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Extension's Role in Changing the Context of Health

Abstract

The Cooperative Extension National Framework for Health and Wellness calls on Extension professionals to operate in new ways that will shape "the context in which people grow, learn, work, and play" and to practice multidisciplinary and collaborative approaches in communities. In this article, we present three cases in Oregon as examples of how Extension faculty at Oregon State University are working to improve population health in rural Oregon communities in alignment with the Cooperative Extension National Framework for Health and Wellness. These examples highlight the roles Extension faculty can play in such work as well as associated successes and challenges.

Keywords: population health, community health, collective impact, collaboration

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Introduction

Crafters of the Cooperative Extension National Framework for Health and Wellness and others in Extension have called on Extension professionals to expand their work to encompass social, economic, and environmental determinants of health (Andress & Fitch, 2016; Braun et al., 2014; Braun & Rodgers, 2018; Rodgers & Braun, 2015). These priorities direct Extension to operate in ways that will shape "the context in which people grow, learn, work, and play" and to practice multidisciplinary and collaborative approaches in communities (Braun et al., 2014, "Program Priorities for Cooperative Extension" section).

In this article, we summarize three examples of how we have applied the National Framework for Health and Wellness in our rural communities as part of the Oregon State University (OSU) Extension Service Family and Community Health (FCH) program. The cases we present are Klamath County Blue Zones Project, Tillamook County Wellness, and Columbia Gorge Food Systems Project.

Cases

In Tables 1 and 2, we identify relevant demographics and roles of Extension faculty for the three cases. We then further explore the cases by describing each project and its structure, specifics of the roles of Extension faculty, and challenges and successes.

Table 1.

Regional Characteristics for Each Case

Characteristic	Klamath County	Tillamook County	Columbia Gorge: Hood River County	Columbia Gorge: Wasco County
Area (square miles)	5,941	1,333	533	2,395
Population size [a]	66,380	22,346	23,346	26,115
Race/ethnicity (%) [a]				
American Indian or Alaska Native	4.9	1.6	1.3	3.9
Asian	1.2	1.1	1.6	1.2
Black or African American	1.0	0.6	0.7	0.7
Hispanic or Latino	13.1	10.7	31.3	18.4
Native Hawaiian or Pacific Islander	0.2	0.3	0.2	0.8
White, not Hispanic or Latino	77.8	84.1	63.6	74.3
Two or more	4.2	2.8	2.5	2.5
Median household income [a]	$42,531	$45,061	$51,307	$42,133
Persons in poverty [a]	19.2%	13.9%	9.5%	15.5%
County health rankings in 2018 (out of 36) [b]	35	18	4	13
Top three employment industries [c]	Educational services, food services and drinking places, wood production and manufacturing	Educational services, food manufacturing, food services and drinking places	Crop production, food services and drinking places, professional and technical services	Crop production, food services and drinking places, professional and technical services

[a] U.S. Census Bureau, 2010. [b] University of Wisconsin Population Health Institute, n.d. [c] Etuk et al., 2019.

Table 2.

Roles of Family and Community Health Extension Faculty

Role	Klamath	Tillamook	Columbia Gorge
Disseminate research knowledge and best practices	✓	✓	×
Build relationships	✓	✓	✓

Engage partners and community members	✓	✓	✓
Conduct listening sessions	✓	✓	×
Gather, review, analyze data, including needs assessment findings	✓	✓	✓
Distill information and tailor information to partners	×	✓	✓
Distill information and tailor information to community members	✓	✓	✓
Identify champions	✓	✓	✓
Provide technical assistance on identifying community needs	×	✓	✓
Provide technical assistance on selecting evidence-based strategies	✓	✓	×
Identify resources, capacity, and gaps	✓	✓	✓
Provide training to build the capacity of partners	✓	✓	✓
Make presentations to decision makers and community members	×	✓	✓
Implement evidence-based strategies and programs	✓	✓	✓
Evaluate program impacts	×	✓	✓
Play leadership role in decision making and strategic planning	✓	✓	✓
Recruit and organize volunteers	✓	✓	✓
Prepare and submit grant applications	✓	×	×

Note. ✓ indicates faculty played the role, and × indicates the faculty did not.

