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Global Is Local: Leveraging Global Mental-Health Methods to Promote Equity and Address Disparities in the United States

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Abstract

Structural barriers perpetuate mental-health disparities for minoritized U.S. populations; global mental health (GMH) takes an interdisciplinary approach to increasing mental-health-care access and relevance. Mutual capacity-building partnerships between low- and middle-income countries and high-income countries are beginning to use GMH strategies to address disparities across contexts. We highlight these partnerships and share GMH strategies through a case series of said partnerships between Kenya and North Carolina, South Africa and Maryland, and Mozambique and New York. We analyzed case materials and narrative descriptions using document review. Shared strategies across cases included qualitative formative work and partnership building; selecting and adapting evidence-based interventions; prioritizing accessible, feasible delivery; task sharing; tailoring training and supervision; and mixed-method, hybrid designs. Bidirectional learning between partners improved the use of strategies in both settings. Integrating GMH strategies into clinical science—and facilitating learning across settings—can improve efforts to expand care in ways that consider culture, context, and systems in low-resource settings.

Keywords

global mental health, mental-health-services research, mutual capacity building

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For historically minoritized populations[1] in the United States, disparities in mental-health care are undeniable. Gaps in care for minoritized populations exist through systematic and structural barriers that advantage certain communities and disadvantage others. These barriers are multilevel, including social processes such as racism and stigma; lack of accessible, culturally relevant mental-health resources; low workforce diversity; and high service costs with inadequate insurance coverage (Cook et al., 2019; Primm et al., 2009; Shim, 2020). When

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minoritized populations do access mental-health care, its quality, relevance, and acceptability are often insufficient. This is partly because many interventions have been developed and tested with majority White, Western populations (Galán et al., 2021). The COVID-19 pandemic has exacerbated these disparities by disrupting existing resources and disproportionately affecting the health of minoritized individuals (Purtle, 2020). There is a need to better consider access and relevance of care early in clinical science to create usable solutions (Cook et al., 2017).

From its origin, the field of global mental health (GMH) sought to better account for the influence of culture, context, and resources on mental-health services to promote equity and close treatment gaps (A. Kleinman, 2009; Koplan et al., 2009; Prince et al., 2007). GMH work has typically been conducted in low- and middle-income countries (LMICs) in response to the staggering lack of mental-health resources, few culturally relevant services, and mental-health stigma affecting human rights (Patel & Prince, 2010). The focus on achieving health equity, that is, the fair and just opportunity to be as healthy as possible, coupled with common challenges in LMICs has spurred a strong evidence base for developing deployable, accessible, relevant care for culturally diverse populations (Braveman et al., 2018). Practices in this evidence base include task sharing (delegation of mental-health tasks to individuals with less specialization, e.g., teachers), cultural-adaptation processes, long-term partner building, focus on scale-up and sustainability, consideration of social determinants, and interdisciplinary mixed-methods approaches (Kakuma et al., 2011; Singla, 2021; Singla et al., 2017; Wainberg et al., 2017).

These approaches are also employed to reduce disparities in the United States and high-income countries (HICs; Singla, 2021). For instance, train-the-trainer models in LMICS rely on midlevel professionals or paraprofessionals, rather than experts, to train and supervise lay providers. This approach has been used in Washington State to improve training capacity of evidence-based interventions (EBIs) with community mental-health providers (Murray et al., 2011; Triplett et al., 2020). Likewise, a brief BA-based intervention (the Healthy Activity Program) delivered by lay providers in India demonstrated effectiveness for depression; this informed a trial to test the task sharing of a similar treatment for perinatal depression to nonspecialist providers in different U.S. and Canadian sites (Patel et al., 2017; Singla et al., 2021).

Although these strategies are increasingly being used in both LMIC- and U.S.-based work, there has been less focus on how strategies are used across contexts to optimize bidirectional learning in equitable ways to improve mental health. Researchers must avoid replicating extractive relationships with LMICs (taking ideas *from* vs. working *with*) and focus on "mutual capacity building." Mutual capacity building, also called "reciprocal innovation," has been defined as an equal exchange of ideas between LMICs and HICs to promote shared learning toward increasing system capacities to, for instance, provide mental-health treatment (Binagwaho et al., 2013; Jack et al., 2020).

To contribute to this knowledge base, we present a case series of ongoing mutual capacity-building partnerships between Kenya and North Carolina (NC), South Africa and Baltimore, Maryland (MD), and Mozambique and New York (NY) State. We describe projects that are implementing mental-health interventions across LMIC and HIC sites, shared strategies used across settings, and any bidirectional learning supporting mutual capacity building.

Method

Design and data selection, generation, and collection

We conducted a case-series study supported by qualitative data. We included three cases of ongoing mutual capacity-building partnership projects, focused on mental health, with sites in both an LMIC and HIC. We prioritized and selected cases in which projects originated in LMIC sites, HIC sites focused on serving historically minoritized populations in the United States, and teams used a similar innovation in both LMIC and HIC sites (e.g., same intervention, same delivery model).

We requested narrative case descriptions from individual principal investigators (PIs) and their team. Each "case" had to refer to dual-site projects. We asked teams to describe (a) intersecting processes and reciprocal innovations used across sites and (b) how bidirectional learning occurred through formal or informal processes. We provided a one-page outline of desired case information to guide descriptions and selection of relevant publications (e.g., project description, study approach, adaptation models, key outcomes, delivery/implementation, reciprocal innovations). Narrative descriptions were reviewed by the lead author and a coauthor (S. Johnson or H. E. Jack).

Data analysis

We analyzed the case description data using document review—a qualitative approach for finding, selecting, appraising, and synthesizing data (Bowen, 2009). This is an iterative process that combines aspects of content and thematic analysis. We supplemented document

Table 1. Case Overview

	Overview
Case 1	In Kenya, community-based development and piloting of task-shared modular family therapy, setting the stage for adaptation of scalable, culturally informed family-therapy approaches in Durham, North Carolina
Case 2	In South Africa, peer-supported delivery of behavioral activation interventions for substance use and medical adherence mutually informing development of a peer-recovery workforce in Baltimore, Maryland, in turn, informing peer-provider development in South Africa
Case 3	In Mozambique, developing, scaling, and sustaining comprehensive, task-shared, digital evidence-based mental-health care reciprocally informed task-shared work in New York State that will use a similar digital training and treatment platform using a brief, all-purpose mental-health screener and comprehensive evidence-based care

review with matrix methods (Lackey & Gates, 1997) to organize analysis across qualitative data sources.

Analysis involved (a) extracting and organizing unique case data and (b) triangulating and synthesizing data to understand common methods, reciprocal innovations, and needs and assets across cases. Analysis involved the following steps. First, A. Giusto reviewed all materials and took notes on themes and initial questions. Second, A. Giusto extracted data from the sources into a table organized by sites within case. The table included setting, patient population, evaluation design, intervention or interventions, outcomes, partners, and overarching study approaches or frameworks. During and after data extraction, themes of shared learning and common innovations (i.e., methods, interventions) were noted and summarized. Third, H. E. Jack reviewed all summaries and tables with materials. Fourth, A. Giusto and H. E. Jack reviewed and triangulated data, including the extracted table, to develop a matrix of common strategies that emerged across cases. The matrix was used to facilitate comparison between cases and sites on the key shared goals and process. Across steps, if questions arose, we reached out to teams for additional details. Teams submitting cases were not involved in direct analysis but reviewed final results.

