ANNUAL REVIEWS

Annual Review of Public Health

Enhancing Community Engagement by Schools and Programs of Public Health in the United States

Mindi B. Levin,[1,2] Janice V. Bowie,[1] Steven K. Ragsdale,[1] Amy L. Gawad,[3] Lisa A. Cooper,[4] and Joshua M. Sharfstein[5]

[1]Department of Health, Behavior and Society; Bloomberg School of Public Health, Johns Hopkins University, Baltimore, Maryland 21205, USA; email: mlevin@jhu.edu, jbowie2@jhu.edu, skrags@gmail.com

[2]SOURCE, Schools of Public Health, Nursing and Medicine; Johns Hopkins University, Baltimore, Maryland 21205, USA

[3]Urban Health Institute, Schools of Public Health, Nursing, and Medicine; Johns Hopkins University, Baltimore, Maryland 21205, USA; email: agawad1@jhu.edu

[4]Center for Health Equity, Urban Health Institute, Schools of Public Health, Nursing, and Medicine; Johns Hopkins University, Baltimore, Maryland 21205, USA; email: lisa.cooper@jhmi.edu

[5]Department of Health Policy and Management; Bloomberg School of Public Health, Johns Hopkins University, Baltimore, Maryland 21205, USA; email: joshua.sharfstein@jhu.edu

ANNUAL REVIEWS CONNECT

www.annualreviews.org

- Download figures
- Navigate cited references
- Keyword search
- Explore related articles
- Share via email or social media

Annu. Rev. Public Health 2021. 42:405–21

First published as a Review in Advance on November 11, 2020

The *Annual Review of Public Health* is online at publhealth.annualreviews.org

https://doi.org/10.1146/annurev-publhealth-090419-102324

Copyright © 2021 by Annual Reviews. This work is licensed under a Creative Commons Attribution 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See credit lines of images or other third-party material in this article for license information.

Keywords

community engagement, equity, service-learning, community-based participatory research, collective impact

Abstract

The US Centers for Disease Control and Prevention define community engagement as "the process of working collaboratively with and through groups of people" in order to improve their health and well-being. Central to the field of public health, community engagement should also be at the core of the work of schools and programs of public health. This article reviews best practices and emerging innovations in community engagement for education, for research, and for practice, including critical service-learning, community-based participatory research, and collective impact. Leadership, infrastructure, and culture are key institutional facilitators of successful

OPEN ACCESS (cc) BY

academic efforts. Major challenges to overcome include mistrust by community members, imbalance of power, and unequal sharing of credit. Success in this work will advance equity and improve health in communities all around the world.

INTRODUCTION

The Centers for Disease Control and Prevention define community engagement as "the process of working collaboratively with and through groups of people affiliated by geographic proximity, special interest, or similar situations to address issues affecting the well-being of those people" (64, p. 3). Key principles of this collective work include "fairness, justice, empowerment, participation, and self-determination" (64, p. 4). Levels of community engagement start with outreach to and consultation with community members and advance to the involvement of community members in projects, collaboration in the implementation of those projects, and, ultimately, shared leadership (64).

Collaboration and partnership with communities facing health challenges can improve the conditions that affect health, reduce illness, and save lives. A meta-analysis by O'Mara-Eves and colleagues (51) identified 131 controlled studies of public health initiatives that engaged members of disadvantaged communities. The researchers found benefits for health behaviors, health consequences, participant self-efficacy, and social support, with larger effect sizes for "interventions that engage community members in the delivery of the intervention," employ "skill development or training strategies," and involve "peers, community members or educational professionals" rather than health professionals (51, pp. 13, 17). Key attributes of successful community engagement include basing efforts on needs identified by affected communities, mobilizing the assets and strengths of communities, establishing a stable infrastructure sharing funding and authority over projects, focusing on meaningful outcomes, and fostering mutual trust and respect (44, 47, 62, 69).

This body of research and guidance has important implications for schools and programs of public health and their academic mission of education, research, and practice to promote public health. Educators can partner with community organizations to help students learn how to listen to individuals who are experiencing serious health burdens and then teach students how to work in partnership to address these burdens. Researchers can work with communities to frame research questions, implement studies, and translate results into action. Practitioners can work with health departments, community organizations, and residents on initiatives to tackle health problems directly.

In pursuing this work, schools and programs of public health should be aware of the legacy of the public health field's past treatment of disadvantaged communities as well as the barriers to successful community engagement today. Even beyond human rights abuses such as the Tuskegee Syphilis Study, researchers at schools and programs of public health have strained relationships with communities through invasive surveys (60), inadequate consent processes (59), and research projects that raise community hopes but vanish after publication. At times, even well-intentioned studies have become foci of discontent, ripe for misinformation and misunderstanding. Other barriers include insufficient support within schools of public health and underappreciation of faculty and staff who pursue community engagement.

In this article, we provide a road map for successful community engagement by schools and programs of public health. We first describe best practices and emerging innovations in community engagement for the curriculum, research studies, and practice programs. This article does not cover the related emerging concept of academic health departments, although many of the principles can inform these efforts. We discuss key facilitators of successful academic efforts,

including leadership, infrastructure, and culture. Finally, we review major challenges to overcome, including mistrust, imbalance of power, and unequal sharing of credit.

EDUCATION

By defining public health as "what we, as a society, do collectively to assure the conditions in which people can be healthy," the Institute of Medicine placed collaborative action at the core of the field (36, p. 1). It follows that to prepare students for careers in public health, schools and programs of public health should provide instruction in effective community engagement. Schools and programs of public health can introduce students to community engagement theories, principles, and methods through a variety of mechanisms, including academic courses, workshops, practicum experiences, and extracurricular education.

Theory-based courses present the pedagogical components of community engagement in order to prepare students for community engagement activities. Examples of such courses include Community Engagement in Public Health Practice & Research at the Drexel University Dornsife School of Public Health; Individual, Community, and Population Health at the Boston University School of Public Health; Applying Theory to Public Health Research and Practice at the Emory University Rollins School of Public Health; and Community Capacity, Competence, and Power at the University of North Carolina (UNC) Gillings School of Global Public Health. At the Johns Hopkins Bloomberg School of Public Health, students take a series of online modules as well as onsite courses to prepare for community engagement activities.

