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COMMUNITY-BASED PARTICIPATORY DEVELOPMENT OF A COMMUNITY HEALTH WORKER MENTAL HEALTH OUTREACH ROLE TO EXTEND COLLABORATIVE CARE IN POST-KATRINA NEW ORLEANS

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Objectives: The REACH NOLA Mental Health Infrastructure and Training Project (MHIT) aimed to reduce disparities in access to and quality of services for depression and posttraumatic stress disorder (PTSD) in post-Katrina New Orleans by developing a mental health outreach role for community health workers (CHWs) and case managers as a complement to the collaborative care model for depression treatment.

Intervention: Community agency leaders, academics, healthcare organizations, and CHWs engaged in a community participatory process to develop a CHW training program.

Design: A review of qualitative data including semi-structured interviews, project team conference calls, email strings, and meeting minutes was conducted to document CHW input into training and responses to implementation.

Results: CHW contributions resulted in a training program focused on community engagement, depression screening, education, referral assistance, collaboration with clinical teams, and self-care. CHWs reported use of screening tools, early client successes in spite of challenges with client engagement, increase in networking and collaboration with other community agencies and providers, and ongoing community hurricane recovery issues.

Conclusions: This intervention development approach and model may be used to address post-disaster mental health disparities and as a complement to traditional implementation of collaborative care. (*Ethn Dis.* 2011;21[Suppl 1]:S1-45–S1-51)

Key Words: Community Health Workers, Community-Based Participatory Research, Collaborative Care, Disaster, Mental Health

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INTRODUCTION

Underserved communities are at high risk for poor access to quality care for common mental disorders such as depression and posttraumatic stress disorder (PTSD),^{1,2} particularly following exposure to disasters such as the 2005 Gulf storms.^{3,4} Evidencebased quality improvement programs such as collaborative care approaches that integrate primary care providers, patient care managers, and mental health specialists into patient-focused teams increase access to services and improve health and employment outcomes for depressed and anxious primary care patients, including underserved groups.^{5–8} However, such programs may be difficult to implement in public sector agencies and those damaged by disaster, owing to resource and infrastructure limitations.9 Secular and faith-based social service organizations often have infrastructure for post-disaster outreach, case management, and medical care

Services and Society, University of California, Los Angeles (EO, KW); Semel Institute for Neuroscience and Human Behavior, University of California Los Angeles (KW); Department of Health Services, University of California, Los Angeles School of Public Health (KW); RAND Corporation (KW, BS); Tulane University School of Medicine, Department of Medicine (BS); RAND Health (BS); and REACH NOLA (BS).

Address correspondence to Ashley Wennerstrom; 1430 Tulane Ave. SL-16; New Orleans, LA 70112; 504.988.4007; 504.988.8252 (fax); awenners@tulane.edu that could support quality improvement, but staff and administrators may lack adequate training to address mental health issues,¹⁰ facilitate appropriate referrals for care, and help affected persons overcome mental health related stigma.

Health and social service agencies often utilize community health workers (CHWs) - personnel who provide fellow community members with health services including education and healthcare referrals - to fill unmet public health needs in underserved communities.¹¹ CHW engagement is a promising strategy to overcome disaster-resultant healthcare infrastructure limitations in contexts such as post-Katrina New Orleans,¹² where the shuttering of healthcare facilities and exodus of providers diminished local capacity to address well-documented unmet, ongoing mental health needs.3,4,13 CHW facilitation of early entry into appropriate care for community members with mild to moderate symptoms of anxiety, depression, and trauma may prevent serious mental health sequelae and subsequent use of emergency health services. CHW provision of peer-topeer support for fellow community members may fill gaps in availability of traditional counseling services, and their participation as members of collaborative mental health treatment teams could increase patient engagement, leading to increased efficacy of care delivery. Previous CHW participation in addressing community mental health needs has included application to homeless or severely mentally ill populations,^{14,15} international settings,¹⁶ and

in one study, following a disaster,¹⁷ but CHWs have not previously been documented in the scientific literature as serving as members of a mental health treatment team in a post-disaster environment.