Results

Table 1 provides an overview of the cases. Case 1 (Kenya and North Carolina) included two in-depth, mixed-method pilot trials focused on the design or adaptation of an intervention to improve the mental health and functioning of families in community settings. In Case 2 (South Africa and Baltimore), we describe several projects that used pilot, hybrid-design, randomized controlled trials to improve substance use, medical adherence, and care linkage through peer providers. Case 3 (Mozambique and New York City) consists of large-scale projects to build and test comprehensive mental-health care for sustainability, equity, and effectiveness using stepped-care models.

Results of data extraction

Case characteristics. Results of data extraction are organized by case sites. We first describe the needs and assets in each site. Then, in Figures 1, 2, and 3, we organize each case's data following the framework in Singla et al. (2017): what was delivered, where it was delivered, who delivered it, and how it was delivered; we added the theoretical frameworks used to guide implementation or adaptation. Table 2 outlines basic trial characteristics and publications.

CASE 1. Kenya–NC, USA: task-shared modular family intervention.

LMIC site: Eldoret, Uasin Gishu County, Kenya. In Eldoret, there is a high burden of mental-health problems in youths linked with harsh family interactions. Very few mental-health professionals or family-based interventions are available. Families instead receive informal support from community members. Communities often value family and community support. To meet this need and build on assets, a team of clinicians, researchers, and community stakeholders from the United States and Kenya developed and piloted Tuko Pamoja in Eldoret.

HIC site: Durham, NC, USA. During COVID-19, mental-health needs among youths and family stress increased. The pandemic worsened existing disparities in mental-health care for Black families, particularly in the South, by exacerbating existing barriers to mental-health care (i.e., cost, racism, few providers). In Durham, there are well-established, community-based organizations connected to Black families providing health-related services, including one with a community-health-worker (CHW) program (paraprofessionals already delivering health information to community members). To address youths' and families'

Tuko Pamoja in Eldoret, Kenya.

What (Intervention): A modular family therapy, *Tuko Pamoja,* developed for the context using mixed-methods formative work. Core treatment components include solution-focused family therapy strategies, including problem-solving, communication skills, behavioral parenting skills, and behavioral coping skills.

Who (Provider): Lay counselors, individuals in the community who were already informally advising families with problems.

Where (Setting): Delivered face-to-face in families' homes. Lay providers recruited families who were experiencing problems, including having an adolescent experiencing distress.

How (Delivery): Designed to complement existing informal counseling practices, with flexible session number and length. Provider training was 10-days long. Supervision was tiered: Kenyan medical psychology students were the local supervisors and received weekly expert consultation from Kenyan and US-based psychologists. Session length was flexible.

Theoretical framework(s) that guided implementation and/or adaptation:

- **Community-based participatory research (CBPR) Principles:** Collaborative approach with community members, researchers, and other stakeholders (Collins et al., 2018)
- **RE-AIM:** A framework emphasizing intervention Reach, Effectiveness/efficacy, Adoption, Implementation, and Maintenance (Glasgow et al., 2019)

Coping Together in Durham, NC

What (Intervention): A family strengthening program, *Coping Together,* adapted from *Tuko Pamoja* using a rapid, iterative participatory process. Content was tailored to address contextual and pandemic-related stressors for Black families. Core treatment components include solution-focused family therapy strategies, communication skills, behavioral parenting skills, and cognitive-behavioral coping skills.

Who (Provider): Community health workers (CHW) from a local partner organization.

Where (Setting): Delivered virtually via Zoom to small groups of families. CHWs recruited families.

How (Delivery): CHW training included 3-days of virtual training plus session-specific videos followed by one-on-one role plays and practice. HWs used a manual with supporting slides and multi-media content to deliver treatment. Supervision included a trained student support partner reviewing session videos, then consulting with the CHW; challenges were discussed with the psychologist (PI). Treatment was eight weekly sessions.

Theoretical framework(s):

- **CBPR**
- **RE-AIM**

Fig. 1. Case 1 Kenya–North Carolina (NC), USA.

needs, the Tuko Pamoja program was adapted to Coping Together and evaluated in a pre–post pilot trial.

CASE 2. South Africa–MD, USA: peer-delivered intervention for HIV care and substance use.

LMIC site: Khayelitsha, South Africa. The largest number of people living with HIV/AIDS is in South Africa, which also has a high burden of substance use that worsens HIV outcomes. There are few mental-health professionals in public HIV-care settings and few sustainable behavioral-health-care-delivery pathways. South African policymakers are prioritizing integrating behavioral health into HIV care. There is also government and policy support for task sharing behavioral-health services to nonspecialists. A team of South African and US-based researchers and clinicans developed and adapted a peer-delivered BA intervention (Khanya) for substance use and HIV adherence for the context, which was evaluated in a hybrid effectiveness randomized controlled pilot trial.

HIC site: Baltimore, MD, USA. The opioid crisis contributes to high mortality rates in the United States, including Baltimore, MD. Minoritized individuals are disproportionately affected (Centers for Disease Control

Khanya in Western Cape, South Africa

What (Intervention): *Khanya,* an individual, peer-delivered intervention for ART adherence and substance use. The intervention was adapted for delivery in HIV care in Khayelitsha, South Africa and peer-delivery. Core treatment components include behavioral activation, motivational interviewing strategies, problem-solving to reduce barriers to adherence, and mindfulness skills adapted based on patient and other feedback delivered in six weekly sessions (up to six booster sessions).

Who (Provider): A peer counselor with lived substance use experience delivered treatment, a decision that was guided by patient and other stakeholder preference. Peers were recruited from existing task sharing clinical/research initiatives and word of mouth.

Where (Setting): *Khanya* was delivered face-to-face in integrated HIV primary care setting.

Patients were recruited in HIV care at a site with a co-located substance use treatment.

How (Delivery): Peer-provider training was 5-days. Ongoing training was conducted weekly via videoconferencing and included role plays and weekly supervision with a clinical psychologist. Peers used a flip chart format to promote intervention fidelity while depicting visuals for patient comprehension.

Theoretical frameworks(s):

- **ADAPT-ITT:** A systematic framework for adapting evidence-based interventions (EBIs) (Wingood & DiClemente, 2008)
- **EPIS (Exploration, Preparation, Implementation, Sustainment)** Framework: Guides and describes an implementation process across different organizational levels (Moullin et al., 2019)
- **RE-AIM**

Peer Activate in Baltimore, MD

What (Intervention): *Peer Activate,* a peer-delivered individual intervention to promote engagement for individuals with opioid and/or other substance use disorders*,* was guided by *Khanya* and adapted based on stakeholder feedback. Content was tailored to patient concerns; activities adapted for community feasibility/acceptability; peer-delivered case management was added and intentional inclusion of disclosures of relevant lived experience. Core treatment components include behavioral activation, motivational interviewing strategies, problem solving for adherence barriers, mindfulness skills, and peer recovery support.

