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Creating a Farm Stress Extension Program

Abstract

Cooperative Extension programs are always evolving based on internal and external factors. The ability to recognize clientele needs, form teams, and deliver programs is Extension's mission. For the past five years, farm stress management has been an emerging program. University of Maryland Extension (UME) has taken several steps to assess, prepare and develop this focus area. The first step was a statewide needs assessment, which discovered elevated levels of farm stress when compared to previous years. As a result UME created the Farm Stress Management Team and sponsored professional development opportunities and supported program planning. Grant funding was pursued and UME received three projects totaling over \$640,000. These funds have supported a wide variety of activities including professional development, curriculum design, online resources, staffing, and counseling agreements.

Introduction

Farm families are feeling the pressure of an unstable and unreliable economy. As a result, finances, legal issues, and physical and mental well-being are at the forefront of agricultural concerns. Farmers and farm families have been forced to parcel off their land, file for bankruptcy, deny their children inheritance rights, and take secondary jobs off the farm to provide health insurance and supplemental income. These stressors can lead to mental and emotional distress, substance abuse, anxiety, depression, and suicide.

To address this concern, the University of Maryland Extension (UME) has developed the Farm Stress Management Program to help farm families navigate available resources and provide timely, science-based education and information to support prosperous farms and healthy farm families. In addition, UME includes education and outreach on mental wellness topics for farmers, families, and communities focused on developing resources to alleviate stressors driven by financial, legal, or mental health issues.

The purpose of this article is to describe the steps in developing a multi-level ecological approach (Figure 1; Braun and Pippidis, 2020) for a statewide Farm Stress Management program. The ecological approach involves intervening at the *individual* (e.g., the farmer), *interpersonal* (farm family), and *community* levels (e.g., service providers and institutions that farmers interact with). We describe our procedures for needs assessment and initial program development in the hopes that the model can be replicated across other Extension systems.

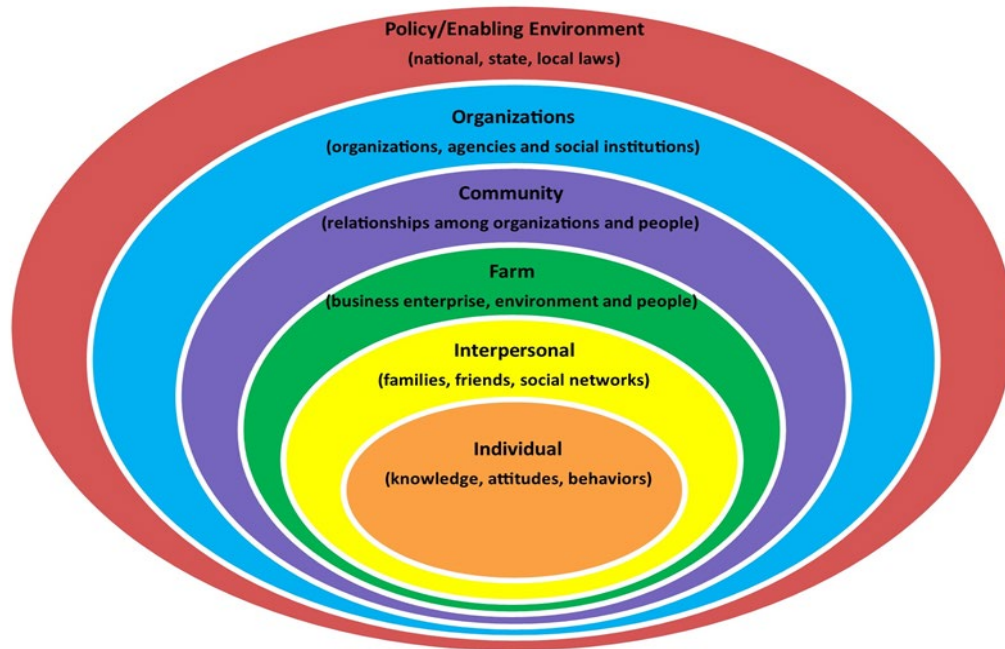


Figure 1: Farm and farm family risk and resilience socio-ecological model. Source: Braun and Pippidis, 2020.

Background

Instances of suicide, depression, and other mental health issues are on the rise throughout the country (CDC, 2022). Based on the State of Mental Health in America report (2022), Maryland ranked 4th out of 51 states (50 states and Washington D.C.) for the prevalence of adults with a mental health illness and 10th out of 51 states for the prevalence of mental illness and access to care as measured in both adults and youth. Additionally, 781,000 adults living in Maryland have a mental health condition (National Alliance on Mental Illness, 2021). Of those with a mental health condition, 252,000 adults in Maryland did not receive the mental health care they needed and 34% did not do so because of cost (National Alliance on Mental Illness, 2021).