Case 1: Klamath County Blue Zones Project

Description

Klamath County is a rural county in south central Oregon. Klamath Falls, a city in Klamath County, was selected as Oregon's first Blue Zones Project demonstration community in 2015. "Blue zones" are geographically defined areas where people live longer, have less chronic disease, and perceive having a higher quality of life (Buettner, 2010). Buettner (2010) identified attributes common to people in these regions, such as moving naturally, having the right outlook, eating wisely, and maintaining social connections. Based on these findings, Buettner designed the Blue Zones Project to influence the environment, policies, and social networks in a community (Sharecare, n.d.-a). Klamath Falls was selected to participate because of poor health indicators identified in the county's health rankings (University of Wisconsin Population Health Institute, n.d.) coupled with a readiness to undertake a large-scale initiative and contribute funding. Schools, worksites, restaurants, grocery stores, media, and faith-based and nonprofit groups implemented strategies to make healthful choices easier. Community partners worked toward the goal of being certified as a Blue Zones community within 3 years by meeting well-defined benchmarks. These benchmarks included number of participating sectors, number of new policies adopted, improvements in well-being, and other measures of

community health and vitality.

Structure

The Blue Zones Project structure consisted of a steering committee and sector committees. The steering committee was responsible for ensuring progress in achieving benchmarks. Sector committees developed goals and objectives for their sectors and then identified action steps. Community leaders serving on the committees did so on behalf of their organizations; others on the committees were Blue Zones Project staff or volunteers. Cambia Health Foundation and Sky Lakes Medical Center provided over $1 million for the project, which funded staff to manage the project, conduct assessments and evaluation, host trainings, and market the initiative.

Role of Extension

One FCH faculty member and staff from other Extension program areas, including agriculture, horticulture, food systems, and Supplemental Nutrition Assistance Program Education (SNAP-Ed), served on planning teams, the steering committee, and sector committees (see Table 2). Along with contributing subject matter expertise, they advised and directed committee activities. They brought partners and resources together to support the project with various endeavors, including collecting data, hosting forums, training volunteers, helping schools achieve the Blue Zones designation, supervising student interns, and obtaining additional funding. Extension faculty served as a voice for those not directly involved in project implementation, including low-income individuals, families, and farmers.

Challenges

The most challenging aspects of the Blue Zones Project were determining what role Extension faculty should play, ensuring that the messages and strategies resonated with diverse community members and organizations, and grappling with which organizations could claim ownership of the project outcomes, many of which were underway before the Blue Zones Project started. At the end of 3 years, Klamath Falls did not receive the Blue Zones community certification because of insufficient improvement in well-being as measured by the well-being index (Sharecare, n.d.-b).

Successes

The long-term investment by Extension in community health likely contributed to community readiness for a project such as the Blue Zones Project. The project had measurable impacts according to assessments Blue Zone staff conducted from 2015 to 2018 using predetermined certification criteria and community-defined metrics (Healthy Klamath, n.d.). For example, one in three people in Klamath Falls were highly engaged in the project, and community pride increased by 15%. Notable accomplishments included adoption of 20 policies addressing the built environment, the food system, and tobacco use. An online farmers market was established and began accepting Supplemental Nutrition Assistance Program benefits, and county government officials were instrumental in reopening a shuttered downtown grocery store. However, although tobacco use

decreased, the incidence of chronic diseases did not. Of course, the lack of change in incidence of chronic disease was not surprising due to the relatively short period of the project. It can take many years for community health interventions to affect rates of chronic disease. In 2018, Klamath County received the Robert Wood Johnson Foundation Culture of Health Prize in part because of these accomplishments and the strength of the partnerships that were developed. In 2020, efforts started by the Blue Zones Project are being sustained through continued work of the steering committee, sector committees, and city and county government as well as through funding from the medical center and the coordinated care organization (a network of care providers who serve participants in Oregon's Medicaid program).