The community experience of health disparities has long been a focus for the Consortium of African American Public Health Programs, which includes Charles Drew University of Medicine and Science, Florida A&M University, Fort Valley State University, Howard University, Jackson State University, Meharry Medical College, Morehouse School of Medicine, and Morgan State University. The first accredited public health program offering Master of Public Health (MPH) and Doctor of Public Health (DrPH) degrees at a historically black university, Morgan State developed a course called Community Needs and Solutions in response to the lead paint poisoning of Freddie Gray.

In addition to offering dedicated courses, schools and programs of public health can incorporate community engagement concepts and case studies in multiple classes across curriculum by involving community leaders and residents as guest lecturers, panelists, and case-based learning discussants (7). Such activities provide students with broad exposure to community voices and experiences on a wide range of public health topics.

Critical Service-Learning

A best practice for integrating community engagement activities into academic courses and degree requirements is known as critical service-learning. A form of experiential education, critical service-learning is a pedagogy that develops students' public health skills and competencies simultaneously through field placements that address community-identified concerns. Critical service-learning focuses on social change through intentional efforts to examine power, privilege, and systems of oppression. The use of critical service-learning pedagogy has enhanced the curriculum by providing students with opportunities to engage in real-world public health practice, an approach that has been linked with improved learning outcomes (48). This pedagogy is viewed as a fundamental tenet for educating health professionals in the social determinants of health (49).

Teaching critical service-learning courses requires skilled facilitation. Without adequate training in critical reflection, service-learning may reinforce a false sense of superiority in students

PRINCIPLES OF CRITICAL SERVICE-LEARNING

1. Incorporate critical reflection. Use community and classroom experiences to learn, and apply learnings in the future.
2. Center efforts on social justice. Examine root causes of social issues, including personal and institutional actions and inactions to address and respond to injustices.
3. Correct power imbalances. Analyze personal and institutional power and privilege and challenge unequal distribution of power.
4. Form genuine connections. Build trust and develop shared agendas to transform communities.

Principles summarized from Reference 48.

(sometimes referred to as the savior syndrome) (22), may function as a charity model, and may fail to lead to social change (12).

When successful, critical service-learning shifts the dynamics of the learning environment by including community partners as coeducators. Community partners are involved in identifying and shaping service-learning projects, educating students about societal issues, reflecting on the historical context of oppressive structures in communities, and providing feedback on the students' actions (15). A key goal of critical service-learning is to strengthen relationships among faculty, students, and community partners (see the sidebar titled Principles of Critical Service-Learning).

Practicum Requirement

Many degrees in public health include a practicum requirement of 100 hours or more of field work. This requirement is a community engagement opportunity for schools and programs of public health. As with critical service-learning, these experiences should include regular opportunities for reflection and learning. At the UNC Gillings School of Global Public Health, for example, the MPH Practicum includes both a two-credit practicum preparation course and a one-credit practicum reflection course.

Social Justice and Racism

Emerging innovations in education related to community engagement include teaching about social justice and racism. National organizations including the American Public Health Association and the Association of Schools and Programs of Public Health as well as many schools and programs of public health have declared that racism is a public health crisis. However, to date, few schools and programs have offered courses that focus on the US history of structural racism and racial inequity (24).

Across schools and programs of public health, students have protested and advocated to close gaps in teaching about the impact of racism, demanding more than basic discussions of diversity and embracing activism to make their point. At the University of Washington School of Public Health in 2013, students participated in an antiracism training that led to a call for a new required competency on racism. After an incident between a staff member at the school and campus police raised concerns of racial profiling, the school adopted in April 2016 a new requirement for students to "recognize the means by which social inequities and racism, generated by power and privilege, undermine health" (32).

At the University of California (UC) Berkeley, the student-led course Decolonizing Bodies in Public Health explores institutional racism, white-savior narrative, human rights injustices, and

colonial ideologies (**http://decolonizingph.weebly.com/**). Inspired by this UC Berkeley course, students at the University of Michigan School of Public Health hosted a Decolonizing Public Health Teach-In in 2018, which led to the development of a course titled the Historical Roots of Health Inequities. At the Johns Hopkins Bloomberg School of Public Health, a collective of students, faculty, staff, and alumni formed LEAD (Liberate, Eradicate, Activate, Dismantle), which offered a workshop series on anti-oppressive frameworks in 2018.

In 2019, a member of a white supremacist group was convicted of first-degree murder in the stabbing death of a black man at a bus stop at the University of Maryland. In response, the University of Maryland School of Public Health expanded the concept of addressing racism as a public health issue directly by introducing a series of teach-ins hosted by subject matter experts sharing their research, practice, and expertise to inform antiracist practices on campus. The university's administration went further to post a message from the Office of Diversity & Inclusion in support of these efforts stating, "Words aren't enough. We have to act! We must learn to be antiracist in the face of racism whenever and wherever it occurs" (63). As the nation works to address the ongoing impacts of racism on health, such courses can serve as opportunities to inform and inspire effective community engagement programs.

RESEARCH

Most research in schools and programs of public health has historically excluded the involvement of nonacademic partners as collaborators. Systematic imbalances of power and privilege within the academy often limited the role of these partnerships to supporting predetermined research agendas and to assisting with study participant recruitment. We now know that research programs benefit greatly from community engagement, both in identifying key questions of importance and in implementing studies ethically and effectively (5). There is also much greater awareness that dissemination of interventions and the advancement of policies based on evidence require the experience, talent, and capacity of community agencies in the promotion of community change (58).

A common structure for engagement in research is the "community engagement core" in federally funded research centers. These programs generally serve to "communicate research findings and concepts to community partners and convey the voice of these communities to researchers within the center" (50). These efforts are highly variable. On the one hand, perfunctory meetings between community members and researchers can lead to little collaboration on research ideas. On the other hand, when researchers approach partnerships with an open mind and genuine interest in matters of concern to local residents, the result can be the codevelopment of important efforts for health.