Who (Provider): Certified peer-recovery coach with lived drug use experience in recovery.

Where (Setting): Delivered in methadone treatment and a community resource center.

How (Delivery): A peer recovery specialist was trained and supervised by a clinical psychologist. Weekly supervision reinforced training and self-care. The peer used a flipchart format to deliver treatment, promoting fidelity and patient comprehension using visuals, guided by *Khanya*. Treatment was 5-6 core sessions (with up to 6 additional sessions).

Theoretical frameworks(s):

- **ADAPT-ITT**
- **EPIS**

Fig. 2. Case 2 South Africa (SA)–Maryland, USA.

and Prevention, 2022), and Black individuals experience the greatest increases in opioid-related overdose fatalities in the United States. Although efficacious treatments for opioid use exist, stigma and systemic barriers interfere with care engagement. Established peer-recovery specialist certification and training exist in the United States, which may help overcome stigma, particularly in minoritized communities. To improve linkage and retention in substance use treatment, Peer Activate, a peer-delivered BA intervention guided by Khanya was evaluated through a mixed-method open pilot and hybrid effectiveness implementation trial.

PRIDE in Mozambique

What (Interventions): 12-item screening, developed for Mozambique, identifies adults at risk for any disorders and categorizes them into: 1) common disorders (depression, anxiety), 2) substance use disorders, 3) suicide risk, and 4) severe disorders (psychosis/mania symptoms) determining referral to treatment. Four evidence-based interventions (EBIs) were selected, digitized, and adapted: 1) Interpersonal Counseling (4 sessions), 2) Screen Brief Intervention Refer and Treat + Motivational Interviewing (4 sessions), 3) Suicide Planning Intervention (1 session), and 4) Medication Management (algorithms to guide primary care providers to prescribe psychotropic medications)

Who (Provider): Primary care providers (PCPs), psychiatric technicians (PsyTechs)—mid level health professionals, trained to deliver psychiatric care including prescription of psychotropic medicines, and CHWs screen and deliver care (combinations of who screens and delivers interventions varies by trial arm) as part of their routine community screening and health care delivery.

Where (Setting): Treatments are delivered in the community (CHWs), in health clinics (PCP), and at the district-level (PsyTechs).

How (Delivery): 25 mental health professionals certified to conduct trainings and supervision (semiannual seminars, weekly online supervision). Training and supervision vary by trial arm (See Table 2) PCPs and CHW received 14 days of training plus certification procedures (three successful cases with supervision per EBI). PsyTechs received double the training to be co-trainers and supervisors. Interventions are delivered using provider-facing apps that provide step by step guidance to ensure quality and high fidelity to the EBIs.

Theoretical Approaches:

- **Fit/Fidelity Model:** Systemic process for adapting EBI content and implementation strategies to diverse contexts (Wainberg, McKinnon, et al., 2007).
- **RE-AIM**
- **Proctor Implementation Outcomes:** A model for measuring implementation outcomes at different levels (e.g., implementation, service, patient) (Proctor et al., 2011)

Mental Wellness Equity Center in New York (NY)

What (Intervention): Package of digitally supported screening and treatments used in Mozambique adapted to NY. Interventions include: 1) Interpersonal Counseling (4 sessions), 2) Screen Brief Intervention Refer and Treat + Motivational Interviewing (4 sessions), 3) Suicide Planning Intervention (1 session), and 4) Financial Wellness Intervention according to context needs (a new module that is being developed in NY to address financial literacy, tax credits opportunities and other social determinants of health)

Who (Provider): Task-shared counseling interventions will be delivered by a new cadre of lay professionals (Community Mental Wellness Workers) as part of an initiative in partnership with the Mental Wellness Equity Center to reduce mental health disparities in New York State.

Where (Setting): Existing clinics and health seeking structures. This will be shaped in phase 1 formative work.

How (Delivery): Training and supervision methods used in Mozambique will be adapted for the New York context during phase 1 formative work.

Theoretical Approaches:

- **Participatory Research Model**
- **Proctor Implementation Outcomes**

Fig. 3. Case 3 Mozambique–New York, USA.

CASE 3. Mozambique-NY, USA: task-shared comprehensive digital mental-health services.

LMIC site: Mozambique—Partnerships in Research to Implement & Disseminate Evidence-Based Practices. Mozambique has a high burden of mental-health and substance use problems. As one of the poorest countries globally, few mental-health professionals and services exist. Given the need, the Ministry of Health is pursuing population-level comprehensive mental health. They have formalized task sharing in their national health platform.

Table 2. Case Trial Characteristics

	Case 1 (Tuko Pamoja & Coping Together)		Case 2 (Khanya & Peer Activate)		Case 3 (PRIDE & Mental Wellness Equity Center)	
	LMIC	HIC	LMIC	HIC	LMIC	HIC
Location	Eldoret, Kenya[a]	Durham, North Carolina, USA[a]	Khayelitsha, South Africa	Baltimore, Maryland, US	All Mozambican districts in the Province of Nampula (94 primary-care community clinics)	New York City, New York, USA
Partners	Moi Teaching and Referral Hospital/ AMPATH	Together for Resilient Youth	City of Cape Town Health Clinics, University of Cape Town, South African Medical Research Council	University of Maryland Drug Treatment Center; Baltimore City Community Resource Center	Mozambican Ministry of Health	New York State Psychiatric Institute, Columbia University, New York State Office of Mental Hygiene
Patient population	Families experiencing conflict; adolescent (12–17) experiencing emotional or behavioral problems	Family with child or adolescent (8–17)	HIV positive (18–65), moderate substance use, and ART nonadherence	Low-income, racial/ethnic minority individuals with OUD and other SUD	All Nampula Province adults ≥ 18	COVID-19-affected individuals > 18 (survivors and household relatives) with common disorders, SUDs, and/or suicide risk
Evaluation design	Mixed-methods, single group, pre-post pilot trial	Mixed-methods, single-group, pre-post pilot trial	Randomized, hybrid Type 1 effectiveness-implementation trial comparing treatment with standard care	(1) Mixed-methods open trial pilot; (2) Hybrid Type 1 effectiveness-implementation trial	(1) Randomized, hybrid effectiveness-implementation Type 2 trial, mixed-method evaluation; 3 arms: (1) usual care—urban MH clinics; (2) all MH-disorder care—rural primary-care clinics; (3) severe-disorders care (rural) + common mental disorders, substance use, suicide risk in community	Implementation: mixed-methods, pre-post pilot trial

(continued)

Table 2. (continued)