There were 650 Maryland lives lost to suicide in 2020, and 188,000 adults had thoughts of suicide (National Alliance on Mental Illness, 2021). Suicide rates in Maryland have increased by 19%, from 9.1 to 10.8 deaths per 100,000 population, between the years 2015 and 2019 (America's Health Rankings, 2021). Centers for Disease Control and

Prevention (2018) found that farmers are about one and a half times more likely to die from suicide than the general population.

Many farmers, ranchers, and their families need assistance to cope with mental illness and suicide, but there is a lack of providers and resources that serve rural audiences. According to a survey conducted by the American Farm Bureau in December 2021, most rural adults and farmers are enduring more stress than in 2020 (American Farm Bureau, 2022). Maryland farms continue to have elevated stress levels due to internal and external factors affecting the family, production, and business.

Methods

Maryland farmer needs assessment

The first step in responding to the mental health crisis in the farming community was to conduct a needs assessment. These assessments began during the 2019-2020 annual production meetings. Participants were asked (n=517) to rate their stress level during the past month on a scale of 1 to 10 (1 as the lowest and 10 as the highest). Forty-two percent (42%) of respondents rated their stress level as a 6 or higher, and 26% rated levels as an 8, 9, or 10. Participants were also asked to rate their stress levels compared to the previous year. Forty-three percent (43%) of respondents rated their stress level as slightly higher or much higher than the previous year (Figure 2).

Participants then rated contributors to stress on the farm. The top three factors included financial (91%), government regulations (90%), and farming (84%) as the highest contributors to stress (Figure 3).

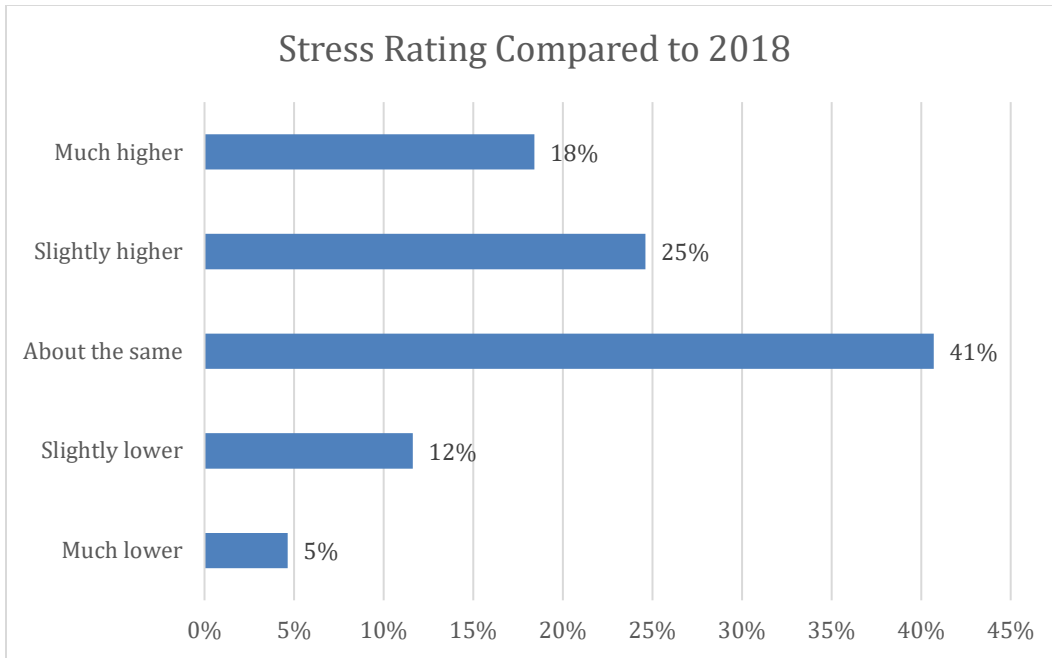


Figure 2. Stress rating by farmers from 2018 to 2019.