Community-Based Participatory Research

One way to distinguish between low-value and high-value research collaborations is through the lens of community-based participatory research. This term represents an approach to addressing pressing issues germane to the beneficiaries of research, interventions, and policies that is based on a set of principles related to mutual respect, humility, and long-term relationships (see the sidebar titled Principles of Community-Based Participatory Research) (38, 66). This research has led to greater understanding and action to address community health challenges, as demonstrated through many examples (13, 34).

One of the earliest programs credited for the increased presence in the field of community-based participatory research is the W.K. Kellogg Community Health Scholars Program, which provided 40 postdoctoral fellowships to increase a cadre of trained faculty, many of whom are

PRINCIPLES OF COMMUNITY-BASED PARTICIPATORY RESEARCH

1. Recognizes community as a unit of identity.
2. Builds on strengths and resources within the community.
3. Facilitates a collaborative, equitable partnership in all phases of research, involving an empowering and power-sharing process that attends to social inequalities.
4. Fosters colearning and capacity building among all partners.
5. Integrates and achieves a balance between knowledge generation and intervention for the mutual benefit of all partners.
6. Focuses on the local relevance of public health problems and on ecological perspectives that attend to the multiple determinants of health.
7. Involves systems development using a cyclical and iterative process.
8. Disseminates results to all partners and involve them in the dissemination process.
9. Involves a long-term process and commitment to sustainability.

Principles quoted from Reference 37.

now faculty and leaders in organizations extending the reach and focus on community-based participatory research. From 2007 to 2012, this program furthered the capacity of community-based organizations to collaborate with academic researchers and practitioners to address their own challenges and to advocate for policies leading to reductions in health and health care disparities (9).

One best practice is for schools and programs of public health to provide intensive training in the skills of community-based participatory research. This training is often conducted with dyads of researchers and community organizations learning together. For example, Columbia University has a 10-session, 25-hour program for researchers and their partners, which includes the opportunity to receive pilot funding. Similar programs exist in public health schools and programs across the country. For example, the Division of Public Health Sciences at the Washington University in St. Louis has developed a Community Research Fellows Training program to "equip community members with the tools and resources to examine and address health disparities that exist among communities of color and medically underserved populations in the region" (43). Similarly, the Detroit Community-Academic Urban Research Center, a collaboration of community organizations in Detroit and academic researchers from the University of Michigan, established The CBPR Partnership Academy, a multifaceted training and mentoring program for new community-academic partnerships to build capacity for engaging in community-based participatory research approaches to eliminate health inequities (**https://www.detroiturc.org/cbpr-partnership-academy.html**). In Boston, staff from Strong Women Strong Girls and researchers from Harvard's School of Public Health participated in a year-long community-based participatory research academy. The result was a project to understand and address the mental health experiences and needs of women and girls in underserved communities (4).

Such collaborative training programs can help overcome a common point of failure for community-based participatory research: faculty who believe they have the requisite knowledge and experience to engage communities, when, in reality, they are not oriented sufficiently to the community's priorities to be effective (67).

Another best practice is to integrate the teaching of community-based participatory research in the curriculum, including support for students' theses and dissertations. One example of a dedicated course is a seminar at the University of Michigan, led by an interdisciplinary team of faculty,

which aims to provide instruction as well as to strengthen support for community-based participatory research across the university (26). There are similar courses at the University of Washington and at Johns Hopkins.

Schools and programs of public health should be aware that major funders are now investing in community-based participatory research. The Patient Centered Outcomes Research Institute has created funding opportunities to support training programs in community-based participatory research, and the National Institutes of Health and other federal agencies have acknowledged community-based participatory research as a method for identifying policy changes that promote health equity and for developing solutions to address health disparities.

PRACTICE

Public health practice refers to the actual work of health improvement. At the turn of the twenty-first century, public health schools began organizing academic efforts in and near communities that had complex relationships with sickness and disease prevention, in part because of the opportunity to study the causes of poor health (60). Today, the location of schools and programs represents a special responsibility to work with nearby communities to improve health outcomes, in addition to work that faculty lead in communities across the nation and around the world. The success of all these efforts depends on trust and respect, shared decision-making, and recognition of the strengths that each of the partners brings to the table (11).

Effective public health practice recognizes the central importance of place. In 2008, the World Health Organization Commission on the Social Determinants of Health found that "inequities in health [and] avoidable health inequalities arise because of the circumstances in which people grow, live, work, and age, and the systems put in place to deal with illness" (68, p. iii). This concept—that place matters—means that improving health requires addressing these structural issues in traditionally marginalized communities. In 2012, the Joint Center for Political and Economic Studies called for tackling the structures and systems that create and perpetuate inequality to fully close racial and ethnic health gaps. The Center's report emphasized the need to respect the significant knowledge of the local community and to allow residents to become leaders who mobilize their neighbors in advocacy for the welfare of their communities, from education and public safety to zoning regulations and environmental protection (41).

Schools and programs of public health can plant the seeds of successful practice efforts through mutual capacity building with community partners. Faculty and students can provide in-person training and webinars around such topics as data analysis, grant applications, and policy advocacy (31). Schools and programs of public health can also make research results and, where permissible, raw data available to community organizations for their own analysis and other uses. These efforts can lead to discrete collaborative efforts that build confidence for tackling larger challenges. One example is the Baltimore Equity Toolkit & Power Mapping dashboard developed by Lawrence Brown and his students at the Morgan State School of Community Health and Policy (**http://www.equitybaltimore.org/**). Community members helped faculty, staff, and students understand key local challenges and how they are experienced within homes and neighborhoods.

Collective Impact

One best practice is for schools and programs of public health to participate in efforts that embrace a collective impact approach, which recognizes that problems are too big to be solved by any one entity alone. Successful collective impact projects involve five key components: a common agenda, shared measurement systems, mutually reinforcing activities, continuous communication, and backbone support organizations (25) (see the sidebar titled Principles of Collective Impact).

