

Perceptions of Stress, Mental Health, and Treatment in West Virginian Farmers

Introduction and Relevant Literature

Farmers often struggle with managing stress, utilizing appropriate coping strategies, and accessing mental health resources. They face a variety of stressors beyond their control as well as long hours and physically demanding tasks (Jo et al., 2016). Farming has been positively associated with increased rates of psychological distress and mental health conditions (Hagen et al., 2022). Farmers are also less likely than non-farmers to seek help for their mental health and may experience self-induced stigma related to mental health treatment (Brew et al., 2016; Hagen et al., 2019). The rural areas they live in may also limit social interaction and availability of medical treatment facilities (Brew et al., 2016). This study featured semi-structured qualitative interviews examine farmer perceptions of stress, mental health, and barriers to treatment organized around five major themes.

Stress is a natural human response that alerts one to challenges and threats in their lives (World Health Organization [WHO], 2022). Stress affects all bodily systems and can influence how people think and act. It can become problematic when it interferes with one's daily function. Long term negative stress affects chemical processes in the brain, cognitive ability, and memory impacting physical and mental health (Yaribeygi et al., 2017). Positive mental health is the state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and effectively, and is able to contribute to his or her community (World Health Organization, 2007).

Theoretical and Conceptual Framework

The biopsychosocial theory of health features the study of mental and physical health phenomena through a multi-systems lens, incorporating perspective from theories of the Biological, Physiological, and Social Environmental models. First introduced by George Engel in 1977, the theory was applied to guide this inquiry through a holistic approach (Bolton & Gillet, 2019). The theory considers interactions between biological, psychological, and social factors related to cause, manifestation and outcome of wellness and disease. Biological factors relate to the body's response to stress, which affect development and behavior (Tsuang, 2000; Kirkbride et al., 2024). Psychological factors relate to cognitive processes, motivations and coping skills (Gautam et al., 2024). Social factors like family circumstances, peer groups, and culture affect the way one develops skills. These guiding concepts are helpful to determine a complete, complex concept of well-being and health while emphasizing the importance of mental health prevention and promotion to overall well-being for everyone (Barry, 2001).

Purpose and Objectives

The purpose of this qualitative study is to explore the perceived influence of mental health among farmers in West Virginia (WV). The following objectives guided this inquiry:

1. Describe how WV farmers and the agricultural community perceive stress and mental health.
2. Identify perceived barriers for mental health treatment for rural communities and farmers.

Methods

This qualitative study utilized a descriptive phenomenological paradigm to focus on human experiences and the meanings the individual assigns to them. Interviews were conducted via Zoom with thirteen farmers and farm service providers. Those interviewed defined themselves as farmers, agricultural service providers, or those otherwise employed in agriculturally related businesses in WV. Participants were solicited by referrals from Extension Agents, and newsletters and Facebook posts from agriculturally related groups. Snowball sampling was also used by asking participants to refer other potential participants. Sample size was determined by saturation point, in which further interviews were not yielding new data (Braun & Clark, 2014; Guest et al., 2006). Participants were purposively chosen from to offer a wide perspective on the research questions. The group represented an age range of 27 to 72, and 6 identified as male and 7 as female; all participants were white and non-Hispanic, with participants from 11 different counties in WV.

Semi-structured interviews was chosen to provide depth and additional contextual information relating to farmer perceptions of mental health, barriers to treatment, and stigma in rural areas. Social constructivist epistemology was adopted, which suggests that there is no single reality or “*truth*,” as reality and knowledge are constructed through interaction and engagement with others (Crotty, 1998). The twenty-five question interview protocol was based on a similar study by Bondy and Cole (2020) and was submitted and approved through the appropriate Institutional Review Board system. When developing the protocol, importance was placed on what the most imperative themes from the literature review in order to cover a variety of information but keep the interview to a reasonable amount of time and stay focused on what might be relevant to WV farmers. After transcription, coding, and multiple reviews of each interview, the content was analyzed by thematic analysis around five themes: (1) awareness and availability barriers, (2) affordability barriers, (3) satisfaction of services, (4) stigma, and (5) coping with stress.

