

The Mental Health of Agricultural Workers

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Because of the difficulties intrinsic to agricultural work, it might be conjectured that agricultural workers are at risk for mental health problems. Relatively little research has examined the mental health of agricultural workers, however, and much of the research that has been conducted on the topic is dated. Despite the scattered nature of this research, the image that has emerged reveals a population at risk for the development of mental health difficulties.

This chapter reviews the literature on stress and mental health of farm owners, farm operators, and farm workers; highlights a model of stress and coping; and gives recommendations for future research.

Model of Stress and Coping

Individuals experience stress when faced with demands that require them to change in some manner. The state of stress has two components: the stressor and the stress response. A stressor is the source of the demand. It is the external or internal event that creates the demand. The stress response is composed of cognitive, affective, and physiological elements. For example, the stress response may involve levels of worry that may compromise an individual's ability to concentrate; feelings of apprehension, tension, and panic; and physiological reactions such as an accelerated heart rate, perspiration, tense muscles, and shallow breathing (1).

The severity of the stress that is experienced by individuals is influenced by the manner in which individuals cognitively appraise both the stressors and their capacity to effectively react to the stressors. Those individuals who appraise a stressor as more threatening are more likely to experience a greater stress response than individuals who sense that they have the capacity to respond constructively to the stressor. Thus, two individuals may experience the same stressor but experience different levels of stress.

Coping refers to individual's efforts to manage the stressors and/or stress. Two commonly mentioned categories of coping strategies are problem-focused coping and emotion-focused coping. Problem-focused coping occurs when individuals change the relationship between them and the environment. For example, individuals who experience stress stemming from their job may choose to change jobs.

Emotion-focused coping, on the other hand, refers to a change in the meaning of the relationship between the individual and the environment. In reaction to stressors that cannot be physically eliminated, such as the death of a loved one or the experience of chronic physical pain, an individual may rely on the emotional support of others, cognitively reframe his or her reaction to the situation, develop a healthy sense of humor, or develop more effective relaxation techniques. All of these would be considered forms of emotion-focused coping.

Figure 22.1 depicts this model of stress and coping. People first appraise the stressor event in light of their past experiences. For example, their inability to effectively cope with a stressor may negatively influence their appraisal when they encounter a similar stressor in the future. If they appraise the situation as threatening, then a stress reaction occurs, quickly followed by coping. After the coping responses are activated, there may be either a reduction in the level of stress or, in the case of severe or unrelenting stress, a reduction in the effectiveness of these particular coping strategies (a breaking-down in coping) and thus a further increase in stress. As will be discussed later, severe or unrelenting stress may have major mental health implications for some individuals. The model implies that people actively interact with their environments. The broken arrow in Figure 22.1 represents the notion that coping has an ongoing influence on an individual's experience of stress and vice versa.

Mental Health of Farmers

This section discusses the mental health of agricultural workers who own or operate their own farms. These individuals, in comparison to hired

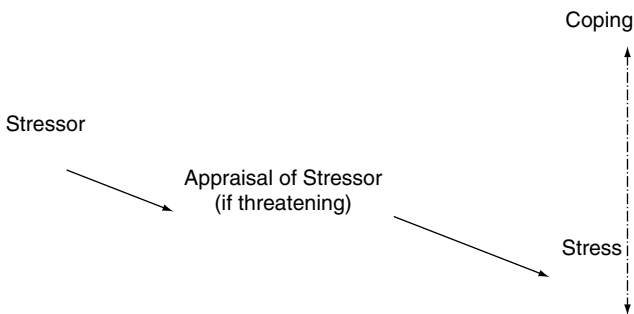


FIGURE 22.1. Model of stress and coping.

agricultural workers, play a major decision-making role in the operation of their farms. For the purposes of this chapter, when discussing individuals in this role, we will use the term *farmers*.

External Stressors

Demands stemming from outside the individual have a potential impact on an individual's internal state. Financial and economic difficulties are perhaps the most common type of external stressors experienced by farmers. In a study of farmer couples in Minnesota, Rosenblatt and Keller (2) found that greater economic loss, greater economic vulnerability as measured by economic indices, and patterns of blaming one's spouse for economic difficulties were related to increased stress. The farmers' perception of loss may be more significant than the actual amount of loss. For example, a farmer who loses 30 acres of a farm of 120 acres because of drought may experience more stress than a farmer who loses 250 of 1000 acres. Blaming a spouse for economic difficulties may occur as part of a farmer's attempt to cope. In trying to answer the question of why, a common attribution is that someone else (in this situation, the spouse) is responsible for the difficulties. This type of cognition may result in temporary relief, but it may eventually create tension within the marriage and create more stress in the long run.