PRINCIPLES OF COLLECTIVE IMPACT

1. Common agenda: While there may be disagreement across a range of issues, all the leaders involved must agree on the primary goals of the collaborative initiative.
2. Shared measurement systems: Data are systematically collected and reported on a set of indicators that can be used to continually assess progress and encourage learning and accountability.
3. Mutually reinforcing activities: While different partners play different roles in the system, their activities are strategically linked to the overarching plan that is determined collaboratively.
4. Continuous communication: This goal is achieved through regular face-to-face and Web-based interactions, in which partners in the initiative build relationships, trust, and shared vocabulary.
5. Backbone support organizations: An infrastructure exists—including dedicated staff—independent of the project partners to coordinate, facilitate, support, guide, and mediate the collaborative effort.

Principles quoted from Reference 42 and explanations quoted from Reference 16.

In Baltimore, for example, a collective impact effort called B'more for Healthy Babies has involved more than 100 public and private partners to improve long-term health outcomes for families, particularly pregnant and postpartum women, infants, and children (3). For more than a decade, this collective has developed public education campaigns to promote safe sleep and reduce infant mortality, centralized home-visiting programs, enhanced state and local policies, and made improvements within partnering organizations to better address systemic challenges (3). Working together, academic partners at Johns Hopkins and the University of Maryland have conducted extensive data analysis as well as created materials for evidence-based behavior change campaigns. Rates of infant mortality and other adverse birth outcomes have improved substantially (3).

In Texas, the School of Public Health at Texas A&M University in 2015 convened a project focused on high-impact diseases—including diabetes, infectious disease, and asthma—and their consequences across 27 counties in South Texas. The effort, known as Healthy South Texas, has, along with local health care providers and community members, brought together faculty in nursing, public health, pharmacy, and medicine, and collectively they have developed and launched a series of initiatives to improve health (33).

Practice efforts in community engagement should provide a leadership role for community members (61). In East Los Angeles, for example, a partnership between the University of California Los Angeles Fielding School of Public Health and the local YMCA, two high schools, and a local arts and civic engagement organization permitted teens to enroll in an elective course focused on social justice, health disparities, and social advocacy. The teens then helped to lead a local health improvement project called Proyecto MercadoFRESCO, which resulted in the conversion of two corner stores that previously sold mostly unhealthy foods into stores that offered a variety of healthy food options (52).

INSTITUTIONAL SUPPORT FOR COMMUNITY ENGAGEMENT

The community engagement work of schools and programs of public health can be more than the sum of discrete efforts in education, research, and practice. One best practice is for leaders of schools and programs to demonstrate institutional support to grow and sustain community engagement over time through strategic planning, academic infrastructure, and resources.

Mission, Vision, and Strategic Plans

Schools and programs of public health can adopt mission and vision statements that embrace health equity and the principles of community engagement and then back them up with strategic plans that incorporate these concepts into key and urgent priorities. In the process of creating a strategic plan, schools and programs can seek community input into key goals, priorities, and metrics.

For example, the School of Public Health at UC Berkeley has set the strategic goal to "deeply engage with communities working to disrupt systemic health threats and inequities, partnering with them on the path to healthy populations" (8, p. 13). The Johns Hopkins Bloomberg School of Public Health strategic plan states, "No matter where we work or the size of the populations we work with, our success depends on listening to the community and developing authentic partnerships that are grounded in mutual trust and respect for shared values and goals" (39, p. 19).

Assigned Responsibility

Although people at a school or program of public health may be involved in community engagement activities, it is useful for "a single individual in central administration" to be responsible for sustaining and supporting these efforts over time (17). This individual can champion community-engaged learning opportunities in the curriculum; be available to make connections to community organizations for research initiatives and practice projects; and foster the development of student, staff, and faculty organizations that pursue community engagement. Many schools and programs of public health have deans for practice, who could assume this role. Other options include a dean for diversity, inclusion, and community engagement.

Offices, Centers, and Institutes

Offices, centers, and institutes that focus on community engagement can grow long-lasting partnerships over time. These structures can support service-learning, community-based participatory research, and a wide variety of practice efforts with a consistent and empowered set of community partners.

At the Johns Hopkins Bloomberg School of Public Health, the community engagement and service-learning center, known as SOURCE, was established in 2005 to engage the Johns Hopkins University health professional schools and Baltimore communities in mutually beneficial partnerships that promote health and social justice. SOURCE operates on a partnership model in which community organizations join a network that provides opportunities for mutually beneficial collaborations. SOURCE has also created opportunities for internships, service days, collaborative action projects, and other connections for thousands of students and more than 100 community organizations each year (45).

Over time, SOURCE has become more deeply involved in the core educational, research, and practice efforts of the public health school. Since 2012, for example, SOURCE has offered specialized training in service-learning pedagogy for faculty and community partners. Over several years, SOURCE developed and implemented a methodology to review and designate courses as service-learning courses. In 2019, the senior staff of SOURCE joined the school's faculty and now work closely with departments across the key domains of community engagement.

Beyond the designation of a responsible academic administrator and the establishment of a focused office to lead efforts in community engagement, another best practice is for schools and programs of public health to expect that every office and department will embrace the

principles and activities of community engagement. Planned reviews of academic departments, for example, can include assessments of community engagement work, with input from community partners.

Community Advisory Boards

Schools and programs of public health can also encourage the development of community advisory boards and coalitions. These boards offer a formal mechanism for coordination across education and practice and provide a critical resource for community-based participatory research (57). The Johns Hopkins Center for Health Equity, for example, has an advisory board that is co-led by a faculty member and a community member; it includes representatives from 50 local and national organizations. The board meets on a quarterly basis to discuss methods of engagement and types of collaborations that may be beneficial to participating stakeholders and targeted communities. The community advisory board members participate in all phases of the Center's research and training programs, from formulation to dissemination, including the development of grant proposals; piloting and refinement of research procedures and materials; recruitment of study participants; training of staff and students; and authoring of manuscripts (20).

