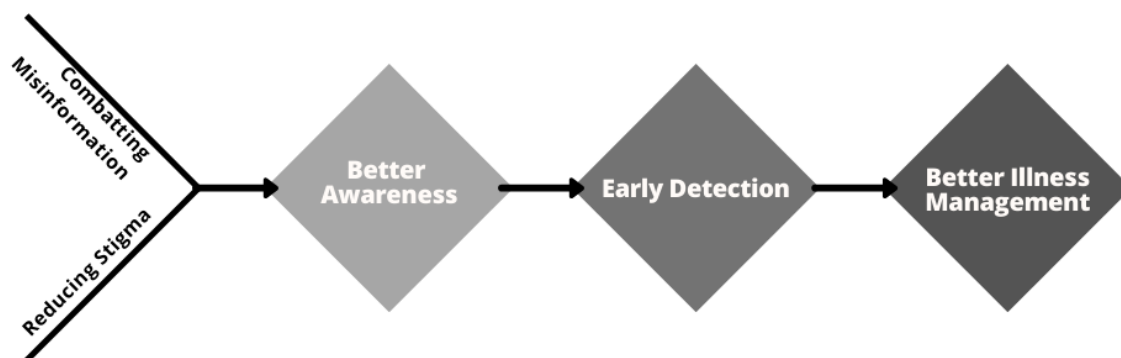


Figure 3. Enablers to achieving proper management of mental illness. The direction of arrows and the gradient of rotated squares indicate the process necessary to achieve better illness management for people with a mental illness. To create more awareness regarding mental illness, there must be efforts to reduce misinformation and stigma. More awareness of mental illness (signs, symptoms, etc.) can lead to early detection. Early detection means better illness management because there would be less illness progression and exacerbation.

For the training workshop itself, interviewees recommended an increase in the length of training so that information could be delivered at a better pace. Some suggested to separate training for different health professions, as non-clinical workers come in with less exposure to the workshop content. Some also suggested extra training on how to differentiate between illnesses that have similar signs and symptoms. For factors outside of the training itself, interviewees suggested working closely with community leaders and creating promotional material to improve awareness of mental illness and promote primary care center visits for people who may have a mental illness. For project expansion, respondents suggested training more local government areas and more types of health professions.

Lack of adequate resources and infrastructure continue to be a problem for the project implementation, but also day-to-day primary care center functions. For the project implementation, there are few supervisors available. This may not be a current concern, but as the project expands, more supervisors will be needed to offer online and in-person support. Additionally, supervisors have challenges travelling from center to center due to poor road conditions on the way to clinics. Outside the project, many clinics are lacking in basic health assessment tools such as stethoscopes and blood pressure cuffs. In tandem with the recommendations made regarding the training structure, raising awareness, and project expansion, these issues must also be addressed moving forward.

Broader Health System Changes

Although one of the main strengths of the HAPPINESS Project is its use of the widely available primary care system in Imo State, it should be acknowledged there are challenges to access that go beyond the existence of a PHC. A 2018 Imo State opinion poll on primary care

showed that the main issues were the lack of funds to pay for treatment and lack of drugs and equipment (rather than the lack of facilities).²⁶ This perception is confirmed further by a study on half of the local government areas within Imo State, finding that most facilities were dilapidated, poorly staffed, lacked essential drugs, had long wait-times and high cost for treatments.³⁰ To combat some of these issues, the HAPPINESS Project has given basic medical tools to the clinics that it operates in and implemented the drug revolving fund (DRF). However, although the DRF was highly regarded in this study, it only covers oral medications on the national essential drugs list (which restricts the types of therapies available).

With Nigeria's National Health Insurance Scheme (NHIS), established in 2005, the majority of the population (greater than 90%) remain uninsured.³¹ In Imo State, with an estimated population of 5.2 million people, 5 million individuals do not have health insurance. According to Imo State's Commissioner of Health, the average out-of-pocket expenditure (OOPE) in the state is 92%, which is considered catastrophic by the World Health Organization's standard (OOPE is considered catastrophic if it exceeds 40%).³² A study of southeast Nigeria (where Imo State is located), found that 27% of households incurred catastrophic health expenditures (CHE), and this rate was only higher for rural regions.³³ The rates CHE are especially high for people with a mental illness, factoring both direct costs of treatment and indirect costs associated with having the illness.^{34,35} Even if people obtained NHIS, these plans only cover care at certain federal hospitals and may be challenging to obtain for those who are unemployed (which is common for those with a mental illness). Moreover, the plans do not cover drugs that are not on the essential drug list of Nigeria, which excludes many common psychotropic medicines (e.g. SSRIs). NHIS plans also do not cover care by clinical

psychologists, psychological social workers, and occupational therapists, and they also do not cover mental health services such as psychotherapy clinics and addiction clinics.¹²

Instead of being fully reliant on federal health insurance programs, the Imo State Health Insurance Agency, in 2019, started to collaborate with the World Health Organization and different unions and health organizations in the community to improve health insurance for people in Imo State. Improvements to health coverage in Imo State will be very conducive to the effectiveness of the HAPPINESS Project, as it will increase the number of people who can access PHC services.

Limitations

Study Design

Due to the retrospective and resource-constrained nature of this project, there were a couple of limitations related to the study design. This investigation was designed after obtaining data; thus, the data collection protocol (e.g. questions asked to informants) could not have been influenced by the thesis author. For instance, the original purpose of conducting interviews was to get basic insights from people involved with the project and what they thought about it. It was not known, at the time, that the interviews would be used for an in-depth qualitative thematic analysis, thus the interview guide had leading questions (that led to short answers) instead of more open-ended questions (that would facilitate robust answers). Often, there were inaudible portions of the interview recordings, which may have led to missing or inaccurate information. To mitigate this, however, the thesis author consulted the original interviewer's notes during interview transcription to fill in gaps. The interviews were also conducted by two different researchers, with very different interviewing styles (despite the same interview guide). Most

interviews were conducted in-person in September 2019 (at the refresher training), but a few were conducted in February 2020 via a video call by a different interviewer. Thus, there may be recall bias in the second set of interviews.

Questionnaires

Since there were only 36 trainees, with only 34 that completed the WPA questionnaire, and many missing responses, the quantitative analysis was inherently not as robust. The WPA questionnaire was also only composed of agree or disagree responses, which is simplistic and may not accurately capture the trainees' perspectives.

Perspectives

This study only looked at healthcare workers and leaders of the local health systems. Among all the types of health workers that this program aimed to train, it did not recruit any community health workers, so their perspective was not included. It also does not encompass the patient's perspective and how this training impacted their experience of primary care or their mental health. Additionally, all trainees were included based on expressed interest; thus, the perspectives that are captured are focused on people who are already passionate about mental health.

Conclusion

Overall, this study provides evidence for the successful contextualization of the mhGAP-IG to local settings for a project that is in its preliminary stages. Although it is specifically tailored for Imo State conditions, results may be generalizable for other low resource contexts where there is a strong primary care health system. This is the only known study that highlights external factors influencing the success of the program (in addition to the impact of the training on participants) and quantitatively evaluates levels of stigma among the trainees. The training

was transformative in providing new skills to general practitioners. Although many resource constraints were presented, participants still overwhelmingly claimed that this project helped them gain invaluable skills. This study evaluated the HAPPINESS Project's training workshop from the point of view of trainees. In line with other mhGAP-IG implementation studies, future evaluations of the HAPPINESS Project should take patient data and patient perspectives into account to achieve a more comprehensive evaluation. It is hoped that the future increase in trainees will yield more robust evidence for the effectiveness of the project.

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