Case 2: Tillamook County Wellness

Description

Tillamook County is a rural, coastal county. In 2016, the board of county commissioners declared a Year of Wellness and appointed a task force and hired a coordinator to take action to meet associated objectives. The objectives were to increase awareness of health services, expand health education, and promote low-cost programs for families and individuals. Subsequently, task force members wanted to continue collaborating, so the yearlong initiative gave rise to the Tillamook County Wellness coalition. Using public health data, coalition members focused on reducing risk factors for type 2 diabetes within 10 years through attention to five action areas: providing education about diabetes risk factors and prevention strategies, improving access to healthful foods, increasing access to physical activity, establishing closed-loop referral pathways for health care and social services, and supporting employers in implementing workplace wellness policies and programs.

Structure

Recognizing that risk of type 2 diabetes is related to social determinants such as housing, economic development, agriculture, and environment, the task force recruited coalition members from diverse sectors, including health and social services, tourism, forestry, utilities, education, government, and food production. Using county and grant funds, the county hired one full-time and one part-time coordinator and hired AmeriCorps VISTA service members. Community leaders from different sectors served as members of an advisory council that provided guidance and advocacy for the coalition. A leadership team provided oversight and direction for effective coalition function in areas including strategic planning, structure, and communication. The leadership team created five action committees to implement interventions and technical support teams that assisted with funding, evaluation, and community engagement.

Role of Extension

One FCH faculty member served on the leadership team that developed a process to create a strategic plan for the coalition (see Table 2). The role included providing technical support by contributing evidence-based resources emphasizing activities that focus on systems, environmental factors, and policies that reduce the risk of type 2 diabetes. The faculty member also designed and facilitated workshops for the coalition on topics including effective strategies for community engagement, evidence-based approaches for addressing type 2 diabetes, and use of public health data and evaluation strategies to measure short- and long-term outcomes.

One additional FCH faculty member and one SNAP-Ed educator participated as members of action committees.

Challenges

A major challenge to achieving objectives has been moving from idea generation to action. The coalition includes many community leaders able to effect change in policies, systems, and environment to support health, though it is often difficult for them to dedicate time and effort to the work. Having insufficient funds for dedicated staff to provide administrative support has contributed to the project challenges. Additionally, although there is a diversity of organizations represented, the coalition has struggled to include Latino community members. This challenge has limited the coalition's ability to create culturally relevant outreach tailored to this group's needs and interests. Another challenge has been evaluating impacts. Doing so is costly, and there are limited resources for measuring broad impacts of collaborative efforts to improve community health.

Successes

The Tillamook County Wellness coalition developed a shared vision and a structure for sustaining the effort. The initial Year of Wellness was a critical first step in catalyzing the momentum needed to form a broad coalition. Other key factors to success were paid staff, investment by the county, and support from county commissioners. In the first year, over 60 community organizations worked together to implement educational events on nutrition, physical activity, and mental health, and over 1,000 residents participated. These early successes helped secure $150,000 in donations and grant funds to support the coalition. In 2018, Tillamook County Wellness received the Oregon Health Authority Place Matters Award for outstanding leadership in chronic disease prevention. In 2019, the National Association of Counties Achievement Award in the health category was granted to Tillamook County for this work. During this time, Tillamook County's county health rankings improved, with the county moving from 23 to 10 in health outcomes and 16 to 14 in health factors between 2015 and 2020 (University of Wisconsin Population Health Institute, n.d.).

Case 3: Columbia Gorge Food Systems Project

Description

The Columbia Gorge region includes several rural counties along the Columbia River in north central Oregon, including Hood River and Wasco Counties. It is a region rich in food production. Yet in 2014 a community health needs assessment indicated that food insecurity was a top social and economic challenge (Columbia Gorge Health Council, 2014).

In 2015 the governor designated the effort to combat this food security as an Oregon Solutions project (Oregon Solutions, n.d.). The designation prompted funding for facilitation and project management support for 1 year. The goals were to create a coalition to cooperatively decrease food insecurity; to increase access to quality food throughout the Columbia River Gorge (pop. ~80,000); and to strengthen the entire food system in the region, from producers to consumers.

Structure

The coalition used the collective impact framework to develop the project team's structure (Kania & Kramer, 2011). The governor appointed two individuals to lead a team of over 30 organizations representing producers, distributors, social services agencies, health care providers, and community members to create a Gorge Food Security Coalition. The coalition started by analyzing the region's food system to determine gaps, priorities, and organizations' capacities for addressing the issues.