Similarly, the Urban Health Institute has a community–university coordinating council, which is made up of community representatives from the faith community, education, philanthropy, and local organizations as well as faculty and staff from across Johns Hopkins and other local universities. The council is cochaired by both a Hopkins representative and a community member and assists the Urban Health Institute in developing its work plan, reviews progress on the work plan, and provides budget recommendations.

Appointment and Promotion

Schools and programs of public health can promote community engagement by emphasizing its value in the academic promotion process. Aspiring researchers, educators, and practitioners can be guided through developing an academic career devoted to community engagement (14). Promotion committees can develop evaluation criteria for these activities based on those created by the National Review Board of the Scholarship of Engagement (40). These committees can obtain from community partners external review of candidates being considered for promotion and establish structures to reward faculty who lead service-learning efforts (28). As one example, the City University of New York School of Public Health developed promotion and tenure policies that incorporate teaching and service to community organizations (27).

Resources

Community engagement requires resources. School and program budgets can make funding available for community engagement activities, including critical service-learning, community-based participatory research, and collective impact efforts. Such funds can be structured as freestanding or matched with other external funding, and funders can require the appropriate sharing of resources with community partners themselves. For example, the Johns Hopkins Urban Health Institute launched in May 1999 after two years of planning that involved more than 150 community leaders, Johns Hopkins faculty, and staff. The Institute makes small grants and awards available to community partners, supporting more than 150 grants over time.

Beyond the resources available within their own institutions, schools and programs of public health can advocate for policy changes to support community engagement. These changes could include accreditation requirements for critical service-learning opportunities, new federal

funding priorities for community-based participatory research, and novel approaches to reimbursing collective impact initiatives and other community-based public health efforts that reduce health care costs.

CULTURE CHANGE

A key goal of institutional support for community engagement is to support an academic culture that embraces work with communities to achieve health improvement. Success requires overcoming a historic misconception of community health that emerged in the 1960s, when mental health professionals in New York saw the term "community" as synonymous with radical and racialized demands averse to the institutional interests of predominantly white academic institutions (2). In response, the institutions limited efforts to improve the health of surrounding neighborhoods, even to the extent of tying the hands of functional unit directors within schools and programs who were working on behalf of the community.

Today, schools and programs of public health can foster a cultural shift that embraces community voice and power sharing as fundamental to the success of academic efforts (24). This effort starts with attention to communication, both internal and external to the school or program. Because communication is malleable, operates on multiple levels of analysis, and fundamentally involves the coordination of meaning, it is a uniquely important focal point for change (53). Unlike the social determinants of health or the entrenchment of systemic racism, communication can be modified, both systematically and individually (53). Internal communication can inspire and lift up examples of effective community engagement as well as validate the importance of urgent health challenges facing communities. External communication as part of community engagement efforts in education, research, and practice can generate a new appreciation for problems and solutions and lead to meaningful change (35).

Workshops and Other Training

Interpersonal discrimination, whether implicit or explicit, impairs relationships and may serve as a barrier to effective community–academic partnerships. Workshops and other training can increase self-awareness of implicit racial and social class bias among faculty, staff, and students.

Schools and programs of public health can learn important lessons from interventions to reduce discriminatory behavior among health professionals and persons in other social sectors. Stereotype replacement, counter-stereotype imaging, individuation, and perspective are potential strategies to reduce individual-level prejudiced attitudes and behaviors toward socially marginalized groups. Interest is now emerging in bystander antiracism training, which prepares people to respond to incidents of interpersonal or systemic racism in the moment, as an organizational strategy because of its documented effectiveness and potential to change social norms toward intolerance of discrimination (1, 19).

The Undoing Racism workshops led by the People's Institute for Survival and Beyond are an example of training that can support effective community engagement. The organization's workshops seek to create change in knowledge and attitudes about structural racism, promote engagement in job-related racial equity activities, raise awareness about an organization's progress toward racial equity, increase understanding of factors that might be associated with personal engagement and progress toward organizational change, and expand knowledge about the role of race in the outcomes (1). Core to this program is the idea that racism has been consciously and systematically erected, and it can be undone only if people and institutions understand what it is, where it comes from, how it functions, and why it is perpetuated (1).

Improving Classroom Instruction

Schools can set in motion processes to examine their curricula to create opportunities to learn about community engagement and related topics, improve the classroom environment for students of diverse backgrounds, and support inclusive teaching practices (32).

Monitoring and Evaluation

The academic culture should embrace continuous improvement in community engagement efforts. Schools and programs of public health can pursue regular review and evaluation of community engagement efforts by monitoring the quality of training partnerships and the achievement of outcomes with an equity perspective (21, 30). However, there is a paucity of indicators and metrics for evaluating success in community engagement (46). A systematic search of six major literature databases through May 2015, focused specifically on community–academic partnerships, found few data on the characteristics of such partnerships and heterogeneity in descriptions of the processes used and the targeted outcomes. Recommendations from this review included using longitudinal or before-and-after data (6) and creating a systematic reporting structure of methods and characteristics to help with evaluation (23). Involving community members in the design and implementation of this oversight is an important element.

OBSTACLES TO SUCCESSFUL COMMUNITY ENGAGEMENT

In pursuing community engagement, schools and programs of public health should be aware of major obstacles to success, including mistrust by community members, imbalance of power, and unequal sharing of credit. Attention to these issues is critical to avoiding problems that can undermine progress.

Social groups that have often been marginalized—including ethnic minorities, religious and cultural minorities, sexual minorities, persons with low income, individuals who are incarcerated, and persons with physical and mental disabilities—and individuals working in community-based institutions serving these groups often mistrust public health professionals and researchers (54). This mistrust stems from historical events, beginning with the legacy of slavery and continuing with events such as the Tuskegee Syphilis Study (29) and the experience of Henrietta Lacks, the African American woman who was the unwitting source of the HeLa cancer cell line that led to many research breakthroughs (56).

