Bridging Community Intervention and Mental Health Services Research

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Objective: This article explores the potential of community intervention perspectives for increasing the relevance, reach, and public health impact of mental health services research.

Method: The authors reviewed community intervention strategies, including public health and community development and empowerment interventions, and contrast community intervention with practice-based quality improvement and policy research.

Results: A model was proposed to integrate health services and community intervention research, building on the evidence-based strength of quality improvement and participatory methods of community intervention to produce complementary functions, such as linking community-based case finding and referral with practice-based quality improvement, enhanced by community-based social support for treatment adherence.

Conclusions: The community intervention approach is a major paradigm for affecting public health or addressing health disparities. Despite challenges in implementation and evaluation, it represents a promising approach for extending the reach of mental health services interventions into diverse communities.

(Am J Psychiatry 2004; 161:955–963)

Psychiatric disorders are leading causes of morbidity in the community, but most persons with such disorders do not receive appropriate care (1–3). Addressing unmet needs by increasing access and improving the quality of services is a major goal of mental health services research. Some progress toward this goal has been achieved through the development of effective and cost-effective service delivery interventions. These programs have had limited public health impact because practices typically do not sustain them after research trials and other practices may not adopt them even when they are proven effective (4–6).

Current challenges for health services research are to strengthen, sustain, and disseminate practice interventions that improve the quality of care, promote access for those with unmet need, and increase efficiency so that care is affordable for all (7, 8). Traditional health services research approaches, whether observational or experimental, may be insufficient to meet these challenges. Rosenheck (9) has argued that research interventions are buffered from the demands that systems face in a more open community environment, where program and treatment choices are made according to the priorities of multiple stakeholders and in the context of changing ownership and diverse policy influences. Furthermore, health services research interventions and evaluations are commonly designed by experts and may not reflect the values of administrators, providers, and consumers making program decisions in community-based service settings.

The purpose of this article is to investigate the use of community intervention strategies, which foster community participation in the aim of improving public health, and to enhance the scope and power of health services research to reduce the burden of unmet mental health needs. Despite a tradition of concern with community-based services, the mental health field has not developed a community intervention research agenda or explored how those methods might enhance community reach and embeddedness or broaden the scope of outcomes for interventions involving psychiatric disorders (10, 11).

Background

To date, health services research has generated information aimed at reducing unmet mental health need through two main approaches. The first has been by evaluating how policy initiatives or market trends affect access, quality, or outcomes of care. Policy initiatives and evaluations typically have broad public scope. For the most part, evaluations of recent policy initiatives, such as parity bills, and market trends, such as the rapid growth of managed care, have not addressed outcomes of mental health care. Results concerning mental health care access or quality have been either contradictory across studies or suggest limited impact (12–16). High unmet need for appropriate care for psychiatric disorders persists, even as the policy and market environment changes dramatically (2, 3).

The second research approach has been in developing and evaluating practice-based interventions designed to

improve quality of care. Successful examples of effective or cost-effective approaches include quality improvement interventions based on the collaborative care model of chronic disease management for depression in primary care (17–19), assertive community treatment for adults with severe mental disorders (20–22), and multisystem therapy for children with severe conduct disorders (23). Although such interventions are currently the subject of dissemination efforts, most evidence-based quality improvement interventions have had limited public impact because practices do not sustain them and they are not adopted by other practices (6, 14). The reasons are multifaceted and often reflect forces both inside and outside the health care system (24). For example, clinical practices may not be the most efficient venue for reducing stigma, a major barrier to care (7, 8). Addressing such concerns may require empowering consumers through public education and local community support.

Community intervention approaches have been used successfully to promote community participation and enhance responsiveness to public health priorities (10, 11). Health services interventions typically target consumers or plan enrollees, providers, or health care administrators or policy makers. Community interventions either 1) target communities (community targeted); 2) use community resources and change strategies based in communities (community based); or 3) are oriented to the needs, perspectives, and priorities of communities and empower them to achieve their goals (community driven) (10). More fundamentally, a community perspective offers a unique philosophical orientation for improving health through reaching the public or promoting participation, neither of which is a strong feature of health services research.