A member-nominated steering committee coordinated coalition meetings. The coalition formed two subcommittees based on identified priorities: a direct service and engagement work group for organizations that directly serve or engage people experiencing food insecurity and an infrastructure work group for organizations that are part of the food system infrastructure or serve as liaisons to farmers, grocers, and restaurateurs. To ensure commitment, each partner organization created a declaration of cooperation to specify its role and contribution to the mission of addressing food security in the region. The coalition identified Gorge Grown Food Network as the lead backbone organization.

Role of Extension

The one FCH faculty member working on this project played an instrumental role, identifying the need to secure resources and then directing development of the Gorge Food Security Coalition (see Table 2). The FCH faculty participated as a member of the steering committee and both subcommittees, providing informed insights based on knowledge of public health and social determinants of health. Other Extension program areas represented by those contributing to the collaborative work of the coalition included horticulture, small farms, master gardening, and SNAP-Ed.

Challenges

In the Columbia Gorge region, the community continues to wrestle with how to improve an entire regional food system that serves all of its communities equitably while addressing new challenges such as the COVID-19 pandemic. An ongoing challenge is understanding how to change policy to reduce poverty and address the root causes of food insecurity. When working with complex food systems, coalitions can become overwhelmed by the breadth of the problem. This scenario can cause a loss of focus and momentum and lead to fractured, unaligned efforts. Additional challenges included not having key food system members, such as farmers and grocers, at the table and lacking concrete and attainable goals and objectives as well as sufficient funds to support the work.

Successes

Early successes cemented the importance of the coalition's work. Local orchards provided added donations of fruit to the Oregon Food Bank; new food pantries opened, with several located at school sites; new sites for the summer lunch program were created; and a food distribution site for a tribal community was established. The FCH faculty member convened a subcommittee of nutrition educators from the coalition to develop a volunteer training program to provide nutrition and food education at more venues throughout the region.

Gorge Grown Food Network continues to support a robust food security coalition and commits funding for a full-time project manager to sustain the work of the coalition. Because of these efforts, the Robert Wood Johnson Foundation awarded the Columbia Gorge region the Culture of Health Prize in 2016 and The Dalles, a city in the region, was selected as a Blue Zones Program demonstration community in 2017.

Discussion

These three cases are examples of how we are working collaboratively to implement interventions to improve the context of health in Oregon communities in alignment with the National Framework for Health and Wellness (Braun et al., 2014). The projects differed with regard to population size, geography, socioeconomic factors, project scope, leadership structure, roles, partners, and funding. Despite these differences, the common contributions of the members of our author team included leadership, content expertise, and engagement of community members from multiple sectors (Table 2). Our subject matter expertise related to nutrition, food systems, agriculture, physical activity, public health, and leadership.

In our leadership roles, we applied theoretical models, recommended research-tested strategies, and provided historical context. We helped our coalitions define health in broad terms to include social determinants such as housing, poverty, and food security. We connected project goals to resources such as funding, research, and staff time. We also were able to engage new partners and convene Extension faculty from other disciplines to support community health. In addition, we sought to address the needs of groups of people or organizations that were unable to participate in the coalition. Through these actions, we enhanced the capacity of members of our teams to make informed decisions and take actions in a community-wide, collaborative project.

Although many factors promoted success, other factors presented challenges. Table 3 compares the projects according to factors for effective collaboration (Mattessich & Monsey, 1992), indicating which were present and which were missing. Our shared challenges were establishing common goals and objectives, acquiring sufficient funds to support ongoing work, and having a shared vision. Another commonality was the challenge of recruiting a diversity of community members to participate.

Table 3.