Mistrust in institutions has been reinforced by centuries of discriminatory treatment in diverse settings, ranging from the educational system, to housing, employment, the criminal justice system, and health care. Ongoing discriminatory actions in diverse settings are manifested by physical violence, dismissive behaviors, denial of access to opportunities, lack of respect for persons and for their autonomy, bias and stereotyping behaviors in decision-making, poor communication, and lack of empathy when interacting with persons from at-risk groups and historically disadvantaged communities (18).

To overcome mistrust, public health researchers, practitioners, and policy makers can demonstrate trustworthiness in their interactions with community members and organizations. Trustworthiness has been defined as the ability to be relied on by others based on benevolence, integrity, and ability or competence (55). Organizational and interpersonal strategies enhance trustworthiness through open information systems, clear communication, person- and community-centered framing of messages, participatory approaches, and authentic leadership. Monitoring, reporting, and accountability also communicate trustworthiness.

Imbalances of power and power dynamics are embedded in the histories of intentional oppression and consequential social injustices (67). In academic and community partnerships, these

differences in status and privilege manifest in unequal practices of agenda setting, distribution of financial resources, data ownership, and publication rights.

Establishing an equal partnership structure and a balance of power requires deliberate and ongoing open and honest communication between community and academic partners. The knowledge and diversity of opinions of community partners should be valued to the same degree as that of the academic partners; otherwise, the credibility and integrity of the relationship, as well as the health improvements of the community, will be in jeopardy (67). Public health researchers and practitioners should make efforts to engage stakeholders in problem-solving and decision-making by eliciting their opinions and preferences and negotiating mutually beneficial agreements. Aligning the priorities and incentives of diverse stakeholders can be time-consuming and challenging; however, public health professionals should be patient and flexible, communicating clearly the importance of certain decisions for the integrity of the research or the implementation of the program while also respecting the concerns of stakeholders and working with them to arrive at mutually agreeable decisions.

The culture, expectations, and processes of community organizations and universities frequently do not align. Researchers often apply for grants prior to engaging with community partners, and there is little coordinated effort following a study on dissemination. In a national study, 73% of researchers reported spending less than 10% of project effort on dissemination (10). Decisions about academic credit-sharing and the dissemination of research findings and products are often left to those within the university (58). These actions result in perceptions by the community that the academic partner will control the research process, perpetuating feelings of exclusion.

Nearly two decades ago, the Agency for Healthcare Research and Quality commissioned a study on the evidence and evaluation of community-based participatory research to provide guidance on best practices for promoting community-based research (65). A set of general recommendations emerged to advance relationships between researchers and communities. In addition to active community input in planning the intervention and interpreting the data, manuscript preparation and translation of research findings into policy changes were cited as important to building and sustaining partnerships between public health institutions and communities. Guidelines such as these minimize the chances of unilateral control and increase the likelihood of shared credit and balance around authorship, dissemination, and translation efforts (65).

CONCLUSION

Community engagement is more than a skill to be taught and more than a strategy for successful research; it is more than a pathway to health improvement. Community engagement reflects the values that animate the field of public health, particularly the concept of social justice. Schools and programs of public health can embrace teaching, research, and practice in community engagement, create structures to support these activities, and strive to overcome the difficult legacy of past failures and other barriers to success. This work is challenging but essential because progress advances equity and improves health in communities all around the world.

DISCLOSURE STATEMENT

The authors are not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

AUTHOR CONTRIBUTIONS

M.L. created the outline for the article and wrote the first draft of the education section. J.B. wrote the first draft for the research section. A.G. wrote the first draft of the practice section. S.R. and

L.C. wrote the first draft of the culture change section. J.S. wrote the first draft of the introduction, the institutional support section, and the conclusion. All authors participated in a critical review of the entire document, and J.S. prepared the manuscript for submission.

ACKNOWLEDGMENTS

The authors acknowledge the research assistance of Haley Brahmbhatt and Trevor Wrobleski, who provided invaluable support with literature reviews and organizing citations. The authors also acknowledge our colleagues from schools and programs of public health and our community partners who work tirelessly to promote health and social justice.

LITERATURE CITED

1. Abramovitz M, Blitz LV. 2015. Moving toward racial equity: the undoing racism workshop and organizational change. *Race Soc. Probl.* 7:97–110
2. Adams ZM, Rogers N. 2020. "Services not mausoleums": race, politics, and the concept of community in American medicine (1963–1970). *J. Med. Humanit.* **https://doi.org/10.1007/s10912-020-09618-6**
3. AECF (Anne E. Casey Found.). 2018. *B'more for Healthy Babies, a collaborative funding model to reduce infant mortality in Baltimore*. Rep., Annie E. Casey Found., Baltimore, MD. **https://www.aecf.org/resources/bmore-for-healthy-babies/**
4. Agénor M, Qureshi F, Johnson K, Kacevich S, McAdams-Mahmoud A, Curlin J. 2018. Developing a community-academic partnership to promote mental health among underserved preadolescent girls in Boston, Massachusetts. *Prog. Community Health Partnersh.* 12:321–28
5. Ahmed SM, Palermo AG. 2010. Community engagement in research: frameworks for education and peer review. *Am. J. Public Health* 100:1380–87
6. Attree P, French B, Milton B, Povall S, Whitehead M, Popay J. 2011. The experience of community engagement for individuals: a rapid review of evidence. *Health Soc. Care Community* 19:250–60
7. Bennett D, Sunderland N, Bartleet B-L, Power A. 2016. Implementing and sustaining higher education service-learning initiatives: revisiting Young et al.'s organizational tactics. *J. Exp. Educ.* 39:145–63
8. Berkeley Sch. Public Health. 2015. *2015–2020 strategy*. Rep., Sch. Public Health, Univ. Calif., Berkeley. **https://berkeley-public-health-archive.s3-us-west-1.amazonaws.com/sites/default/files/2015-2020_Strategy.pdf**
9. Bowie J, Eng E, Lichtenstein R. 2009. A decade of postdoctoral training in CBPR and dedication to Thomas A. Bruce. *Prog. Community Health Partnersh.* 3:267–70
10. Brownson RC, Jacobs JA, Tabak RG, Hoehner CM, Stamatakis KA. 2013. Designing for dissemination among public health researchers: findings from a national survey in the United States. *Am. J. Public Health* 103:1693–99
11. Brush BL, Baiardi JM, Lapides S. 2011. Moving toward synergy: lessons learned in developing and sustaining community-academic partnerships. *Prog. Community Health Partnersh* 5:27–34
12. Butin DW. 2007. Justice-learning: service-learning as justice-oriented education. *Equity Excell. Educ.* 40:177–83
13. Cacari-Stone L, Wallerstein N, Garcia AP, Minkler M. 2014. The promise of community-based participatory research for health equity: a conceptual model for bridging evidence with policy. *Am. J. Public Health* 104:1615–23
14. Calleson DC, Jordan C, Seifer SD. 2005. Community-engaged scholarship: Is faculty work in communities a true academic enterprise? *Acad. Med.* 80:317–21
15. Cashman SB, Seifer SD. 2008. Service-learning: an integral part of undergraduate public health. *Am. J. Prev. Med.* 35:273–78
16. Christens BD, Inzeo PT. 2015. Widening the view: situating collective impact among frameworks for community-led change. *Community Dev*. 46:420–35
17. CIC (Comm. Inst. Coop.) Comm. Engagem. 2004. *Final report and recommendations: defining and benchmarking engagement*. Rep., CIC Comm. Engagem., Champaign, IL. **https://rede.ecu.edu/engagement/wp-content/pv-uploads/sites/397/2018/05/BenchmarkingEngagement.pdf**