In this article, we explore: 1) the process and viability of using a community-based participatory approach to develop a framework and model for CHW and case manager mental health outreach as a complement to quality improvement training in collaborative care for depression in post-Katrina New Orleans; and 2) the feasibility of the model itself, as well as early responses to a training curriculum that was developed to operationalize the model. While the need for developing a mental health outreach model was jointly recognized by academic and community participants in early stages of the project we describe, we were uncertain of whether the community-based participatory approach would lead to an implementable model within the short time period required by the urgency of the postdisaster situation. We were also uncertain whether CHWs receiving relatively little training in mental health issues would find the outreach model and training applicable to their work. We report on the process of model development and early experiences with implementing a training program to

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METHODS

Community-based participatory research (CBPR) approaches have been recommended to address health disparities,¹⁸ particularly in groups with historical distrust in research and services.¹⁹ This approach has been applied to mental health services research,^{20,21} and was the basis for development of the participatory REACH NOLA partnership^{22,23} that led the Mental Health Infrastructure and Training Project (MHIT).

Training Development

Initiated in May 2008, MHIT aimed to address limitations in access and quality of mental health care for New Orleans area hurricane survivors by providing staff and administrators at social service and safety-net agencies with multi-day training seminars and follow-up technical support in evidencebased practices for treatment of depression and psychological trauma. Approximately 400 therapists, psychiatrists, primary care providers, care managers, administrators, CHWs, and case managers employed by 70 participating institutions attended team-focused sessions on implementation of collaborative care for depression that included: overview of the collaborative care model; implementing system change through structured quality improvement methods; improving care coordination and communication between clinical providers; strategies for assembling a collaborative care team; networking with other community providers; and quality improvement methodology.

Profession-specific collaborative care competencies were developed through: instruction of medication management principles for primary care providers; therapist training in administration of evidenced-based therapy; and care manager sessions on coordination of depression treatment.

The addition of CHWs as members of the collaborative care team required the development of a CHW-specific training curriculum and resources. A work group of community and academic MHIT project co-leads, and New Orleans-based CHWs engaged in a participatory, iterative process with the goal of developing a sustainable, culturally competent CHW training program for mental health outreach. Work group collaborators sought to: 1) be responsive to community needs and acknowledge community strengths; 2) be consistent with key components of the collaborative care model of chronic disease management²⁴ such as promoting evidence-based treatments, care coordination, and patient participation; 3) build on existing CHW models that address health disparities;²⁵ and 4) support CHW-patient engagement in nonclinical settings to contribute to patient education that results in an increase in the utilization of evidence-based screening tools, and to contribute to the referral of patients into treatment, which may be critical to bringing underserved populations into appropriate care.²²

Sixty-two CHWs and case managers attended the first three MHIT training seminars held between July 2008 and February 2009. Trainers used didactic instruction, role-playing and discussion at Training 1 to demonstrate the use of depression screening tools and teach principles of community engagement; at this time participants and trainers identified a need for additional instruction to address more adequately community concerns. All participants in Trainings 1 through 3 were invited to contribute to a revised CHW mental health outreach curriculum by providing insights on community context and feedback on training materials and resources. The project team altered training topics, techniques, and materials in response to CHWs' goals and concerns.

All information presented at trainings was documented in a written manual and distributed with a CD of resources and a client education DVD. CHWs received a book on depression education and treatment options, including collaborative care²⁶ and community resource guides describing lowor no-cost social services resources to address client needs.

Partnered Working Group Qualitative Assessment

We conducted a qualitative review of CHW input into training development and responses to training and implementation using a partnered working group approach.²⁷ Data sets were reviewed by two-member work group teams, with each member independently reviewing the source material. We analyzed blinded data from all sources of CHW feedback that included: minutes taken during 20 CHWspecific breakout sessions during Trainings 1, 2, and 3; 12 MHIT project team weekly conference calls among academic and community partners including CHWs; three CHW support calls, in which academic partners provided CHWs with post-seminar technical assistance for implementation of outreach techniques and use of screening tools; 31 email strings from project team members, including CHWs; and five semi-structured telephone interviews of CHWs who participated in the training seminars and support calls.

A structured form was developed to record themes and text examples based on the analysis questions. Then team members together reviewed all documents to identify common and uncommon themes and associated citations. Authors integrated these summaries to reduce redundancies and clarify distinct themes.²⁸

No financial incentives were offered to participants. Research procedures were found to be exempt from review by IRBs at RAND, Tulane University, and the University of Washington.