In a sample from Iowa, Swisher et al. (3) found that, in comparison to men who did not farm, farm men reported significantly higher rates of financial losses, cuts in wages or salary, increases in debt loads, and limitations by banks on the sizes of loans. This study is one of the few studies that has directly explored the role of coping in farmers. In addition to the use of family support, the authors found that male farmers tended to utilize downward social comparisons (i.e., comparing themselves to others who were worse off) to cope with distress associated with financial and job-related stressors. The authors conjectured that the strategy of downward comparisons can enhance a farmer's sense of self. These comparisons remind farmers that things can be worse and that others have faced similar difficulties and have survived them. They also serve to reduce the stigma that is often experienced with economic difficulties, and they promote external attributions that are less threatening to self-efficacy.

Other studies have yielded purely descriptive findings. The purpose of these studies was to identify stressors that were commonly experienced by farmers. Murray (4), for example, explored the occurrence of stressors in a sample of dairy farmers in Pennsylvania. Over 90% of the farmers reported experiencing stressors in the following categories: financial management, business management, awareness of new technology, knowledge of law concerning agriculture, infrequent days off, and physical injuries/accidents. Weigel (5) found that Iowa farmers identified machinery breakdown, disease outbreak, accidents, and government regulations as stressors.

Rosenblatt and Anderson (6) reviewed factors related to tension and stress in farm families. In addition to the stressors already mentioned, they cited difficulties related to unpredictable weather, geographical isolation, high accident rates, invariant work demands, and seasonal variations in work demands and income. Invariant work demands represent heavy periods of work that are rarely interrupted by nonwork activities. This lack of flexibility often leads to stress and fatigue. Seasonal variations in work requirements represent the pattern of work in which farmers move back and forth between invariant work demands to periods in which the farmers have no pressing work demands. Such variations can result in stress emanating from, for example, a lack of togetherness time for farm families during heavy work periods and stress due to spending too much time with family members during the off-seasons.

Several researchers have documented a relationship between pesticide exposure and the experiences of stress and depression (7–11). This relationship is important to note because researchers have found an extremely high incidence of pesticide exposure in farmers. For example, Calvert et al. (9) found that agricultural workers were 35 times more likely to become exposed to pesticides in comparison to nonagricultural workers.

A common way to cope with external stressors is through the use of problem-focused coping strategies. The effectiveness of such coping methods may be limited for some farmers, however. In their discussion of rural psychology, Lefcourt and Martin (12) concluded that although farmers often experience a sense of competence and control in the daily actions of farming, they are likely to feel powerless in response to forces outside of the farming world such as the government and the economy. This is a form of learned helplessness, which has been shown to increase the risk for anxiety and depression (13).

Table 22.1 lists the stressors that are commonly experienced by farmers. Research exploring the full continuum of stress and coping is lacking. For example, few or no studies have assessed interactions between stress and coping in farmers, the direct impact of external stressors on stress and coping, or the influence of different types of coping on distress. Many of the studies reviewed thus far were conducted during the farming crisis in the 1980s. There is some question, therefore, about how exactly these findings generalize to today's farming environment.

Internal Stressors

Interpersonal conflict, along with role-related stressors, are the most commonly cited internal sources of stress for farmers. For example, Murray (4) examined the experience of stressors in Pennsylvania dairy farmers and found that most farmers stated that family conflict and problems with neighbors and other farmers were stressors. There appeared to be a link between these interpersonal stressors and economic concerns, depression,

TABLE 22.1. Stressors experienced by farmers.

External stressors

- Economic factors (low income or poor cash flow, seasonal variations in income, increases in debt loads and limitations by banks on loan sizes, high interest rates on loans, conditions of market prices, potential or actual loss of the farm)
- Structure of farming (long work hours, infrequent days off, high work load, seasonal variations in work demands, farming over long period of years, multitask nature of farming)
- Physical hazards associated with farming (pesticide exposure, fertilizers, equipment, animals)
- Health status (e.g., acute injuries, chronic health problems)
- Lack of medical care and health insurance
- Unpredictability of weather
- Physical environment (terrain, size of farm, types of crops harvested)
- Resource supplies (e.g., malfunctioning equipment, lack of labor equipment parts and animal chutes)
- Geographical isolation

Internal stressors

- Interpersonal stressors (e.g., interpersonal conflict with family, friends, and neighbors; divorce; social isolation)
- Role strains (due to role incongruence, intergenerational transfer of farms, lack of equality and influence in farm activities)
- Obligation to past, present, and future generations
- Consideration of possible career change

and substance abuse. For some farmers, substance abuse may represent an unhealthy form of emotion-focused coping (see Chapter 10).