Factors for Effective Collaboration

Category	Factors for effective collaboration	Klamath	Tillamook	Columbia Gorge
Environment	History of collaboration or cooperation in community	✓	✓	✓
	Collaborative group seen as leader in community	✓	✓	✓
	Favorable political/social climate	✓	✓	✓
Membership characteristics	Mutual respect, understanding, and trust	✓	✓	✓
	Appropriate cross-section of members	×	×	×
	Members' perception that collaboration is in their self-interest	✓	✓	✓

	Ability to compromise	✓	✓	✓
Process and structure	Members' sharing stake in both process and outcomes	✓	✓	✓
	Multiple layers of decision making	✓	✓	✓
	Flexibility	✓	✓	✓
	Development of clear roles and policy guidelines	×	✓	×
	Adaptability	✓	✓	✓
Communication	Open and frequent communication	✓	✓	✓
	Established informal and formal communication lines	✓	✓	✓
Purpose	Concrete, attainable goals and objectives	✓	✓	×
	Shared vision	×	✓	×
	Unique purpose	✓	✓	✓
Resources	Sufficient funds	✓	×	×
	Skilled convener	✓	✓	✓

Note. ✓ denotes factors present, and × denotes factors missing

These projects demonstrated our capacity to work successfully in collaborations via the initiation of new policies, changes in built environments, procurement of additional funding, and receipt of statewide and national recognition. Our ability to cultivate the environments, processes, structures, and communication necessary for effective collaboration contributed to the success of the work. We drew on many resources to build effective collaborations (summarized in Table 4).

Table 4.

Resources Used for Case Projects

Resource name	**Source**
Collective Impact Framework	Kania & Kramer, 2011
Community Health and Group Evaluation (CHANGE) Action Guide	Centers for Disease Control and Prevention, 2018
Community Health Improvement Toolkit	Healthy Wisconsin Leadership Institute, 2016
Community Tool Box	University of Kansas, n.d.
Facilitator's Guide to Participatory Decision-Making	Kaner, 2014
Power of Collaborative Solutions: Six Principals and Effective Tools for Building Healthy Communities	Wolff, 2010
County Health Rankings	University of Wisconsin Population Health Institute, n.d.
Watershed Stewardship: Working Together to Create Successful	Adams et al., 2002

Groups

One of these resources (Kania & Kramer, 2011) outlined the principles of collective impact, which we used in all three projects. These principles are as follows:

- Members engage in frequent and open communication to build trust, assure mutual objectives, and create motivation.
- All participants share a common understanding of the problem and a joint approach to solving it.
- Organizations support and fund staff time for coordinating the initiative, convening partners, and guiding strategy.
- Diverse activities are coordinated through a mutually reinforcing plan of action.
- All participants agree on how success and progress will be measured and reported with shared accountability.

Another element critical to these projects was support from OSU Extension Service administration for faculty to shift work toward community collaborations and put less focus on direct education and classroom instruction. In 2014, the newly accredited College of Public Health and Human Sciences at OSU became the academic home for the FCH program. FCH then created a strategic plan for 2015–2020 that included a priority goal of fostering healthy communities, which guided shifts in FCH efforts. Additionally, the affiliation of FCH with the College of Public Health and Human Sciences provided faculty with added systematic support with greater access to campus faculty in relevant disciplines and added credibility to contribute expertise to public health efforts. These institutional frameworks were necessary for us to perform effectively in these three projects.

Successful engagement in collaborative population health initiatives in communities also requires consideration of how to present such work through scholarship. Although scholarship is an important way to demonstrate our service and impacts, community partners can perceive this scholarship as taking credit for all the work done by other partners in a collaborative effort. Therefore, it is necessary for us to demonstrate our contributions, value, and impacts through scholarship in a way that shares the spotlight and credit with partners and community members. One way to address this issue is to use a community-engaged scholarship approach, whereby Extension faculty and community partners work collaboratively in the development of scholarship.

Implications and Conclusions

For the past century, Extension has supported community health by delivering evidence-based information on food safety, nutrition, parenting, and other related topics. Although such work is still relevant, the Cooperative Extension National Framework for Health and Wellness (Braun et al., 2014) calls for Extension faculty to "test the capabilities of Cooperative Extension Service to guide communities toward creating a culture of health" (Braun & Rodgers, 2018, p. 10). As demonstrated in these three case studies, Extension faculty across multiple program areas provided leadership and subject matter expertise and had institutional supports for

successful outcomes in rural Oregon communities.

Changing the context in communities to improve population health and well-being requires collaboration across sectors, and Extension can be successful in these efforts if provided the support and resources to do this important work. To perform such roles, faculty need programmatic, systemic, and institutional policies that support working collaboratively in communities to create a culture of health.

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