RESULTS

Community input into training development is summarized in Table 1. CHWs revealed the following primary concerns: complex post-hurricane challenges; need for services for vulnerable populations; continuing stressors such as concern about future hurricanes; frustration with inability to satisfy clients' financial needs; difficulty responding to suicidal clients; and concern about existing community and agency capacity, resources, and infrastructure to support mental health services and referrals. CHWs and case managers reported strengths in the areas of trust-building with clients, knowledge of the community, and flexibility. Many CHWs described difficulty accommodating the stresses of being on the front line, facing personal recovery needs, and lacking time or resources to get help for personal recovery. CHWs requested instruction in self-care techniques to cope with personal and workrelated stress.

Table 2 summarizes findings concerning CHW responses to the training. The CHWs generally offered positive feedback on the training content and valued both guided role playing and follow-up support calls. They reported using PHQ-2²⁹ and PHQ-9³⁰ screening questionnaires. To increase community acceptability, some rephrased screening questions to include colloquial language, or they incorporated screening questions into informal conversations. Although most CHWs were familiar with employers' existing privacy policies, some CHWs identified confidentiality/HIPAA training as useful particularly role playing the application of policy and tools. Training in problem-solving skills and behavioral activation support was novel for most CHWs, and use of these techniques was noted in follow-up support calls. CHWs offered specific suggestions for improvement of training and materials such as inclusion of additional role-playing sessions, emphasizing cultural competence and networking, simplifying the case registry form, and integrating training for CHWs and therapists. CHWs identified a number of challenges to conducting outreach and client follow-up, including difficulty of reaching clients, stigma, lack of community infrastructure, job conditions, and barriers to collaboration. Training participants acknowledged five types of positive training impact: increased delivery of highquality care, improved networking opportunities, increased respect for providers, assistance with continuing education requirements, and increased hope for community mental health recovery.

The final CHW training curriculum contained modules that covered: overview of depression and PTSD; techniques for building trust with clients; instruction in use of PHQ-2 and PHQ-9 depression screening tools; community resources for referring depressed patients; skills for problem-solving and behavioral activation, which were adapted from psychotherapy trainings in other collaborative care initiatives; selfcare for community health workers; community education techniques; and tools for tracking client services and outcomes.

DISCUSSION

This project aimed to expand the implementation of collaborative care for depression through a community-partnered, participatory approach to developing and evaluating a culturally appropriate mental health training program for CHWs and case managers in post-Katrina New Orleans. The effort integrated principles of collaborative care, CHW models for other health conditions, and participatory planning. The result, a program presented in a

Themes	Quotations
What are the needs of New Orleans residents?	
Multiple problems	"Most people before the storm could handle their issues, but afterwards, it was difficult to deal with because all the problems were adding up."
Difficulty of housing	"It's always housing issues."
Vulnerable populations and mental health issues	"There are a lot of scary things being noticed in the community in terms of children without parents in homes by themselves, people not able to find jobs and not having any hope for dealing with rebuilding issues, elderly folks living alone on dark streets with no relatives checking on them, children in desperate need of mental health interventions."
Suicidal clients	"Just talking to them straight out. Are you having thoughts of killing yourself? They want someone to listen to them, and are relieved that I brought it out."
	"I met a woman in the doctor's office who wanted to die."
Fit with agency scope	"They say 'I need this fixed' rather than accepting assistance." "75% of clients are hard to get a follow-through because what you are offering is not direct enough."
Continuing stressors	"We are back from (evacuation due to hurricane) Gustav and seeing people in the community centers and counseling offices whose needs have only increased."
How is mental health outreach currently conducted?	
Lack of mental health outreach programs	"There is nothing out there in the community that addresses the needs of mental health outreach workers."
Knowledge of local needs	"History of serving low-income and/or African-American populations of post-disaster Greater New Orleans area."
Engage in client's story	"I want to hear your story, tell me what you're experiencing."
Support without enabling	"There is a thin line between empowering and enabling."
Faith-based support	"I had to go to the Bible." "I pray with them."
Build trust	"We deal with building the trust of community folks to work with them."
Flexible style	"Let people know that we are here for them and won't abandon them." "Need to be flexible in terms of meeting people on their own terms."
What do CHWs and community-based organizations need to address stress and depression in New Orleans?	
Resources/staff	"Get so many (clients) that you become overwhelmed."
	"Clients are responding, but would respond better if we weren't standing on someone's porch going door to door."
	"A place we can refer our clients—that's our big need as case management."
Funds for medication	"One of the major problems we have is funds for medication."
Self-care/personal treatment	"You need to treat yourself as a patient."
	"Discussion of having recently trained counselor run support group for outreach workers for mutual benefit."
Integrate into existing programs	"Work with other programs—nutrition for high school students, encourage exercise and healthy habits."
Agency capacity and accountability	"The vast majority of those agencies are not doing what they say they are doing; lack of direction; no enforcement mechanisms."