Berkowitz and Perkins (14,15) found that marital dissatisfaction and lack of their husband's support were related to increased psychosomatic stress symptoms in married dairy farmer women in New York State. Their findings suggest that effective marital support plays a primary role in reducing stress and promoting health in farmers. Similarly, Weigel and Weigel (16) found that greater perceptions of family satisfaction were related to decreased stress in Iowa farmers.

Weigel and Weigel (17) used factor analyses to identify stressors and coping strategies in two-generation farm families in Iowa. Their first analysis identified the stressor factors of lack of equality (not having an important role in the operation of the farm); lack of teamwork (difficulties family members had in communicating and working together); value differences (between generationals in the family); and competition (the stressors related to combining work and family roles on the farm). Their second analysis identified the coping factors of faith, fun and physical activities, talking with others, and avoidance of problem. Faith represented strategies that were used to cognitively reframe the stressors. Each of these four coping factors represents a form of emotion-focused coping in that they were utilized in the effort to better emotionally and cognitively deal with stressors, rather than to change potentially stressful situations.

As noted by Carruth and Logan (7), some farmer women assume increasing responsibilities both on and off the farm. This allows husbands or sons to hold more lucrative off-the-farm jobs, thus decreasing the economic vulnerability of the family. This type of role shift, however, may lead to greater fatigue for farmer women and increase their susceptibility to stress.

In an early study, Berkowitz and Hedlund (18) explored the influence of role incongruence on stress in 20 farm families in New York State. The authors defined role incongruence as the husband's and wife's incompatible expectations and perceptions of the wife's role. Interview data indicated that high stress levels were evident in 30% of the families. Role incongruence was present in 83% of the families that reported stress, and in 0% of the families without stress. According to the authors, many farmer wives perform major labor and management functions by acting as partners with their husbands in the operation of the farm. Thus, the ability to define mutually compatible roles for the wife as the family moves through its life cycle may be crucial for healthy family functioning.

Some researchers have examined role-related stress that is associated with the intergenerational transfer of farms. The transferring of farms may lead to stress because of a variety of reasons. Intergenerational transfers may involve issues of authority, control, and the dividing of tasks and income. Critical role transitions may include attempts within the family to accommodate the younger generation while phasing out the older generation. Moreover, while the younger generation may strive for self-respect, autonomy, and a fair share of responsibility, the older generation may strive to maintain decision-making responsibilities, emotional and physical territory, and the respect they believe is merited by greater experience. Elements of sibling rivalry and competition may also be evident (19,20).

Hedlund and Berkowitz (19) found that intergenerational transfers were disruptive in 30% of the families they interviewed. Russell et al. (20) examined coping strategies utilized in response to intergenerational transfer stress in farm families in Kansas. A factor analysis identified the coping strategies of individual coping (self-reliance, keeping problems to oneself), discussion, use of professionals/professional consultation, farm management strategies (including membership in farm organizations), and expression of anger. Family members, for example, reported that individual coping was most helpful in combating stress and that expressing anger was least helpful. Although, in comparison to their children, parents reported that the transfer decision was more difficult, they also reported higher psychological well-being than did their children. This suggests that the above coping strategies were relatively more effective for parents.

Heppner et al. (21) examined coping strategies in Missouri farmers who were considering making a change in their careers. Most of these farmers had lost or were in danger of losing their farms through bankruptcy. The authors found that, for both genders, those farmers who were stressed and depressed were more likely to use emotion-focused coping rather than

problem-focused coping in reaction to the stress linked to their possible career change.

Finally, Davis-Brown and Salamon (22) noted that the obligation to past, present, and future generations felt by some farmers compounds the stress engendered by other stressors.

Table 22.1 summarizes the internal stressors discussed in this subsection. It seems apparent that emotion-focused coping strategies may be more accessible, if not more effective, than problem-focused coping in dealing with farm-related distress.

Consequences of Stress

Many authors have pointed out the impact that severe stress and stressors have on the physical health of farmers. For example, in a sample of North Dakota farmers, Eberhardt and Pooyan (23) found that increased time pressures—the experience of having too much to do and too little time in which to do it—were significantly related to increased episodes of physical illness during the previous 2 years.