	Case 1 (Tuko Pamoja & Coping Together)		Case 2 (Khanya & Peer Activate)		Case 3 (PRIDE & Mental Wellness Equity Center)	
	LMIC	HIC	LMIC	HIC	LMIC	HIC
Intervention outcomes	Family functioning Relationship conflict Relationship quality Caregivers' and youths' MH	Family functioning Family resilience Parent–child communication Caregivers' and youths' MH	ART adherence Substance use Viral suppression	Linkage to substance-use treatment Retention in methadone treatment Opioid abstinence Depression	Optimal pathway arm MH symptoms (common, severe, substance use disorders, suicide risk) Functioning Satisfaction	MH symptoms (common disorders, severe, substance use disorders, suicide risk) Functioning Satisfaction
Implementation Outcomes	Fidelity (adherence, quality) Counselor clinical skills Acceptability/ feasibility Use of core intervention principles	Fidelity (adherence, quality) Counselor clinical skills Acceptability/ feasibility	Fidelity Acceptability/ feasibility/ appropriateness	Fidelity Acceptability/ feasibility Appropriateness	Optimal pathway Reach Retention Penetration Uptake Pathway fidelity Sustainability Cost-effectiveness Services	Fidelity Acceptability/ feasibility, uptake Decrease wait-list
Publications	Giusto et al. (2020); Puffer et al. (2019, 2020, 2021) Puffer and Ayuku (2022)	Puffer et al. (2022)	Belus et al. (2022); Magidson, Andersen, et al. (2020); Magidson et al. (2019, 2021); Magidson, Satinsky, et al. (2020)	M. B. Kleinman et al. (2021); Satinsky et al. (2020)	Lovero et al. (2021); O'Grady et al. (2021); Suleman et al. (2021); Wainberg, Gouveia, et al. (2021); Wainberg, Lovero, et al. (2021)	Moise et al. (2021); Hochul (2022)

Note: PRIDE = Partnerships in Research to Implement & Disseminate Evidence-Based Practices; LMIC = low- and middle-income country; HIC = high-income country; AMPATH = Academic Model Providing Access to Healthcare; MH = mental health; ART = Antiretroviral therapy; OUD = Opioid Use Disorder; SUD = Substance Use Disorder; SU =. Substance Use.
[a]And surrounding areas.

Given country needs and strengths, stakeholders from Columbia University and the Mozambican Ministry of Health established a partnership to develop and evaluate comprehensive mental-health screening and digitized treatment guided by provider-facing apps. These partners are evaluating the comprehensive services in a three-arm scale-up study using a hybrid Type 2 effectiveness-implementation design in Mozambique.

HIC site: New York, NY, US—Mental Wellness Equity Center. There are long-standing disparities in the burden of mental illness and access to care among minoritized individuals in NY. COVID-19 exacerbated disparities and highlighted the need for interventions that address social determinants and access simultaneously. Formative research revealed a strong interest in expanding the mental-health workforce using task sharing and mental-health screening and provider-facing treatment apps developed in Mozambique. In partnership with the New York State Office of Mental Hygiene, Columbia Psychiatry and New York State Psychiatric Institute launched a Mental Wellness Equity Center to reduce mental-health disparities by bringing these digital innovations to scale in NY, delivered by a new cadre of providers ("community mental wellness workers").

Common shared strategies across cases

Across cases, teams used several common strategies in both LMIC and HIC settings. Table 3 presents a matrix of strategies used across cases and their goals. These included partner building and formative work, selecting adaptable interventions, prioritizing accessible delivery pathways, contextually adapting treatments, task sharing, tailored training and supervision for providers, and evaluation using mixed-method, implementation-science designs.

Partnerships and formative work. Across cases, qualitative formative work and partner building guided by principles of community engagement set the stage for project decisions. Qualitative formative work typically consisted of ethnographic observations (Wainberg, González, et al., 2007), semistructured interviews, and focus-group discussions. Interview participants were typically service users, providers, and institutional leaders. Formative work included identifying and building partnerships with community organizations, government organizations, hospitals, and treatment centers who might participate in the intervention's implementation. Qualitative results and partnerships facilitated understanding relevant challenges and strengths, how patients perceived their mental-health symptoms and treatment (Dinos et al., 2017), community priorities, and cultural and contextual considerations.

Formative work helped identify clinical modifications needed to increase relevance of existing EBIs for the population. For instance, the development of the Tuko Pamoja intervention for Kenya engaged families, youths, community leaders, and providers in focus groups, key informant interviews, and interactive role-plays. Data generated from participants informed development of Tuko Pamoja; the qualitative findings were used to build a model of family functioning and mental health specific to this community's described experiences of distress rather than using a preexisting model (Strauss & Corbin, 1990). This was the foundation for selecting evidence-based strategies and outcome measures. In the South Africa–MD case, key informant interviews and focus groups with patients, providers in care settings, and peer providers provided the basis for adapting clinical content of a previously used intervention.

Partnerships further informed how the interventions were implemented. In the Mozambique–NY case, formative work centered on building partnerships through qualitative interviews and meetings with policymakers and community leaders to understand how to deliver treatments to ensure sustainability and scalability of solutions. In Kenya–NC, formative work emphasized that using community pathways for delivering care could promote sustained delivery and potentially increase families' trust in the intervention because it would be associated with a local community partner they already knew. In qualitative interviews in South Africa, peer providers emerged as central to addressing stigma and facilitating engagement in substance use treatment (Magidson et al., 2019). Investigators heard from participants and peer providers that peers made patients feel less judged for certain behaviors, such as substance use, and could help level the power imbalance between patients and providers. Focus groups and key informant interviews in Baltimore then informed the development of a peer intervention that could be feasible and acceptable in that context.

EBI selection. Across cases, selected EBIs were all brief psychological interventions with strong evidence of efficacy. EBIs or intervention components across cases typically had strong evidence of mechanistic efficacy. The existing evidence on the mechanisms through which this intervention works allows the form of treatment to adapt and change to context, culture, and provider type while maintaining the core functions of treatment using activities most salient to patients. This helped to clarify the core elements of the intervention needed to maintain fidelity (Stirman et al., 2019). For instance, teams in South Africa and MD employed BA, an EBI for depression and substance use; BA has strong efficacy for multiple problems and clear mechanisms (e.g., increased reinforcement of positive, healthy behavior can improve mood and reduce use).

Furthermore, to enhance relevance and acceptability, the content of many of the interventions was driven by