Table 1. Community input into development of community health worker training program

training manual³¹ is itself an important addition to the public mental health field, building on prior documented approaches.³² Early feedback suggests that CHW participation in post-disaster mental health outreach may bolster community resilience by increasing interagency collaboration, building trust, and alleviating mental healthassociated stigma.

Data from the partnered evaluation of the program suggest that the two-way

knowledge exchange between community and academic partners enabled the development of a community-relevant program informed by experts in local context. We were encouraged that a participatory model was effective in supporting program development in a short time period, and for a stigmatized issue in the context of a historically underserved community following a major disaster. Consistent with participatory research principles, it was possible to develop awareness of the many challenges for the population and environment post-disaster, while maintaining an asset-based approach that supported hope in participants.²¹

The data suggested a positive overall response to training and desire for additional information in problem-solving therapy and PTSD. Participants valued confidentiality training. Depression screening was implemented by many participants and was often report-

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see if you have things like this in your program."	Certification	"Our agency pre-Katrina, failed Joint Commission because we did not do this. They will look to
	Improved quality and funding	see if you have things like this in your program." "Helps set our own standards, better opportunity to shine, clarify ourselves, and get more
Perception of providers "' "First time realized these providers want to do well."	Perception of providers	

Table 2. Community health worker responses to training program

ed as acceptable in the community. Some adapted screening tool questions to increase cultural appropriateness, but these informal adaptations were not validated for reliability. Some CHWs noted resistance and difficulties with follow-up for referrals among those clients who screened positive for depression. CHWs requested enhanced focus on cultural competence, which was implemented in a training session after the data collection period. Additional CHW suggestions included adding information on managing severely mentally ill clients and addressing workplace safety concerns, both addressed in subsequent seminars. We found that the program instilled hope, offered networking opportunities, helped with continuing education requirements, and supported CHWs' commitments to improving the quality of their services

We found many challenges to implementation of mental health outreach practices, especially limited community capacity for service delivery, inadequate funding for CHWs, and social stigma of mental illness. We failed to generate consistent use of both web- and paperbased case registry tools designed to track client interactions and depression scores, as these tools were perceived as burdensome. CHWs expressed a strong need for personal assistance with recovery stressors and anxiety about future hurricanes. The participatory nature of the project allowed us to implement modifications in response to many of these concerns. Some challenges, such as environmental factors, could not be directly addressed by the CHW intervention, but generating awareness of them improved the ability of CHWs to anticipate client needs.

We were somewhat surprised that the most innovative feature of the program, orientation to problem solving and behavioral activation, reportedly led to early client successes, with one CHW using behavioral activation to assist a client in implementing a physical activity regimen, leading to increased social interaction and improved mood. This intervention may offer an important resource for underserved communities to address mental health disparities following major disasters, as a complement to implementation of collaborative care programs in healthcare settings.

In summary, we found that it was possible to use a community-partnered, participatory research approach to design, implement, and evaluate feasibility of a CHW mental health outreach training program built on evidence-based practices in post-disaster New Orleans. Preliminary data support the acceptability and feasibility of implementation of most components, including novel features such as behavioral activation. We recommend ongoing program development supported by community input, as well as a formal evaluation to determine effectiveness of the model. This intervention may offer an important resource for underserved communities to address mental health disparities following major disasters, as a complement to implementation of collaborative care programs in healthcare settings.

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