Efforts were made to increase trustworthiness and credibility at all stages of the research process (Lincoln & Guba, 1994). Examples of those efforts include using a standard interview protocol, recording interviews for others to appraise, systematically coding the responses into themes, and using a third party to determine the credibility of results from transcripts.

Findings and Discussions

Findings are presented around each theme from the interviews. Each theme will be described and supported with evidence from the interviews. Themes and evidence are directly related back to the supporting literature used for development of interview protocols.

Awareness and Availability

Many rural areas lack specialized mental health care professionals and clients often report difficulty in accessing resources and long wait times for services (Edbrooke-Childs & Deighton, 2020; Morales et al., 2020). Interview participant’s stories supported this notion for WV farmers. Emily was unaware of services that may exist in their area:

The only thing I know for any sort of mental health would actually come in the form of the hospital like a break, and I know you can go to the hospital, and they

can hold you for 24 hours to 3 days and that is all I would know to tell you is that if you are feeling that bad go to the ER and they will hold you, that is all I would know.

Farmers that are willing to seek treatment often struggle with finding and accessing mental health treatment. Interviewees discussed barriers including the lack of services available, a lack of awareness of services that already exist in their communities, and the overburden on the existing mental health facilities and personnel. Participants were often unaware of services and options for mental health treatment that actually were available in their area. When asked about access, Dianna said “there are a lot of people that you could go see, like a lot of professionals however, anytime you call them they’re like ‘Oh we can’t see you. We are booked out like six months in advance’.

Affordability

Patients in treatment may face high deductibles, out of pocket costs, and billing complications (Modi et al., 2020). Only two interview participants reported personal experience with mental health providers themselves, but others had some experience related to a friend or family member. Most admitted they had no idea if their insurance covers mental health care or what the cost of treatment might be. When asked about availability and affordability, Caroline explained:

I don’t even know. I guess there’s a therapist at our primary care doctor’s facility... there are telehealth options available, you know, everywhere. But they’re really expensive. And I am not sure how many people around here would get coverage, like with their insurance, or something like that but I don’t have personal experience with that either.

While four interview participants were able to identify options in their community, only one was able to identify a free or low-cost service in their community. Financial concerns are one of the largest stress factors for farmers (Yazd et al., 2019) and seeking mental health services may add to the worry over finances. Farmers may have difficulty deciding to seek services and pay for mental health care when they feel they should be handling their concerns themselves (Gunn et al., 2021; Hull et al. 2022). When prioritizing their spending and time, they often In Emily’s words “What holds me back is, is money. I've convinced myself that it's not worth it. You know I can do it myself. I'll figure it out. I'll talk to somebody, or I'll read something, and for the most part that gets me through.”

Satisfaction

Acceptability refers to several characteristics related to mental health treatment including a misalignment of patient preferences and what services are available. Delivery of mental health care services has expanded rapidly in the last few years as virtual and telehealth services grow (Hollander, 2020). Kent expressed his frustration at the lack of facilities, inadequate specialized service and deficiencies at the system level:

In our area and I think maybe in the state, it is very limited. Finding anyone that specializes at all, basic counseling is about all we have... I don’t think there is access, and I think that people that have severe mental health needs, there is not even a system in place to get that to them.

Virtual options have increased and as a therapeutic delivery method virtual or telephonic option function well related to privacy and accessibility in communities that have sufficient structure related internet access (Schure et al., 2018). Many of those in farm communities may not be familiar with what services are available or have a lack of comfort with the virtual or telehealth format. As Caroline explained “I’m hearing from people that can be a better option and a quicker option, but I am not familiar with it myself”. Franklin expanded, describing his frustration with virtual programming:

You know I'm so done with Zoom...there's nothing like being there face to face and when I can look you in the eye and, and see that you're there, and that I've known you, and that I've come to engage in a relationship with you of trust and confidentiality.

Only three interviewees indicated they had personal experience themselves with mental health treatment. Two of the others experienced difficulty when trying to find help for a friend or family member. Those that had participated in treatment themselves found experience helpful.