Table 3. Matrix of Common Strategies Across Cases

Commonalities	Case 1: Tuko Pamoja/ Coping Together	Case 2: Khanya/ Peer Activate	Case 3: PRIDE/Mental Wellness Equity Center
Formative work & partnerships	*Goals:* both sites Identify cultural, contextual factors on clinical targets and implementation Engage community partners to identify priorities + scalable, acceptable, feasible care pathways	*Goals:* both sites Identify cultural, contextual factors for EBI adaptation and implementation Engage community and healthcare partners to identify priorities + scalable, acceptable, feasible care pathways	*Goals:* both sites Identify cultural, contextual factors on EBI adaptation and implementation Engage local stakeholder to identify community and policy priorities + scalable, acceptable, feasible care pathways
	Process *LMIC:* qualitative interviews, FGDs *HIC:* FGDs, iterative lay provider feedback	*Process* *LMIC:* qualitative interviews *HIC:* KIIs, FGD	*Process* *LMIC:* policy priority discussion, FGDs, KIIs *HIC:* partner meetings, KIIs
Intervention selection: efficacious, adaptable	*Goals:* both sites Flexible, efficacious, adaptable task-sharing family therapy to improve relationships and youths/caregivers' MH	*Goals:* both sites Efficacious, adaptable, value-led, peer-delivered therapy for ART adherence & AOD (LMIC), OUD/SUD (HIC)	*Goals:* both sites Efficacious, adaptable, task-shared delivery, scalable, targeting all psychiatric disorders (+ epilepsy in LMIC)
	Adapted components *LMIC:* problem-solving, communication skills, parent behavior skills, behavioral coping skills *HIC:* same as LMIC, plus cognitive coping skills	*Adapted components* *LMIC:* BA, Life-Steps, MI, mindfulness skills (brief) *HIC:* BA, Life-Steps, MI, mindfulness skills (brief)	*Adapted components* *LMIC:* stepped care—IPC, SBIRT, SPI, MM *HIC:* stepped care—IPC, SBIRT, SPI
Intervention delivery: accessible pathways	*Goals:* both sites Embed in existing community infrastructure	*Goals:* both sites Embed in existing community and health-care infrastructure	*Goals:* both sites Expand mental-health care integrated into the existing public-health infrastructure using provider-guided digital tools.
	Outcome *LMIC:* religious organizations *HIC:* community organization	*Outcome* *LMIC:* public HIV primary-care clinics *HIC:* methadone treatment; community resource center	*Outcome* *LMIC:* public-health system primary-care community clinics *HIC:* community- and clinic-based MH Nimble, stepped services (digital tools from Mozambique)
Intervention adaptation	*Goals:* LMIC—design; HIC—adapt Tailor intervention for culture, context, provider delivery Tailor delivery for barriers/ facilitators	*Goals:* both sites Tailor intervention for culture, context, peer delivery Tailor delivery for implementation barriers/ facilitators	*Goals:* both sites Validate brief MH screening + household proxy assessment tools Develop and tailor digital tools to guide EBI delivery Tailor for sustainability, scale, context, and population needs
	Process *LMIC:* multistep, community-engaged *HIC:* rapid, iterative CBPR process with providers	*Process* *LMIC:* ADAPT-ITT *HIC:* ADAPT-ITT	*Process* *LMIC:* policy and community-engaged *HIC:* TBD—policy and community-engaged
	Example outcome *LMIC:* modular approach *HIC:* add values clarification, virtual delivery, cognitive coping	*Example outcome* *LMIC:* add mindfulness, peer delivery *HIC:* add case management	*Example outcome* *LMIC:* app-supported screening + EBI for all MH disorders *HIC:* patient-facing tool, financial wellness

(continued)

Table 3. (continued)

Commonalities	Case 1: Tuko Pamoja/ Coping Together	Case 2: Khanya/ Peer Activate	Case 3: PRIDE/Mental Wellness Equity Center
Provider selection	*Goals:* both sites Trusted individuals already sought for help to reduce stigma, increase access	*Goals:* both sites Providers with lived experience to reduce stigma, increase access	*Goals:* LMIC—shift; HIC—expand *LMIC:* providers in the existing public system of care to reduce stigma and ensure sustainability *HIC:* strengthen, expand workforce to decrease MH disparities
	Outcome *LMIC:* "Natural counselors" in community *HIC:* trusted community organization CHWs	*Outcome* *LMIC:* peer counselor *HIC:* peer-recovery coach	*Outcome* *LMIC:* CHW, PCP, PsyT *HIC:* new task-shared community workforce
Provider training and supervision	*Goals:* both sites Emphasize core content with provider strengths Tailor supports to provider	*Goals:* both sites Emphasize core content with peer strengths Tailor supports to provider	*Goals:* both sites Develop sustainable, cost-effective tools for training, certification, and ongoing supervision Create a cadre of local trainers/ supervisors
	Example outcomes *LMIC:* skills-based role-play; track adaptations *HIC:* virtual real-time + asynchronous training; tele-supervision	*Example outcomes* Both sites: Flip charts Incorporate self-care in supervision and self-disclosure in fidelity	*Example outcomes* *LMIC:* WhatsApp supervision; mobile technology *HIC:* TBD—virtual weekly supervision; mobile technology
Pragmatic, hybrid designs	*Goals:* both sites Assess clinical and implementation outcomes together to refine simultaneously	*Goals:* both sites Assess clinical and implementation outcomes together to refine simultaneously	*Goals:* both sites Assess implementation, services, and patient outcomes together to inform scale-up and policies
	Process: both sites Mixed methods, assessing clinical and implementation outcomes in survey and qualitative interviews	*Process:* both sites Mixed methods, hybrid Type I design	*Process* *LMIC:* mixed methods, Hybrid Type II *HIC:* mixed methods, pre-post trial

Note: PRIDE = Partnerships in Research to Implement & Disseminate Evidence-Based Practices; MH = mental Health; EBI = evidence-based intervention; IPC = interpersonal counseling; SBIRT = screening, brief intervention, and referral to treatment; MI = motivational interviewing; BA = behavioral activation; PCP = primary care provider; TBD = to be determined, yet we still report the proposed and hypothesized outcomes based on proposals and initial conversations; HIC = high-income country; LMIC = low- and middle-income country; CHW = community health worker; PsyT = psychiatric technician; FGD= focus-group discussion; KII = key informant interview; CBPR = community-based participatory research; SPI = Safety Planning Intervention; MM = Medication Management; ART = Antiretroviral therapy; AOD = Alcohol and other drug disorder; OUD/SUD = Opioid Use Disorder/ Substance Use Disorder; ADAPT-ITT = Assessment, Decision, Adaptation, Production, Topical experts—Integration, Training, Testing.

patient values or presenting problems. For example, solution-focused family-therapy strategies were employed in Kenya and NC to follow the lead of families. Their presenting problems and goals dictated how they applied the core skills. First, the counselor guided participants to identify their key goals using a tree metaphor in which parts of the tree symbolize parts of the family system. In the Kenya individual-family model, they then chose a module based on their presenting problem or goal (e.g., the couple-relationship module), and the counselor guided them to use solution-focused skills (i.e., identifying exceptions, making action plans) to deal with the specific issue in the relationship. In the NC group model, the counselor taught the core skills and then facilitated activities during which the family applied them to their specific relationship goals. In both sites, the solution-focused approach was taken to align with family values to increase engagement and acceptability. In Kenya, a solution-focused approach also matched the lay counselor's natural problem-solving style; in NC, it matched the need for an approach that was strengths-based and flexible to address the diversity of ways COVID affected families. This is similar for BA, used in South Africa and Baltimore, and the

Screening Brief Intervention and Referral to Treatment (SBIRT) and interpersonal counseling therapy (IPC), used in Mozambique and NY: Patients' values determine the activities they engaged in, or presenting problems determined what solutions to try.

