

Cooperative Extension as a Force for Healthy, Rural Communities: Historical Perspectives and Future Directions

Cooperative Extension (Extension), part of the land-grant university system, has been engaged in rural communities for more than a century. While the focus of Extension's efforts has largely centered on agriculture, there is an important thread of work that has similarities to public health.

As Extension settles into its second century, we are working to be even more engaged in efforts that improve the health and well-being of rural communities in particular. Extension faculty and staff are accomplishing this through direct-to-the-population education and through partnerships with more classically oriented public health organizations able to leverage Extension's networks and positive reputation in communities to engage them and improve their health. A component of these partnerships includes Extension faculty and staff increasingly engaging in policy, systems, and environment work and other initiatives that help ensure longer-term, systemic changes more likely to improve health outcomes.

In short, Extension clearly changed the agricultural system of the United States, and because of its reach into rural communities, it has the capacity to do for health in rural communities in this second century what it did for agriculture in the first century. (*Am J Public Health*. Published online ahead of print July 16, 2020: e1–e4. doi: 10.2105/AJPH.2020.305767)

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Cooperative Extension (Extension) has been helping rural people improve their overall health and well-being for more than a century. But most people know Extension primarily for its work with farmers and are not aware of its work with rural populations at large. In this commentary, we advance the notion that Extension, by working hand-in-hand with public health professionals, has an important role to play in addressing the health needs of rural communities both today and in the future.

ORIGINS OF COOPERATIVE EXTENSION

Cooperative Extension serves as an outreach and community engagement arm of the nation's land-grant university system. Land-grant universities were established by legislation enacted in 1862 that set aside federal lands to assist states in building state universities focused on the agricultural and the mechanical arts. Subsequent legislation in 1890, 1994, and 1998 expanded the land-grant family of institutions to include historically Black-, Native American-, and Hispanic-serving universities.¹ The Hatch Act of 1887 established land-grant university-affiliated agricultural experiment stations.¹

In 1914, President Woodrow Wilson signed the Smith–Lever Act, which formally established the Extension mission of these universities. The goal was to extend the teaching mission of the universities and translate the research findings of the experiment stations into a form that could be utilized by rural people. Early work focused on agriculture, family and consumer sciences (home economics), community leadership, 4-H youth development, economic development, and coastal issues. These are still a mainstay of Extension work today.

The Extension model was built on campus-based, doctorally prepared subject-matter experts providing training to county-based Extension agents who, in turn, would share what they learned with the public. The Smith–Lever Act mandated that Extension be cooperatively funded by federal, state, and local partners to ensure that communities felt ownership in the local Extension programs. Because Extension agents often live in the communities they serve, they possess a deep understanding of their communities'

social, economic, and environmental challenges.

In planning programs, Extension professionals use approaches also common in public health, which may include logic models as well as needs assessments that inform program development and delivery, and then evaluation and program refinement.²

EXTENSION AND RURAL COMMUNITIES

Rural Americans are different from their nonrural counterparts. They are “more likely to die from heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke than their urban counterparts.”³ But a recent report from the American Communities Project found that rural individuals and communities are also quite different from each other. While they tend to be more likely to be White, older, poorer, and less educated than the nation as a whole, there is variability on these measures across rural communities. For example, while residents of rural

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communities as a whole tend to be older, a large percentage of the residents of rural Hispanic, Mormon, and Native American communities are younger than 18 years. As a consequence, public health issues vary across these communities. Chinni and Pinkus, authors of the report, summarize by saying that rural America “is not a monolith.” Rather, “its wide ranging, evolving communities have different strengths, face different trials, and need different policy solutions.”⁴ Because rural communities are very different from one another, a one-size-fits-all approach to addressing their health disparities will not work. Accordingly, work focused on generating solutions to local public health-related issues needs to originate from within the community.