Few mental health studies have used community intervention strategies. Mental health preventive intervention research, for example, is largely limited to extensions of practice interventions to high-risk groups (25). Public campaigns for mental disorders have had few rigorous evaluations (26). Nevertheless, community interventions have been widely used to address other major public health problems and improve the management of chronic disease. For example, public campaigns have been used to reduce behavioral risk factors, increase early detection and intervention, and promote adherence with recommended treatments for heart disease, diabetes, and cancer (11, 26–28), including for stigmatized conditions like HIV infection (29, 30). Recent research initiatives by foundations and federal agencies, including the Agency for Healthcare Research and Quality (31), the National Center on Minority Health and Health Disparities (32), and the Centers for Disease Control and Prevention (33), encourage community participatory research, partly as a result of community demand for relevant interventions (34).

Community Intervention Research

We define communities as social groups with a collective identity or shared attitudes and experiences, whether social, cultural, political, occupational, or based on affiliation through geography, institutions, or communication channels. Two community intervention fields are relevant to mental health services approaches: public health interventions and community development interventions. These fields share principles and methods but differ from health services research approaches in the locus of decision making for and in the intended outcomes of interventions, as well as research process and evaluation methods (34, 35).

Public Health Interventions

Public health interventions use a socio-ecological framework in which the origins of the health problem are identified at multiple levels (individual, family, organization, community, and public policy) (35). Interventions are implemented within and across levels to reduce individual and collective health risks (27, 36). For example, a diabetes prevention intervention might include school-based education, family cooking classes, enhanced nutritional labeling, access to fresh foods, policies to promote walking paths, and community policing to promote safety. Interventions that operate across multiple levels of the socio-ecological framework and link these levels may be more effective and have greater reach into populations than single-focus interventions (36, 37).

Theories are used to identify goals for interventions, such as change in attitudes, skill, or knowledge to design communication messages and delivery strategies (38). They can facilitate tailoring interventions for the attitudes or behaviors of different age, gender, or cultural groups (26, 39, 40). Prominent behavior theories underlying many research-based public health interventions include the social cognitive theory (41), the theory of planned behavior (or reasoned action) (42), the health belief model (43), the transtheoretical model (44), and others (45). Interpersonal, organizational, and social change theories become important to include when considering integrating interventions across the socio-ecological spectrum (45).

National and regional campaigns are public health interventions that often combine media-based strategies aimed at the public with activation of local resources (26, 38, 46). More intensive local strategies use individual counseling sessions (47); home visitations (48, 49); telephone, Internet, or print materials (50, 51); or group sessions (52, 53). Not surprisingly, more intensive interventions tend to have the strongest outcomes (11, 26, 37, 54, 55). To enhance reach and effectiveness, a social environmental approach combining media, policy, and community with intensive local intervention can help address the public health mission of reaching at-risk individuals, preventing others from entering the pool of at-risk individu-

als, and shifting public expectations for health behavior and health care (26, 56, 57).

Among local strategies, work-based interventions have the advantage of permitting simultaneous change activities at organizational, environmental, and individual levels (58–60). Interventions fielded in churches have also been successful, for example, in improving historically low mammography rates in African American women (61). Faith-based interventions have used pastoral sermons, health-related testimony, scripturally relevant printer material focused on behavior change, peer health advisors, and church volunteers. Nevertheless, locally contextualized interventions can be difficult to sustain even when infrastructure is developed to support them (62). Developing community resources and mobilizing broader community and political support may facilitate sustainability, but these goals require the integration of intervention approaches concerning public health, public policy, and community development (63–65).