Interventions were relatively brief. With the exception of the Kenya–NC case, all EBIs were five sessions or fewer. Teams hypothesized a relatively brief intervention would increase potential to scale interventions to more people, increase acceptability, and lower costs. In Case 3, all interventions were four sessions or less to keep patients engaged and reduce the task-sharing burden. Case 1, which targeted multiple outcomes and individuals, was eight sessions in the U.S. site, relatively brief for a family therapy, and unlimited sessions in Kenya to prioritize potential for sustainability by mirroring existing help engagement in the community.

EBI delivery. All teams chose to deliver the EBI in a setting in which patients already were present, thereby increasing accessibility. This setting informed decisions about EBI selection and implementation partners. Settings included community structures and organizations (e.g., churches, mosques, community centers), resource centers, and health-care settings (e.g., primary care, HIV treatment). The teams also considered who would be delivering the intervention, often building on existing CHW or other lay-health-worker programs. This was done to try to enhance patient engagement and access and task share to existing staff.

In Case 1, both sites (Kenya and NC) prioritized working with community partners who interacted with and had trusted relationships with families. In Eldoret, this meant working with community and religious organizations, and in Durham, this partnering was with a local community organization. Case 2 prioritized similar assets, considering where patients already received care and settings in which a potential provider workforce existed. In South Africa, the intervention was integrated into HIV-care settings and in Baltimore into methadone and community resource centers. Likewise, in Case 3, the team balanced policymaker priorities (large-scale reach and sustainability) with existing care pathways to work with existing primary-care clinics in Mozambique. Specifically, policymakers underscored to researchers that the Ministry of Health was responsible for caring for all mental-health conditions. This led researchers and partners to focus on comprehensive mental-health-care solutions with a public-mental-health emphasis versus focusing on one or two disorders. In NY, a similar process is underway with key stakeholders to determine delivery methods with best potential for reaching and engaging patients, whether by leveraging existing providers (e.g., case managers, peer specialists) or creating a new cadre of providers. Nontraditional recruitment strategies (e.g., local churches) are also being explored.

EBI adaptation. All projects systematically adapted the EBIs for the local context. Systematic adaptation processes ensured fidelity to core treatment components (Stirman et al., 2019). The teams adapted the content and implementation procedures of the interventions. Across sites, content was often added to make the intervention more responsive to the social determinants of health that patients were facing, particularly poverty. In Case 2, a formal adaptation model, ADAPT-ITT, an acronym for the steps of the process (Assessment, Decision, Adaptation, Production, Topical experts—Integration, Training, Testing), was used in both sites (Wingood & DiClemente, 2008). It facilitated understanding of how the intervention components and delivery (who delivers and how) needed to be adapted to increase cultural relevance and acceptability. In Baltimore, this led to adaptions such as the inclusion of case-management services in the EBI to address structural barriers to engagement (e.g., housing and financial instability), which patients and providers reported in the formative interviews. In Case 3, participatory research using the fit-fidelity adaptation model worked with local providers, community leaders, patient advocates, and patients to adapt intervention content and implementation strategies to balance fidelity to efficacious interventions with fit to a new context and culture (Wainberg et al., 2007).

Cases continually refined interventions on the basis of incoming data to increase relevance to cultural norms and setting, address new stressors (i.e., COVID), improve acceptability, address delivery barriers, and pilot translation. For example, in Case 1, although in-depth formative work (described above) guided the development of a treatment for Eldoret, this was not possible in Durham given the immediacy of partners' needs. Accordingly, the team used an efficient, but participatory, adaptation process with the CHWs, which they adapted continually during training and implementation. In Kenya, additions included encouraging providers to use their own stories or metaphors and to address poverty-related challenges in more concrete ways (e.g., practicing communication skills through budgeting conversations). In Durham, changes included adding positive emotions exercises (e.g., gratitude) and tailoring treatment to address pandemic-related community stressors.

In Case 3, each selected EBI was digitized into an app and adapted to patient and provider needs. Digitization and adaption first occurred with partners in Mozambique to create a nimble adaptable tool to be used across 20 different districts. Therefore, apps focus on core treatment functions (e.g., identify values, list activities) with

notes to providers to provide relevant examples to patients. These digital tools are now being adapted for NY State, along with the creation of a new module, a financial-wellness tool, to address social determinants of health that influence patient well-being.

Finally, all interventions designed or adapted for LMIC sites were translated, typically using transcultural translation procedures from English to the local language. This included steps such as cognitive interviewing to ensure content and measures were comprehensible, acceptable, and relevant in the local language.

Lay-provider-delivered intervention. In all cases, the interventions were delivered by individuals with lived experience or individuals already embedded in existing care pathways. This is a form of task sharing because services are delivered by nonspecialists. Task sharing served multiple purposes: It addressed shortages, reduced stigma, and increased social proximity to support care engagement and retention. Cases 1 and 2 selected individuals on the basis of qualitative formative work and partnerships to maximize existing infrastructure strengths, patient preferences, and service-system and provider preferences. In Case 1, individuals already working with families to solve family issues were chosen to be trained; they were already embedded in communities working with families and desired more skills. In Case 3, task-shared providers were chosen on the basis of both formative partner work and policymaker suggestions for who could be embedded in existing health-care systems to maximize potential sustainability. Task sharing was used in U.S.-based sites in addition to LMIC sites, for which task sharing was a means to train providers who better represented the patients receiving care. Note that in the Mozambique–NY case, training Black and Latinx providers to help support a mental-health workforce more diverse in terms of racial-ethnic identities is an explicit goal of the NY project.

Provider training and supervision. Tailored training and supervision for providers across cases focused on supporting fidelity while maintaining flexibility and leveraging provider strengths. This included the explicit focus on using individualized strategies in training and supervision, such as how to best use self-disclosure or integration of cultural principles (e.g., life lessons) in treatment. Training and supervision were also tailored to provider preferences. For instance, providers in NC preferred and received virtual training; providers in Mozambique requested asynchronous supervision in addition to weekly meetings leading to additional ad hoc WhatsApp Group supervision. Training across all cases was relatively brief and included didactics, role-plays, and experiential learning. All cases assessed intervention-delivery outcomes, such as fidelity and counseling competency (i.e., counselor abilities), at the end of training and during treatment delivery. Each of these approaches supported supervision while aligning with existing resource shortages and existing demands on providers.

For Case 1, providers' individualized adaptations were monitored as part of measured counseling competencies; counselor-specific adaptations that seemed to improve the content were later added to the manual. Supervision was flexible to accommodate counselors' busy schedules. This informed a flexible training schedule in NC, where training included both virtual real-time supports alongside asynchronous didactic activities to meet CHWs' time and preferences. Likewise, in Case 2, training, supervision, and provider supports emphasized peer strengths, such as self-disclosure, and included them in the training manual. In addition, across sites, a flip-chart manual helped guide the peer provider during sessions while giving the patient visuals related to content. This innovation was adopted in response to stakeholder feedback in South Africa and then implemented in Baltimore. In Case 3, in which goals were large-scale implementation and workforce capacity building, the screening tool and EBIs were digitized into one mobile tool application for providers. This innovation will be carried to NY State (digitized tools) to support scaling up services with providers. Furthermore, Case 3 included formalized certification processes for providers in Mozambique, which was used to assess competencies and build the workforce. A similar model is planned for use in NY.