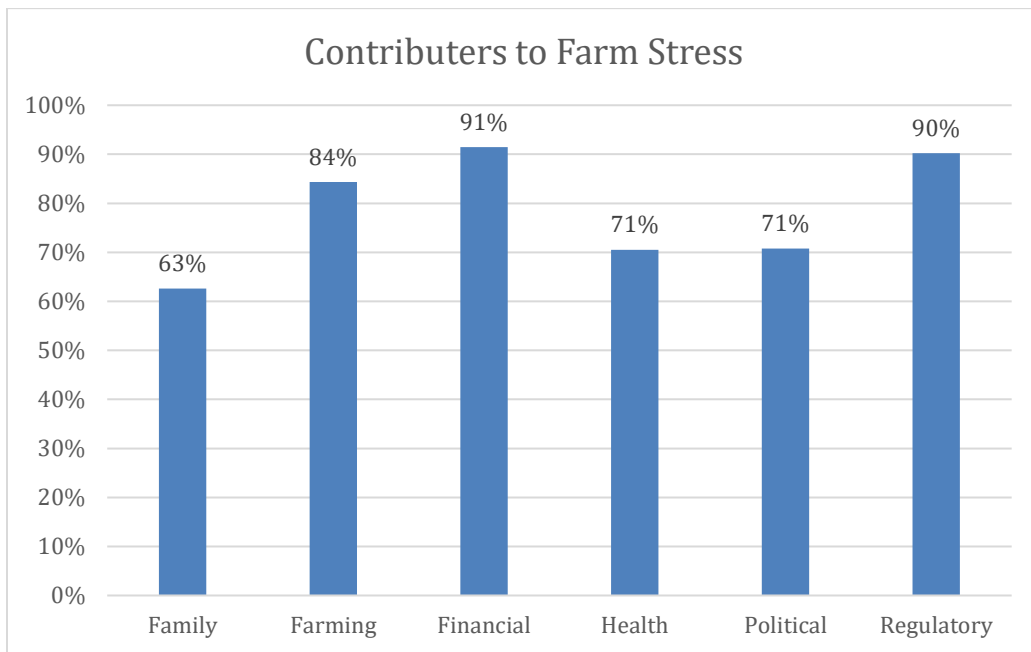


Figure 3. Farm stressors 2019-2020.

The following year (2020-2021), all winter meetings were held virtually due to COVID-19 closures and included another survey administered to agronomy and vegetable growers to answer questions about impacts on farms and businesses. Included in this survey was a rating for stress level and health. Sixty-six percent (66%) of the participants (n=446) rated the impact of COVID-19 on their stress level as either “increased a little” or “increased a lot”.

Winter meeting attendee demographics include representation from all 23 Maryland counties and Baltimore City. Of those attending, 73% were farmers, with 45% farming for more than 20 years. Other attendees include agency personnel and private industry. Participants were 70% male, with 54% of participants over the age of 45.

While the Farm Stress Program was being designed, a brief survey of Maryland agriculture service providers was conducted to understand perspectives on farm stress and mental health topics as well as the need for additional training and resources. The survey was sent to 54 providers and 21 responded (39%). The providers categorized themselves within the industries of government (29%), university (29%), commodity organizations (14%), and private industry (14%). Nearly all (95%), said that stress is an issue facing farmers. Yet, 52% did not feel they have the ability or tools to assist someone experiencing stress. Ninety percent (90%) would be interested in a program to increase their ability and skills and 90% were also interested in resources to share with farmers about their farm stress. Respondents estimated that they would share resources with 17–36 farmers.

The data from the needs assessments, paired with qualitative information when speaking to farmers, families, and agriculture service providers, presented UME with a solid beginning to the importance and development of a Farm Stress Management Program in Maryland.

Creating a team

UME promptly identified educators within the university from Agriculture and Food Systems (AgFS) and Family and Consumer Science (FCS) teams. These educators received training at the Michigan State Managing Farm Stress program and Mental

Health First Aid before the COVID-19 pandemic. Simultaneously the team began meeting to create curriculum and outreach materials and tools.

An advisory group was identified early in team formation, recognizing a need for feedback and guidance. Members from agricultural agencies, commodity organizations, farmers, and health providers were asked to engage with the team. This has been helpful as the statewide program was formed and implemented. The composition of the Extension faculty/staff team and the advisory groups is noteworthy. For example, well-connected AgFS educators have been critical in serving as “cultural brokers” between FCS educators and farmers. An AgFS educator’s introduction and endorsement of a presentation conducted by an FCS educator lend credibility to the farming population. On the other side of the programming spectrum, FCS faculty have been critical in developing statewide connections to mental health agencies that can serve farming communities.