Evaluating public health interventions can be challenging (34, 66, 67). National campaigns are difficult to evaluate because market saturation is key to effectiveness, and comparison groups and randomization options may be limited. Impacts are often measured through broad community indicators because resources are typically not available to measure individual change (11, 38). It can be difficult to account for extraneous influences such as media coverage independent of the campaign (38). Although some work site and faith-based health promotion studies used experimental designs, reviews suggest that methods limitations often preclude firm conclusions regarding effectiveness (66). In some areas such as cardiovascular risk reduction, there is more consistent evidence of effectiveness but with different outcome indicators across studies (37). National and local communication interventions, for example, have been effective at raising the rates of mammography screening while reducing disparities in screening rates (26). Evaluations of local intensive public health interventions often use case study methods and triangulation through mixed methods (66, 67).

Public health interventions for mental health conditions remain largely undeveloped in the United States. Although the National Institutes of Mental Health (NIMH) Depression Awareness, Recognition, and Treatment Program represented a 10-year national campaign, it was never evaluated (68). The evaluation of National Depression Day relied on a process evaluation and impact on referral and use among participants (69). A review in the international literature (70) suggested that in mental health prevention and promotion programs, media interventions can improve access to social services or change attitudes but individual behavior change requires local face-to-face intervention.

Community Development

Community development initiatives seek to increase the capacity and resources of communities (71). The classic typology, formulated by Rothman and Tropman (72), includes social planning by outside experts, locality development or participatory development of goals and programs, and social action or advocacy. Strategies used include grassroots organizing, professional organizers, coalitions, census development, problem solving, political and legislative action, and nonviolent confrontation (72, 73). A more recent typology excludes social planning and promotes the value of community building from people's strengths and assets, in addition to community organizing methods (71).

Community empowerment is a community development strategy that derives from the work of the Brazilian educator Paulo Freire (74). This approach uses nontraditional educational methods to enable individuals to understand their goals independent of the prevailing social order and to develop capacities to realize these goals (75). Applications to health focus on enhancing awareness of needs, promoting effective problem solving, and developing capacities for implementing solutions in high-risk communities (75, 76). A related strategy is media advocacy, which seeks to create leverage for broader policy change by influencing public opinion (77). Because the goals and approaches used in participatory community interventions cannot be fully specified in advance, evaluations rely on action research methods and qualitative or mixed methods (65–67). Some evaluations also use experimental strategies, such as group-level randomized trials (78). Charles and DeMaio (79) established a framework to judge the degree of community participation. More recent reviews suggest that greater community involvement may promote intervention adoption and sustainability (11, 34, 80, 81).

In participatory research, skills are required in developing trust with community members and leaders and dealing with differences in authority (73). Conflicts may arise over priorities for sustaining interventions versus identifying experimental effects and for outcomes such as neighborhood safety versus health (76, 82). Community interventions shift the focus away from individuals and toward the process of engagement and impacts on communities, entailing a different measurement and assessment process.

Community research can require substantial developmental time, and the evaluation phase may be of long duration. The feasibility of achieving change in communities may be affected by political and social factors. Hence, community research requires long-term commitment to particular communities (73, 82).

Strategies that can help mitigate these problems include agreeing on goals and expectations at the outset, maintaining a structured, equal partnership, using an independent community organizer, sharing expertise and resources across community organizations and researchers, educating the community about research goals and pur-

poses, and developing financial support for community programs (73, 75, 81, 82).

Even though community intervention research poses unique challenges, many of the conceptual, practical, and methods challenges are similar to those of practice-based quality improvement research, in which exact goals are not easily specified in advance and long-term commitment is required, and to policy research, where randomization options and availability of suitable databases for evaluation are limited (83–86). Furthermore, the conceptual and measurement frameworks underlying both policy and quality improvement research are similar: both suggest that health interventions should be embedded within local contexts and address and involve multiple stakeholders (34, 87). As in community intervention research, evaluations of practice-based quality improvement interventions and public policies have revealed mixed results; however, health services research has not retreated from designing and evaluating quality improvement interventions or evaluating policy (11, 88, 89). Furthermore, with recent advances in methods, health services research has yielded a new generation of policy and quality improvement studies (90–92) that are interpretable and useful to health care systems. For example, research on quality improvement interventions for depression in primary care progressed from the development of effective models within well-organized practices to effective models being implemented by community-based practices under minimal research supervision (4, 17, 18, 92).