Evaluation. Mixed-methods, hybrid, implementation-effectiveness designs were used to simultaneously explore implementation outcomes alongside clinical outcomes. All cases, even in pilot stages, used hybrid designs. Hybrid designs simultaneously evaluate both clinical and implementation outcomes with the goal of more efficiently getting effective care into the "real world" (Curran et al., 2012). Most included implementation-science frameworks to guide dual-outcome assessment, including assessment of lay-provider experiences. Cases emphasized sustainability and the ongoing implementation of the treatment over time as the key reasons for exploring both clinical and implementation outcomes. Sustainability is an outcome in Case 3 and long-term foci of bidirectional learning across sites—how to deliver EBIs in ways that will last.

Mixed-methods designs allowed studies to gather in-depth feedback on accessibility, feasibility, relevance, barrier/facilitators to implementation, and clinical change. With stakeholder input, this allowed teams to simultaneously refine treatments and their delivery. For instance, in Case 2, learning appropriate peer disclosure helped build patient motivation to change; self-disclosure was

then included in measures of fidelity, and training was tailored to safely support self-disclosure. Mixed methods also helped facilitate adaptations to interventions after piloting to better meet community needs and overcome implementation barriers. With Case 1, findings informed clinical and implementation refinements, such as having religious organizations become program champions to help sustain treatment over time.

Bidirectional learning

Although cases used many similar strategies, these commonalities do not necessarily indicate shared learning, only common practices to address similar issues across sites (i.e., mental-health-care provider shortages, family problems, importance of resources). For each case, we summarize the formal and informal mechanisms that the research team used to exchange information and facilitate bidirectional learning between HIC and LMIC sites.

Case 1. When adapting the intervention developed in Kenya for NC, the team's Kenyan research assistant who implemented Tuko Pamoja was consulted on the adaptation and reviewed the final adapted version. The Kenyan research assistant and the U.S.-based team members, including the PI and graduate students who worked across both projects, are now incorporating some of the new NC intervention components back into the Kenyan version because some activities were improved in ways that are relevant for both settings of the intervention. Thus far, this has consisted of adding art-related activities that better engaged youths and integrating some of the more-cognitive coping skills. In addition, multiple team members worked across both sites, including the PI, graduate students, and a Kenyan research assistant. Onboarding and introductions to the NC project with CHWs and partners in Durham also always incorporated background on the development of Tuko Pamoja in Kenya. Furthermore, teams from both sites have coauthored academic presentations on the innovations used across projects, such as task sharing.

Case 2. The research team initially developed the peer-delivered EBI for South Africa on the basis of input from patients and other stakeholders about the value of peer support. The success of the intervention in South Africa motivated the U.S.-based team to develop a parallel intervention for delivery in Baltimore. Although peer interventions are common in the United States, few incorporate EBIs. In addition, components of the Western-originated treatment first adapted for South Africa were then adapted from South Africa to Baltimore (i.e., Life-Steps, a brief problem-solving intervention from HIV medication adherence in South Africa to methadone adherence in the United States). Their work in Baltimore then informed newly funded work to create a more structured peer-recovery-coach workforce in South Africa. The Baltimore-based peer specialist is working with the South Africa team to adapt their training and certification model to the South African context. This exchange was enabled by having a U.S.-based PI involved in leading the studies in both settings to foster collaboration across sites. In addition, one of the U.S.-based peer clinical supervisors and trainers joined weekly meetings with the South Africa team (including an in-person visit in South Africa) to help interpret feedback from workshops with peer providers to evaluate individuals' potential fit as peer specialists. Finally, the South Africa- and Baltimore-based research teams are collaborating to combine the postintervention patient interviews from both sites and analyze them jointly, facilitating a comparison of the peer intervention between settings and identification of core elements of peer support.

Case 3. Initially, Western EBIs and mental-health-screening tools were adapted for delivery in Mozambique; two of them (IPC, SBIRT) were already being used locally but not at scale. EBI delivery was adapted by creating provider-facing apps with step-by-step guidance to ensure high intervention fidelity and support supervision. A brief comprehensive mental-health-screening tool (the mwTool) was developed to identify items from existing scales that could be used for population-wide screening and triage into EBIs (Lovero et al., 2021). The NY-based team is now replicating those methods to determine whether any adaptations are needed for the mwToolin in the U.S. context. Faced with stricter regulations in NY about who and how mental-health services can be delivered and how patient data are handled, the team will work with NY to create a digital platform for EBI app data. This platform will integrate health records and dashboards to support clinical supervision and community-needs mapping to guide resource distribution. Once built, the system will be adapted for the Mozambican context. These projects are led by the same, NY-based PI. Mozambican team members are consulted for NY work, the background of Mozambican tool development is part of all onboarding and presentations of the NY State project, and dissemination plans are in place to share NY State findings back to Mozambique. Furthermore, collaborative team meetings with cross-site team members also allow informal learning to occur, including regular meetings between predoctoral D43 trainees in Mozambique who interact with postdoctoral trainees in the United States to discuss shared project data and ideas.

Across cases. Common themes in how bidirectional learning was accomplished emerged. First, all projects had at least one common PI across both the HIC and LMIC site, which facilitated one person having a high-level view of

both projects and exchanging ideas between them. For instance, the implementation in the second site was frequently inspired by the PI noting the clinical or implementation successes in the first site. Second, all teams had meetings and trainings that included trainees, researchers, and clinicians from both sites, facilitating relationship building and sharing of ideas, including exchange of key innovations from one site to another (e.g., peer workforce development from Baltimore to South Africa). Third, acknowledging the other site as part of orientation or onboarding for trainees and clinical staff in many sites signals bidirectional exchange and mutual learning are valued. Finally, all teams noted projects across sites are ongoing with shared goals (e.g., improve family functioning with historically underserved populations; improve peer-delivered EBI to improve mental health, substance use, and HIV adherence; optimize delivery of comprehensive mental-health care with historically underserved populations) and continued efforts to secure funding to bridge project goals across sites.

Discussion

Using a series of case studies, we present shared GMH strategies and bidirectional learning used in emerging mutual-capacity-building partnerships. We highlight strategies that help consider culture, context, and systems across stages of research to aid efforts to address disparities in access to relevant mental-health services. Although use of new approaches in a traditional research paradigm does not provide a radical overhaul of practices that are inherently rooted in Whiteness, wealth, and HIC privilege (Bowleg, 2021; Lett et al., 2022), they can highlight steps to move toward a more equitable research process and potentially improved clinical and implementation outcomes.