Extension administrators are encouraging Extension staff to join local health coalitions, contributing what they can to public health initiatives. These coalitions typically include representatives of government agencies, not-for-profit organizations, health care, businesses, and local residents. If no organized coalition currently exists, local staff recruit coalition members and lead solution-focused processes to generate community-owned solutions to issues they identify. While Extension staff tend to be expert teachers and facilitators, they know their limitations and seek partnerships with others who have skills that complement their own. They generously share credit for accomplishments and find joy in collaborative success.

FRAMING THE OPPORTUNITY

The pathway for increasing Cooperative Extension’s

expanded role in public health is outlined in several framing documents developed over the past several years. One example is the National Framework for Health and Wellness commissioned by the Extension Committee on Organization and Policy, which was released in 2013. The framework identified a set of system-wide priorities for Extension’s work related to health, all aimed at increasing “the number of Americans who are healthy at every stage of life.” In addition, it identified the public, private, and nontraditional partners with whom Extension should partner as it seeks to attract new resources, expand programming, and track outcomes.⁵

The framework, rooted in socioecological theory, was adapted from Bronfenbrenner’s ecological systems theory⁶ and encouraged Extension to establish implementation teams around six major programmatic themes. These include health literacy, chronic disease prevention and management, health insurance literacy, positive youth development, and health policy issues education through health implementation teams. A model representing this framework is available here: <https://bit.ly/2WznAaf>. Also identified in that framework was a theme focused on integration of nutrition, health, environment, and agriculture. A special task force exclusively focused on this theme developed the Healthy Food Systems, Healthy People report from the Association of Public and Land-Grant Universities.⁷

The report called “for collaborations and integration among agriculture, food, nutrition, and health care systems that have never before been explored or optimized.”^{7(p2)} It also challenged Extension to articulate the drivers of food choices and

community behavior, determine the impact of food on consumer health, define what constitutes quality food and improve accessibility to it, and improve education, outreach, and engagement. The document emphasized the importance of strategic partnerships between industry, academia, and the government in building food and health systems that improve the lives of all Americans. This report and a model representing the integration called for is available here: <https://bit.ly/3fqCFDJ>.⁸

INVESTMENTS IN COOPERATIVE EXTENSION

Because of its unique ability to catalyze community transformation, Cooperative Extension has been awarded several grants and contracts that capitalize on this strength. Beginning in 2014, funding was provided to 15 states through the Centers for Disease Control and Prevention High Obesity Program to implement strategies in high-obesity communities that increase access to healthier foods and promote physical activity. These projects leveraged Extension’s strong community engagement capacity, particularly evident in rural communities.^{8,9}

In 2017, the Robert Wood Johnson Foundation provided funding to the National 4-H Council for Extension staff to establish local health coalitions that develop and implement action plans to address public health priorities. Coalitions involve youth voice and action in a community change cycle, which includes working together, community assessment, priority setting, strategy selection, plan activation, and impact measurement.¹⁰

Cooperative Extension is also the largest provider of educational programming supported by the Supplemental Nutrition Assistance Program-Education program (SNAP-Ed) of the Food and Nutrition Service. In addition to providing nutrition education to SNAP-eligible audiences, SNAP-Ed staff have recently begun to implement policy-, systems-, and environment-level interventions that increase access to healthier food and physical activity.¹¹

In 2018, Cooperative Extension was awarded a Substance Abuse and Mental Health Services Administration Rural Opioid Technical Assistance funding opportunity to “develop and disseminate training and technical assistance for rural communities on addressing opioid issues.” Since 2019, 18 states have engaged more than one million people in rural communities with opioid misuse prevention messaging and interventions.¹² Finally, the US Department of Agriculture Rural Health and Safety Education Initiative supports Extension to collaborate with the state Office of Rural Health to deliver community-based outreach education programs with a focus on chronic disease and environmental health education, access to public health promotion and educational activities, and volunteer and health services provider training.¹³