Integrated Research Model

The Institute of Medicine recommends integrating principles from quality improvement intervention and community participatory intervention through a community health improvement process to achieve a broader change in the health of communities (93). The community health improvement process model is based on two stages of intervention development and evaluation. The first stage builds a community stakeholder coalition to monitor community health indicators and identify community health priorities. The second stage involves developing, implementing, and evaluating the impact of health improvement strategies designed to address those high-priority health concerns. The focus of this model is on monitoring community health indicators and developing feasible strategies within communities to improve the health concerns of interest, according to local priorities. The community health improvement process is iterative, similar to continuous quality improvement processes for health care improvement (87–89). A multisite demonstration based on this model showed health improvements for some population subgroups in two of nine demonstration communities (94, 95), but the full model has been neither implemented nor evaluated (93). Furthermore, the testimony of programs that had attempted the model suggested that it was complex and often not feasible and that communities may not necessarily choose evidence-based solutions (93).

We propose an alternative approach, the evidence-based community/partnership model, that is designed to support health improvement goals through evidence-based strategies while building community and practice capacity to implement those strategies in a manner consistent with community priorities, culture, and values. This model relies on a partnership between communities, community advocates, health care practices, and researchers, blending techniques of community participatory intervention and evidence-based quality improvement programs.

The first step of our proposed evidence-based community/partnership model relies on developing a negotiated set of goals among local community stakeholders, practices, and researchers. This might range from having the community voice its priorities regarding service improvements to implementing evidence-based practice interventions with a public inner-city hospital. Among psychiatric disorders, examples well suited to an evidence-based approach might include improving care for schizophrenia, depressive disorder, or attention deficit disorder. However, psychiatric disorders and treatments may be poorly understood by communities, especially as diagnostic criteria and therapeutic interventions have been evolving. This suggests a need for capacity building through empowerment education (73).

The second step focuses on matching community needs, resources, and values with evidence-based practice strategies to address unmet need and tailored to the community context. This may involve adapting practice interventions for local community practices and developing complementary community interventions to extend the reach of practice interventions into the community. It may also include building capacity in the practices to increase the engagement and retention of economically disadvantaged clients to benefit from evidence-based care or building the capacity of community agencies to access practice interventions. The evidence-based community/partnership model differs from the community health improvement process model in specifically bridging to an evidence-based intervention and focusing on health and health care change strategies rather than a health-monitoring process (93).

A key feature of the evidence-based community/partnership model is using a participatory process to define and enable complementary community intervention activities that support the principles of the practice intervention, as well as to adapt the practice intervention to respond to the needs, priorities, and culture of the target community. These activities involve identifying key functions that could be performed within the community to extend the reach and impact of the program. Examples of functions are screening for depression through health fairs or web-based programs in education centers; facili-

tating referral to practices hosting evidence-based quality improvement programs through lay health workers; or developing social programs, for example, through lay groups in faith-based organizations or parent associations in schools. Another community function might be reinforcing therapeutic goals through social or material support, such as providing resources for transportation to visits or providing outlets for increased social activities that are recommended by therapists.

Given a set of defined functions, a participatory process can be used to define intervention roles and to specify necessary personnel to provide those functions. Protocols that document the roles and functions can be used to support community staff training and increase program reproducibility and reliability.