Statewide and regional partnerships and collaborations are imperative. Team members actively work with partners from health care systems, the University of Delaware, and the Maryland Department of Agriculture. There is also participation in the Northeast Farm and Ranch Stress Assistance Network. As the team and projects have grown, the program has hired an emeritus faculty from the University of Maryland School of Public Health, a program coordinator, and two graduate assistants.

Forum results

A virtual forum was held in March of 2021 for the Farm Stress Management Team to solicit feedback about various topic areas in farm stress, available resources, and the agricultural industry that would further develop curriculum and materials. Broad invitations were sent through agricultural and health provider networks. Forty-two invitees participated in a two-hour session that included presentations and facilitated breakout discussions. At the beginning of the forum, participants identified the presence of these top 4 indicators of stress among Maryland farmers in the past year: Anxiety, Financial Worries, Depression, and Burnout.

Following the forum, participants were invited to complete a short survey. Over two-thirds (69%) preferred 1-5 hours of professional development done virtually and in person held mid-week. Participants rated their preferred topics for professional development topics on a scale of 1 to 10 (1 is the lowest and 10 is the highest). The results and mean scores include: Physical and Mental Health (8.69), Stress Management (8.46), Financial Well-Being (7.77), and Legal and Regulatory (7.33). The forum also created essential buy-in from partners to support and advocate for the program as it evolves.

Participants were asked to comment on forum topics and to provide feedback during the breakout sessions:

- “Reflecting on the meeting - please continue to tie these resources together, so that people understand the interconnection of physical and mental well-being with farm/financial/legal stress levels. It will reduce the barriers for people who need mental help but who still feel the stigma. Wrap all these topic areas into all outreach so if they say they need legal resources but are also curious about mental health resources, they get it all as a package.”
- “Great information. We need to continue to make the information sources available to ALL farmers, producers, growers, and landowners, especially our non-traditional, female, veteran, and beginning, new agriculturalists and conservationists. Including their families, relatives, friends, and others.”

Initial program development activities

In response to the data collected during the needs assessments and community forum phase, the interdisciplinary team has developed a multi-level approach to address farm stress targeting farmers, farm families, agriculture service providers, health care providers, and rural audiences. The goals of the program are to raise awareness, provide training, establish tools and create resources around the topics associated with mental health. The topics and delivery have been based on assessment, forum, and advisory comments to create a robust program.

Before widespread educational delivery began, the team formulated an outreach plan. Because mental health was a topic that UME’s farm clientele had not yet been exposed

to, an awareness of mental health programming had to be created ahead of offering any educational programs. The team accomplished this through several means:

- The team sponsored exhibits at regional agriculture conferences. Information about the purpose of the program and planned educational offerings were shared with attendees.
- The team visited winter production meetings hosted by county agricultural agents to promote the resources developed by the team
- The team shared information at farmer's markets, county fairs, and local health fairs.
- All UME field offices received outreach materials to display at their front desks as a passive form of raising awareness.

As awareness increased, demand for educational programs also began to rise. Educational programs developed by UME focus on mental health, communication, financial resources, and legal concerns. One of the core educational programs is the Observe, Engage, Share (OES) program. The OES program has been offered virtually or in-person and ranges in time from one-hour to four-hour training. Participants learn the warning signs of overwhelming stress, how to communicate sensitively, and which resources are appropriate to share with Maryland farmers. The training is structured similarly to other widely utilized mental health curricula, such as Mental Health First Aid. However, the content is tailored toward farm communities, and does not require a full-day commitment.

The team is currently in the process of collecting evaluation data on the OES program to establish its effectiveness. Additional educational programs were developed focusing on teaching healthcare providers about the culture of farming. All materials, tools, and announcements are included on the program website. It is updated regularly with new information, and a monthly newsletter is sent to a large database of contacts.

Conclusion

The steps to creating an effective Farm Stress Management program include:

1. Needs assessments conducted with both farmers and industry partners
2. Multidisciplinary team formation (e.g., agribusiness, legal, mental health expertise)
3. Statewide outreach at conferences, producer meetings, and agricultural events
4. Responsive program development and delivery with evaluation measures in place

Through these successful steps, funding and partnerships were created and have allowed this program to expand beyond initial intentions, including attendance at outreach events, offering customized training, and facilitating teletherapy sessions. The program has reached 1,789 participants through 35 events (as of June 30, 2022). Preliminary evaluation results of the four-hour OES program include (n=105) a 40% knowledge gained using pre and post-test and an 85% implementation rate of skills learned. In total, the team has received three awards totaling over \$640,000 through state, federal, and private funding. The effectiveness of the program was due to the systematic assessment of the need, the creation of a team, and team implementation.

Acknowledgements

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