18. Cooper LA, Beach MC, Johnson RL, Inui TS. 2006. Delving below the surface. Understanding how race and ethnicity influence relationships in health care. *J. Gen. Intern. Med.* 21(Suppl. 1):S21–27
19. Cooper LA, Beach MC, Williams DR. 2019. Confronting bias and discrimination in health care—when silence is not golden. *JAMA Intern. Med.* 179:1686–87
20. Cooper LA, Purnell TS, Ibe CA, Halbert JP, Bone LR, et al. 2016. Reaching for health equity and social justice in Baltimore: the evolution of an academic-community partnership and conceptual framework to address hypertension disparities. *Ethn. Dis.* 26:369–78
21. D'Agostino McGowan L, Stafford JD, Thompson VL, Johnson-Javois B, Goodman MS. 2015. Quantitative evaluation of the community research fellows training program. *Front. Public Health* 3:179
22. Dempsey S. 2010. Critiquing community engagement. *Manag. Commun. Q.* 24:359–90
23. Drahota A, Meza RD, Brikho B, Naaf M, Estabillo JA, et al. 2016. Community-academic partnerships: a systematic review of the state of the literature and recommendations for future research. *Milbank Q.* 94:163–214
24. Fleming PJ. 2020. The importance of teaching history of inequities in public health programs. *Pedagogy Health Promot.* **https://doi.org/10.1177/2373379920915228**
25. Flood J, Minkler M, Hennessey Lavery S, Estrada J, Falbe J. 2015. The collective impact model and its potential for health promotion: overview and case study of a healthy retail initiative in San Francisco. *Health Educ. Behav.* 42:654–68
26. Fontaine SJ. 2006. Integrating community-based participatory research into the curriculum. *J. Higher Educ. Outreach Engagem.* 11:45–56
27. Freudenberg N, Klitzman S, Diamond C, El-Mohandes A. 2015. Keeping the "public" in schools of public health. *Am. J. Public Health* 105(Suppl. 1):S119–24
28. Furco A. 2001. Advancing service-learning at research universities. *New Dir. Higher Educ.* 114:67–78
29. Gamble VN. 1997. Under the shadow of Tuskegee: African Americans and health care. *Am. J. Public Health* 87:1773–78
30. Goodman MS, Ackermann N, Bowen DJ, Thompson V. 2019. Content validation of a quantitative stakeholder engagement measure. *J. Community Psychol.* 47:1937–51
31. Griffith DM, Allen JO, DeLoney EH, Robinson K, Lewis EY, et al. 2010. Community-based organizational capacity building as a strategy to reduce racial health disparities. *J. Prim. Prev.* 31:31–39
32. Hagopian A, West KM, Ornelas IJ, Hart AN, Hagedorn J, Spigner C. 2018. Adopting an anti-racism public health curriculum competency: the University of Washington experience. *Public Health Rep.* 133:507–13
33. Healthy South Tex. 2017. *2016–2017 bi-annual report*. Rep., Tex. A&M Univ., Bryan, TX. **https://healthytexas.tamu.edu/files/2018/02/WEB-HSTX-33282-0218_Bi-annual_report.pdf**
34. Heaney C, Wilson S, Wilson O, Cooper J, Bumpass N, Snipes M. 2011. Use of community-owned and -managed research to assess the vulnerability of water and sewer services in marginalized and underserved environmental justice communities. *J. Environ. Health* 74:8–17
35. Hornick R, ed. 2002. *Public Health Communication: Evidence for Behavior Change*. Mahwah, NJ: Erlbaum
36. IOM (Inst. Med.). 1988. *The Future of Public Health*. Washington, DC: Natl. Acad. Press
37. Israel BA, Parker EA, Rowe Z, Salvatore A, Minkler M, et al. 2005. Community-based participatory research: lessons learned from the Centers for Children's Environmental Health and Disease Prevention Research. *Environ. Health Perspect.* 113:1463–71
38. Israel BA, Schulz AJ, Parker EA, Becker AB. 1998. Review of community-based research: assessing partnership approaches to improve public health. *Annu. Rev. Public Health* 19:173–202
39. Johns Hopkins Bloomberg Sch. Public Health. 2019. *The power of public health: a strategic plan for the future. FY 2019–2023*. Rep., Johns Hopkins Bloomberg Sch. Public Health, Baltimore, MD. **https://www.jhsph.edu/about/strategic-plan/download-options.html**
40. Jordan C. 2006. *Developing criteria for review of community-engaged scholars for promotion or tenure*. Peer Rev. Workgr., Community Engaged Scholarsh. Health Collab.
41. Jt. Cent. Political Econ. Stud. 2012. *Place Matters for Health in Baltimore: ensuring opportunities for good health for all. A report on health inequities in Baltimore*. Rep., Jt. Cent. Political Econ. Stud., Washington, DC. **https://www.nationalcollaborative.org/wp-content/uploads/2016/02/PLACE-MATTERS-for-Health-in-Baltimore.pdf**