During intervention development and implementation, partnership members may adopt different roles at different project stages; one indicator of a successful partnership may be flexibility in shifting roles to support different goals. For example, in adapting an existing evidence-based practice strategy locally, the community serves as an implementation partner. In contrast, when determining how to build service capacity given a weak local health care infrastructure, the community serves the role of leader and activist, aided by research knowledge and political support. Community, practice, and research teams serve complementary roles in understanding local cultural norms and in matching expectations and conflicts in the community with proposed intervention activities (87). Furthermore, in initiating new program directions, the research team may collaborate with the community leaders as capacity builders (71). But even this capacity-building role for researchers could emerge from a participatory analysis of options with the community partners. From the practice's perspective, their role may be as a laboratory to test the adoption of interventions (the practice in the role of recipient/site of the intervention) (87), as a generator of solutions for improving access (the practice as leader), or as a consultant on what strategies work and under what conditions they can be sustained (the practice as expert advisor). Thus, role definitions of partners may vary as a function of the goals, community resources, practice context, history of interactions among stakeholders, funding constraints, and other factors (34).

Community development approaches can potentially encompass the range of partnership roles just outlined (71). Overall, the evidence-based community/partnership model uses community development and participatory public health intervention principles to achieve a fit of community need, experience, and priorities; practice capacities; and research evidence on how change can be achieved and to estimate the likely consequences. In such a collaboration, all partners have equal importance.

The evidence-based community/partnership model incorporates outcomes that span those of primary interest to the community stakeholders, as well as those that reflect outcomes adapted from successful effectiveness studies of evidence-based practices. However, existing data sources in the community are unlikely to include outcome measures used in prior effectiveness trials, posing challenges to implementing outcomes evaluation. Attending to community outcomes priorities may require a focus on factors such as a reduction of violence in neighborhoods or use of afterschool programs. In this case, the research team would work with the community to determine the evidence basis for those outcomes in relationship to the designed program or suggest modifications of the program to better influence those outcomes and develop appropriate measures of them within the community.

By way of illustration, an evidence-based community/partnership initiative might focus on depression as a problem of interest to researchers, a given community, and local practices. The participatory community partnership identifying this priority and developing the evidence-based community partnership might include representatives from a local housing project, a community-based advocacy group, a local faith-based organization serving the poor, a representative of the mayor's office, and local mental health services and community researchers. A goal might be set of introducing an existing evidence-based practice quality improvement intervention, such as Partners in Care (4), into a free clinic, by using a nurse care manager and training local physicians, with a link to a local mental health clinic. The planning group might decide that broader community outreach of this program could be achieved through monthly health fairs spanning diet, exercise, and depression management and cosponsored by a faith-based organization and a school. At the fair, free, confidential screenings of families could be provided by health workers. Broader community education might be promoted through community meetings in schools or on a local radio talk show. At the health fair, trained health workers could follow up on those who screen positive with a home visit or a telephone call and serve as a referral source for the local public health clinic. To reduce the burden on the clinic for this expanded caseload, the health workers might offer to conduct home visits for existing patients. Resources to meet community needs, such as housing or transportation vouchers provided by the mayor's office, could be coordinated through a trained home-helper service or a faith-based volunteer workforce. Central to all of these activities, however, is the goal of increasing access to appropriate (evidence-based) care and community support to reduce unmet need for such care. This kind of intervention model would be difficult to either design or implement without extensive community-based partnership.

The evaluation would focus on the process of development of the evidence-based community/partnership intervention, including the development process' effects on those participating, the costs of running the program, and the effects of the program itself on those screened and served in terms of access to care, quality of care, and health

outcomes. Other outcomes of interest might be identified by the community. Depending on its scope, change in community awareness might be assessed through a community telephone or household survey or through focus groups in community settings. The project would initially require a qualitative process evaluation and more a formal mixed methods evaluation of the impact of implementation.

The evidence-based community/partnership model differs from a fully participatory process, which could lead to more sustained change but not necessarily to use of evidence-informed strategies. It differs from a practice-based quality improvement intervention in its focus on developing community capacity and compatibility of the intervention within local culture. It differs from the community health improvement process in focusing on quality improvement and evidence-based strategies rather than on health monitoring. Achieving the negotiated goal-setting process we propose may be challenging and suggests a new role for mental health services researchers within communities. The norms of "deliberative democracy" proposed by Daniels (96) offer one approach for establishing a fair process of integrating community, practice, and research priorities.