Stigma

Stigma exists at multiple levels, including self-induced stigma, community or social stigma, and stigma within the agricultural community specifically (Zomoro et al., 2022). Structural stigma and internalized stigma occur when cultural norms or institutional policies cause discrimination (Hatzenbuehler et al., 2014). Some interviewees conveyed internalized stigma. When Marshall was asked how he felt about receiving mental health treatment:

A bit embarrassed. I mean, I know it is a chemical imbalance, especially now that I have it regulated. But I am not so sure everyone in my circle does... I don't want it to reflect on my job and that sort of thing, you know? 'Did you know [Name] is going to a place where they talk about their feelings and takes medicine for his wackiness' and that sort of thing.

All participants felt there was at least some level of stigma toward mental illness in the agricultural community. Stigma in the broader community was cited by 12 out of 13 participants. Interviewees indicated there is anxiety in the agricultural community about being judged or what others will think. Rural populations, and farmers in particular, are accustomed to stoicism and self-reliance; they may fear the opinions of others if they learned about them receiving mental health treatment (Firnhaber et al., 2024).

Coping

Coping involves using specific strategies to deal with stress and difficult situations. Interviewees described coping tactics such as consulting others, going to church or praying, participating in physical activity, attempts to problem solve, or isolating oneself. Problem-focused coping strategies are generally productive, attempting to address the cause of stress through problem solving, planning, or accessing available information. Marshall discussed the difficulty in avoiding stressors and his use of problem focused coping:

I try to eliminate some of the things that cause too much stuff in your head and in your body. I try to find time to go fishing, or do something that I enjoy, and try to find some silence...So it's really hard to decompress, because while you're

decompressing you're thinking about all the stuff you should have been doing...
If I if I'm gonna decompress. I have to have a physical activity, something that
keeps me moving so I'm not reflecting on all those stressors, so to speak.

Emotion-focused coping emphasizes dealing with emotions that result from a stressor and covers strategies such as religion, humor, and emotional support. Andrew describes his need for connection and the importance of having someone to talk to about stress:

That is what makes the day go away sometimes when it is stressful, to go home and talk to your wife or whatever there. At least you can unload, and they can unload their stuff and go on. You know the way it is and that helps a bunch. So that you are not sitting there thinking about it.

While no coping strategy is inherently bad or good, some are less productive or can have harmful results. Avoidant-coping involves using strategies to avoid emotions and feelings related to stress. Some participants felt non-productive strategies such substance use or taking one's stress on someone else were common:

Maybe some of the issues are too close to home for them, and those are sometimes the ones that are hardest for us to talk about. You know, if it's finances, if it's you know, just again drinking too much or substance use.

Implications and Recommendations

In the United States, life expectancy in rural areas is 2.4 years less than that of metropolitan areas with heart disease, stroke, and heart attacks being common causes of death. All of these conditions are accelerated by stress (Singh & Siahpush, 2014). As rural residents, American farmers often have less access for mental health treatment and may experience stigma related to mental health treatment (Fox et al., 2018; Zomoro et al., 2022). Participants in the qualitative interviews were vocal about the stresses of their daily life and their concern for others in the agricultural community.

In addition to having a significant impact on mental and physical well-being this stress can increase the risk of suicide. Financial concerns, physical labor, interpersonal relationships, and the uncertainty of weather and prices, are all risk factors for suicide (Berry et al., 2011; Yadz et al., 2019). Two participants discussed their knowledge of suicides that had occurred, with one knowing four farmers that had died by suicide during her tenure as an ag service provider. Coping methods varied among the farmers, and they identified both productive and maladaptive coping strategies.

Mental health is a complex issue with many facets and problems that aren't easy to solve. Treatment is affected by availability, affordability and inequities in rural areas as well as stigma and cultural expectations. The additional context provided through these interviews provides valuable insight for ag service providers and mental health professionals. These findings may be used to develop additional resources to reduce stigma and encourage farmers to seek treatment, ultimately leading to higher utilization rate of mental health services by farmers.

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