The common strategies used across cases align with both GMH methods and best practices for community-engaged research (Collins et al., 2018; Wainberg et al., 2017). Approaches were interdisciplinary and employed principles of implementation science. This fits with the broader literature in GMH concerned with scaling effective care to underserved populations (Jordans & Kohrt, 2020; Patel & Prince, 2010; Singla & Hollon, 2020). Community-based participatory research (CBPR) principles implicitly or explicitly guided all cases. CBPR has a history of use with historically minoritized populations in the United States and indigenous and First Nations populations in countries such as Australia and Canada (Bainbridge et al., 2011; Wallerstein & Duran, 2010). These principles are increasingly employed in GMH such that the field is moving toward a focus on partner building and involvement of people with lived experience (Bemme & Kirmayer, 2020; Kola et al., 2021). In these cases, community-engaged work was an ongoing approach to consider culture and context, establish shared goals, and innovate according to partner needs. Community engagement was facilitated, at least in part, by engagement with lay health workers. As outlined by Barnett and colleagues (2018), working with lay providers who have lived experience, shared identity, or social proximity with patients may dually target supply (e.g., diverse workforce) and demand (e.g., stigma)—factors affecting disparities. Furthermore, engagement with policymakers, as was done in Case 3, at the outset of these process also has potential to create sustainable system-level change (Lobb & Colditz, 2013).

Despite the promise of involving lay health workers in the delivery of EBIs, this approach faces distinct challenges in the United States. Health-licensing policies, insurance reimbursement, and perceptions that ample care is available have slowed task sharing (Barnett et al., 2018). Here, two U.S.-site cases focused on working with existing lay workforces (CHWs, peer-recovery workforce), whereas the third aimed to explore whether developing a new paraprofessional workforce in collaboration with policymakers was needed to meet mental-health needs or if existing staff can be leveraged (Hochul, 2022). For two U.S. sites, COVID-19 appeared to increase motivation of systems to adopt task-shared clinical interventions. As individuals begin to consider task sharing, it is imperative to think critically about how lay providers will be selected (Kohrt et al., 2020) and supported professionally and personally. This includes training specialists to supervise lay health workers (Rwafa-Madzvamutse et al., 2020), assessing provider experiences (Wall et al., 2020), and structural policies to support efforts (Mongelli et al., 2020). Cases here used tailored training and supervision approaches to support providers and measured provider experiences, and two cases were beginning to expand structural supports such as workforce credentialing. U.S. task-sharing efforts need to consider policies supporting upward mobility and relevant supports to avoid compounding disparities by placing a disproportionate workforce burden on lay providers (Nguyen et al., 2021).

Opportunities and challenges for mutual capacity building

The goal of mutual capacity building is to create a fully bidirectional exchange of ideas and resources between sites to promote shared learning. True reciprocal learning requires a feedback loop, not just LMIC to HIC or HIC to LMIC. Unique opportunities emerged across cases for continuing to build this exchange around points of shared learning, such as adaptation processes, task-sharing models, and implementing comprehensive mental-health care.

Another opportunity included the chance to help shape more formal mutual-capacity-building frameworks. Across cases here, much of the exchange to share learning was informal (i.e., shared meetings, a single person involved in both projects) rather than formally laid out in the methods each site used. This is understandable given no current models exist to guide such methods. Some of the processes used for shared learning across these cases might serve as a basis for developing a framework to more formally support mutual capacity building. Although we have evidence-based models for intervention adaptation (Heim et al., 2021; Wainberg, McKinnon, et al., 2007; Wingood & DiClemente, 2008), questions remain about what processes and metrics should be used to develop and assess mutual-capacity-building partnerships. A clearer understanding of these processes might inform a more equitable exchange of innovation.

In the cases here, the common PI across sites was based at a U.S. institution. Although U.S.-based investigators played a role in LMIC sites, there was less of a focus on LMIC investigators in HIC sites. This imbalance is reflective of much of the GMH landscape and represents a key challenge to building ongoing mutual-capacity-building partnerships in ways that are equitable. This imbalance is driven partly by money. Although many grants and other resources exist for HIC researchers to do work in LMICs, fewer exist for LMIC researchers to conduct studies in HICs, and even fewer exist to support research teams to work in both HIC and LMIC settings. There are resources differences between HICs and LMICs that also influence funding resources as well as needs, time, and priorities across levels (i.e., patient, provider, system). Resource differences are compounded by racism, language barriers, and training differences that further challenge equitable partnerships (Chibanda et al., 2021).

There is still much work to be done to promote mutual, equitable partnerships across LMIC and HIC settings, and researchers need to think critically about how to meet valued needs of both site partners. For instance, what does mutual, equitable involvement look like for investigators across LMICs and HICs who face different structural barriers? How can resources flow from an HIC collaborator to an LMIC collaborator without bestowing additional power over the project to one collaborator? Building mutual and equitable partnerships will necessitate discussing and confronting power, privilege, and positionality throughout the project. Continued reflection on who is defining constructs is also needed. This includes the adoption of practices that acknowledge and work against historical colonialism in GMH (i.e., the one-sided extractions of resources from LMICs; Abimbola & Pai, 2020; Büyüm et al., 2020; Kim, 2021; Sweetland et al., 2016).

Limitations

This article was not intended to be a review of mutual-capacity-building partnerships or a large sample of existing practices; it is limited to the three cases presented. Other examples, which approach mutual capacity building from a variety of perspectives and positions, should be explored (Binagwaho et al., 2013; Cancedda et al., 2017) to further inform the development of processes, models, and metrics to guide learning. However, given how little is known about how mutual capacity building is occurring, we believed that an exploratory case series was warranted and facilitates the development of hypotheses for further exploration. As noted, the final steps of mutual capacity building have not yet occurred in these cases. Related, many of the projects are still in piloting phases, and more work is needed to fully demonstrate the effectiveness of these interventions. Many empirical questions remain, including how well strategies and approaches promote mental-health equity as outcomes and within research processes. This further highlights the tensions of working on delivery pathways without full knowledge of whether an EBI will work in new settings or with new populations.

Conclusions

Strategies used in growing mutual-capacity-building partnerships across LMICs and HICs can aid U.S. approaches to promote equity by emphasizing practices that account for culture, context, and systems across stages of research. This often includes the use of community-engaged partner building, adaptation processes, qualitative methods, and task sharing alongside clinical science. Together, this can inform more relevant, usable solutions for populations globally. The application of such shared strategies must be considered in the context of mutual capacity building to advance the field of clinical science to reduce mental-health disparities.

Transparency

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The larger coauthor team reflects different experiences and opinions that shaped findings and ideas put forth here. The lead author (A. Giusto) is a White, U.S.-born mother and early-career clinical researcher. She is guided by principles of community-based participatory research, putting listening and partnership first alongside critical self-reflection. The senior author, M. L. Wainberg, is Venezuelan, currently based in the United States. Coauthors J. F. Magidson, H. E. Jack, E. S. Puffer, A. C. Sweetland, S. H. Hankerson, S. Johnson, and K. Lovero are currently U.S.-based. P. F. dos Santos is Mozambiquan based in Mozambique. D. Ayuku is a Kenyan psychologist based in Kenya. B. Myers is a South African clinical psychologist living in Australia since 2021. We offer these findings as one interpretation of these cases.

Note

1. We use the term "minoritized" to refer to individuals with marginalized identities (e.g., Black, indigenous, Latinx, Asian American) that historically and currently face systematic oppression from White supremacist systems. We acknowledge and recognize this term may not capture the experiences of individuals living in these identities, and they may reject these terms. When discussing specific projects, we use terms preferred by participants.

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