Implementing such interventions safely would likely require guidelines for ethical use of confidential information outside the context of health care settings. While the extent of social stigmatization of persons with mental disorders may raise concerns about community-based screening and other intervention activities, similar approaches have been used effectively for other stigmatized conditions (8, 29, 30). Community participants, for example, would have to be warned of real risks, such as embarrassment or job or insurance coverage losses, if a history of depression is disclosed through activities occurring outside health care environments. Communication with community organizations would have to be compliant with Health Insurance Portability and Accountability Act regulations and local standards of practice.

Discussion

Mental health services research interventions have focused on health policy initiatives or practice programs to improve access to appropriate care in response to widespread concerns about health care system factors contributing to a "quality chasm" (24). Community interventions focus on behavioral change of the public or the development of communities and social action targets based on community priorities not necessarily involving health care change. Health services research interventions are often expert driven, while community interventions range from expert driven to participatory. Across such approaches, the environmental context for intervention is complex, and multiple stakeholders are involved, leading to challenges in intervention design, implementation, and evaluation (9). The scope of implementation for applied studies can limit evaluation options, but generally, health services interventions have been evaluated through randomized or quasi-experimental designs, while community interventions are typically evaluated through case study and action research models by using qualitative or mixed methods, with a strong focus on the intervention process.

Despite differences in perspectives and methods, community and health services intervention approaches may offer new opportunities to achieve goals of public health reach and sustainability. The NIMH Working Group on Research on Affective Disorders (97) recently suggested exploring such community intervention models as an alternative paradigm for increasing public reach or addressing health disparities that have not been articulated (7, 8, 11, 12, 92). Evidence of broad societal impacts, such as reduced unemployment resulting from practice-based interventions for depression, reinforce the potential benefits to diverse communities of facilitating better access to appropriate care (4, 92).

Exploring this new integration will require interdisciplinary collaborations and training that span public health, health services, community, and policy research; qualitative, quantitative, and mixed methods; and investigator skill in community participatory research and coalition building as well as evidence-based practice interventions. Development of this field may require academic departments and schools to broaden their criteria for academic promotion, for example, to include evidence of community health improvement and other positive impacts on communities as promotion criteria and to more strongly value team contributions as evidence of important scholarly activity.

In summary, we raise the question of whether community interventions can potentiate the effect of practice-based interventions while improving consumer centeredness and community relevance. While the field should initially focus on exploring the feasibility and potential impact on community populations, in the long run, the field should focus on whether such approaches achieve either more enduring or far-reaching reductions in the individual and societal burden of mental illness for diverse communities, in which burden is defined at least partly in community terms.

Received Jan. 31, 2003; revisions received May 29 and Sept. 2, 2003; accepted Sept. 8, 2003. From the Department of Psychiatry and Biobehavioral Sciences, David Geffen School of Medicine, University of California, Los Angeles; the Health Program, RAND, Santa Monica, Calif.; the Department of Psychiatry, Weill Medical College of Cornell University, White Plains, N.Y.; the Center for Multicultural Mental Health Research, Cambridge Health Alliance and Harvard University, Cambridge, Mass.; and the Master's in Public Health Program, University of New Mexico, Albuquerque. Address reprint requests to Dr. Wells, UCLA/NPI Health Services Research Center, 10920 Wilshire Blvd., Suite 300, Los Angeles, CA 90024; kwells@ucla.edu (e-mail).

Funded by grants from the NIMH Center for Research on Managed Care for Psychiatric Disorders (MH-54623), the Interventions and Practice Infrastructure Program Treatment of Late Life Depression in Home Care (MH-64608), and the Latino Research Project Program

(MH-59876) and by an NIMH Independent Investigator Career Development Award (MH-01634).

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