42. Kania J, Kramer M. 2011. Collective impact. *Stanford Soc. Innov. Rev.* 9:36–41
43. Komaie G, Goodman M, McCall A, McGill G, Patterson C, et al. 2018. Training community members in public health research: development and implementation of a community participatory research pilot project. *Health Equity* 2:282–87
44. Koné A, Sullivan M, Senturia KD, Chrisman NJ, Ciske SJ, Krieger JW. 2000. Improving collaboration between researchers and communities. *Public Health Rep*. 115:243–48
45. Levin MB, Rutkow L. 2011. Infrastructure for teaching and learning in the community: Johns Hopkins University Student Outreach Resource Center (SOURCE). *J. Public Health Manag. Pract.* 17:328–36
46. MacQueen KM, Bhan A, Frohlich J, Holzer J, Sugarman J. 2015. Evaluating community engagement in global health research: the need for metrics. *BMC Med. Ethics* 16:44
47. Michener JL, Yaggy S, Lyn M, Warburton S, Champagne M, et al. 2008. Improving the health of the community: Duke's experience with community engagement. *Acad. Med.* 83:408–13
48. Mitchell TD. 2008. Traditional versus critical service-learning: engaging the literature to differentiate two models. *Mich. J. Community Serv. Learn.* 14:50–65
49. Natl. Acad. Sci. Eng. Med. 2016. *A Framework for Educating Health Professionals to Address the Social Determinants of Health*. Washington, DC: Natl. Acad. Press
50. NIEHS (Natl. Inst. Environ. Health Sci.). 2018. Environmental health sciences core centers. *Community Engagement Cores*. **https://www.niehs.nih.gov/research/supported/centers/core/coe/index.cfm**
51. O'Mara-Eves A, Brunton G, Oliver S, Kavanagh J, Jamal F, Thomas J. 2015. The effectiveness of community engagement in public health interventions for disadvantaged groups: a meta-analysis. *BMC Public Health* 15:129
52. Paskett E, Thompson B, Ammerman AS, Ortega AN, Marsteller J, Richardson D. 2016. Multilevel interventions to address health disparities show promise in improving population health. *Health Aff.* 35:1429–34
53. Perloff RM. 2006. Introduction: communication and health care disparities. *Am. Behav. Sci.* 49:755–59
54. Schmotzer GL. 2012. Barriers and facilitators to participation of minorities in clinical trials. *Ethn. Dis.* 22:226–30
55. Schnackenberg AK, Tomlinson EC. 2016. Organizational transparency: a new perspective on managing trust in organization-stakeholder relationships. *J. Manag.* 42:1784–810
56. Skloot R. 2010. *The Immortal Life of Henrietta Lacks*. New York: Broadway
57. Strauss RP, Sengupta S, Quinn SC, Goeppinger J, Spaulding C, et al. 2001. The role of community advisory boards: involving communities in the informed consent process. *Am. J. Public Health* 91:1938–43
58. Tableman B. 2005. *Universities working with communities: an evolving partnership*. Best Pract. Brief 32, Univ. Community Partnersh., Mich. State Univ., East Lansing. **https://community-wealth.org/sites/clone.community-wealth.org/files/downloads/paper-tableman.pdf**
59. Tam NT, Huy NT, Thoa LTB, Long NP, Trang NT, et al. 2015. Participants' understanding of informed consent in clinical trials over three decades: systematic review and meta-analysis. *Bull. World Health Organ.* 93:186–98h
60. Thomas KK. 2016. *Health and Humanity: A History of the Johns Hopkins Bloomberg School of Public Health, 1935–1985*. Baltimore, MD: Johns Hopkins Univ. Press
61. Thompson B, Molina Y, Viswanath K, Warnecke R, Prelip ML. 2016. Strategies to empower communities to reduce health disparities. *Health Aff.* 35:1424–28
62. Trebil-Smith K. 2019. *Perceptions of partnership: a study on nonprofit and higher education collaboration*. Rep., Iowa Campus Compact, Council Bluffs. **https://iacampuscompact.org/wp-content/uploads/large/sites/29/2019/03/Perceptions-of-Partnership_toWebsite.pdf**
63. Univ. Md. Off. Divers. Incl. 2020. Words aren't enough. We have to act! #UMDSolidarity. *Facilities Management*. **https://facilities.umd.edu/words-arent-enough-we-have-act-umdsolidarity**
64. US DHHS (Dep. Health Hum. Serv.). 2011. *Principles of community engagement*. NIH Publ. 11–7782, US DHHS, Washington, DC. **https://www.atsdr.cdc.gov/communityengagement/pdf/PCE_Report_508_FINAL.pdf**

65. Viswanathan M, Ammerman A, Eng E, Garlehner G, Lohr KN, et al. 2004. Community-based participatory research: assessing the evidence. In *AHRQ Evidence Report Summaries*. Rockville, MD: Agency Healthc. Res. Quality
66. Wallerstein N, Duran B. 2010. Community-based participatory research contributions to intervention research: the intersection of science and practice to improve health equity. *Am. J. Public Health* 100(Suppl. 1):S40–46
67. Wallerstein N, Duran B, Oetzel JG, Minkler M, eds. 2017. *Community-Based Participatory Research for Health: Advancing Social and Health Equity*. Hoboken, NJ: Wiley
68. WHO (World Health Organ.). 2008. *Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health*. Geneva: WHO
69. Wong K, ed. 2007. *Achieving the Promise of Authentic Community-Higher Education Partnerships: Community Case Stories*. Seattle, WA: Community-Campus Partnersh. Health