THE ENGAGED UNIVERSITY

The Kellogg Commission on the Future of State and Land-Grant Universities challenged the United States’ public universities to re-engage with communities to address some of the nation’s most pressing problems, urging

universities to move beyond the comfort of their “ivory towers” and reconnect with people.¹⁴ Cooperative Extension is doing just that as it fulfills the land-grant mission of addressing the needs of people who historically did not have access to higher education, including those in rural areas who are now among the nation’s most unhealthy.²

The way Extension accomplishes its work is shifting to meet the changing demands of the time. Over the years, Extension used an expert model to disseminate agricultural research to rural and farm audiences through a variety of educational methods. But education alone is not always enough to change behavior, particularly when there are barriers to adoption. Thus, Extension is now working in new ways to address the social, economic, and environmental factors that are barriers to thriving in rural America.¹⁵ What follows are five bold steps Extension can take with its public health partners to do for the nation’s health in the next century what it did for US agriculture in its first 100 years.

Address Determinants of Health Via Coalitions

Local health departments and Extension both operate from a prevention-based orientation. In addition, both are committed to addressing social, economic, and environmental determinants of health through policy and systems change. Such change is frequently catalyzed by the work of multisector coalitions established to address local health issues or health equity concerns. As trusted and well-respected community resources, Extension and local health departments can work together to convene such coalitions or energize those whose efforts have stalled.

Connect Communities to Land-Grant Resources

Land-grant universities are large public institutions that possess a robust array of academic expertise potentially relevant to communities. Extension is well positioned to serve as a two-way connector between the campus and communities, helping those communities gain access to science-based knowledge relevant to their needs. Nineteen of the nation’s Council on Education for Public Health-accredited schools of public health are affiliated with land-grant institutions. By partnering with Extension, schools of public health have the opportunity to greatly expand the reach and impact of their public health practice units. Extension adds public health expertise to the array of disciplinary resources undergirding its community-based work.

In addition to its expertise related to commonly recognized lifestyle issues like obesity and physical activity, Extension has the capacity to leverage expertise in areas that have significant impacts on rural areas. These include entomology, veterinary medicine, water quality, food systems, vector-borne disease prevention, and engineering.

Restore Public Confidence in Science

Extension has a century-long history of communicating usable science in ways that make it understandable to individuals who may lack advanced formal education. Its success in convincing farmers to adopt science-informed production practices has resulted in our nation becoming one of the world’s leading producers of food. As trusted public servants, Extension personnel and community-based public health professionals are

well positioned to help rebuild trust in science. Some may choose to work together to conduct community-based participatory research projects that help community members actively engage in the discovery of new knowledge.

Engage New Technologies

It is likely that the COVID-19 pandemic will produce lasting changes in the way that people interact with one another. Because of its connection to land-grant universities, Extension has access to a wide variety of online learning platforms and other technologies available to support lifelong learning and collaboration. We believe that expanded use of these technologies will have positive impacts on how we collectively serve rural communities.

Capitalize on Youth Voice and Action

Currently, there are 100 million young people in the United States aged 25 years or younger. Unfortunately, young people are often viewed as problems to be managed rather than resources for positive change. History, however, reminds us that much of the social change across the world in the past century has been led by youths. Extension, as the administrator of the national 4-H youth development program, is well positioned to help mobilize youths in pursuit of a culture of health in every community in the nation. Youths can and should be active members of local health coalitions.

A FINAL WORD

In our view, Extension has been an underutilized partner in efforts to address the public health

concerns of rural America. With a 100-year history of work in rural communities, a network of more than 3000 county and regional offices, a broad portfolio of public health-related programming, and hard-wired connections to land-grant universities, we believe that Extension is well positioned to partner with the public health community to improve and address population health, and—in many cases—is already doing that. The work ahead is difficult, but, together, Extension and public health partners can help the people of rural America achieve a level of health and well-being they expect and deserve. **AJPH**

CONTRIBUTORS

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CONFLICTS OF INTEREST

Neither author has conflicts of interest to disclose.

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