In regard to farm-related injuries and death, it has been estimated that 10% of agricultural workers experience a disabling injury every year and that nearly half of all survivors of farm trauma are permanently impaired. Moreover, according to the National Safety Council, agriculture has consistently ranked second to mining in the number of work-related fatalities in the United States over the past 20 years. For example, for the year 2003, the fatality rate for agriculture was 20.9 out of 100,000 workers. In comparison, the fatality rate for mining was 22.3 and the fatality rate for all work-related deaths was 1.5 (24,25).

The cognitive and physiological features of stress increase the risk for farm-related accidents. These include the diminished ability to concentrate on tasks, impaired decision making, carelessness, weakened immune system functioning, fatigue, direct physiological responses such as shakiness in the hands, and chronic strain and consequent physical effects such as back pain.

Several studies have found that stress is indeed associated with farm injuries. For example, Thu et al. (26) discovered that Iowa farmers who reported high stress levels were 3.5 times more likely to have experienced a disabling farm injury than were farmers without high stress levels. Reis and Elkind (27) found that farm families in eastern Washington State consistently reported stress as the fundamental cause of farm injury and that they readily perceived the potential harmfulness and daily risks of their occupation.

Stueland et al. (28) examined predictors of injuries in farmer women in central Wisconsin and discovered that the total number of hours worked significantly predicted the occurrence of injuries, with most injuries occurring in the barn. Many of these women had assumed increasing responsibilities in farm work as their husbands sought higher paying work off the farm, thus

increasing the women's chance for injuries. Changing role responsibilities thus appeared to have an indirect effect on farm injuries.

Swanson et al. (29) found that farm injuries in children, in combination with economic stressors, greatly increased the stress experienced by farm families. Similarly, Linn and Husaini (30) found that the number of chronic medical problems, in association with ineffective social support, significantly predicted depression in Tennessee farmers. Such findings point to a cycle of stress and injury that becomes circular. Stress itself may lead to illness and injury. However, once illness or injuries occur, these physical problems themselves become stressors, leading to more stress and an even higher risk for illness and injury. Acute or chronic physical problems can layer themselves on top of other stressors to exacerbate an already stressful picture. Interestingly, farmers often coped by passively waiting until their problems went away.

Carruth and Logan (7) examined predictors of depression in women farmers in southeast Louisiana. Odds ratios indicated that those women who experienced poor health were eight times more likely to experience depressive symptoms than were women with good health; those with long-term exposure to perceived hazards such as pesticides and tractor use were six times more likely to experience depression; those who had recently experienced farm-related injuries were 2.5 times more likely; those who had been engaged in farming for over 20 years were 1.5 times more likely; and those who were divorced were five times more likely. The authors concluded that farmer women are at particularly high risk for depression due to their juggling of a multitude of farm and family responsibilities. These responsibilities add to feelings of isolation and loneliness in creating a depressive outlook.

Although several of the above studies focused on depression, there is much evidence that depression and anxiety often coexist. Thus it can be argued that farmers who experience severe stress are also at risk for anxiety disorders (31).

For some farmers, severe stress and depression in farm workers may lead to an increased risk for suicide. Gunderson et al. (8) studied suicide rates for the period of 1980 to 1988 among farmers in Wisconsin, Minnesota, North Dakota, South Dakota, and Montana. The suicide rate for farmers was 48.1 per 100,000 individuals. This rate is more than twice as high as the overall suicide rate for adults in the United States. Firearms and poisoning by gas were the most preferred methods of suicide. The authors attributed the elevated suicide risk in farmers to geographical and social isolation, medical underutilization, chronic diseases, disabling injuries, pesticide use and consequent depression, and access to lethal methods.

Stallones (32) compared suicide rates among farmer men in Kentucky, nonfarmer men in Kentucky, and men in the United States for the period of 1979 to 1985. Farmers had a higher suicide rate (42.2/100,000) in comparison to nonfarmers in Kentucky (30.1/100,000) and men in the United States (19.2/100,000). Stallones conjectured that hazardous work environments; increasing social and geographical isolation due to the ongoing decrease of

rural residents; the changing economic environment in agriculture, including unemployment and the decreased ability to run heavy equipment required by increased mechanization on farms; and the lack of emergency medical care and mental health services in rural areas contribute to suicide risk in farmers.

Mental Health of Hired Farm Workers

A hired farm worker is an agricultural worker who is hired to work on a farm that someone else owns. Hired farm workers are usually hired contractually on a piecework basis—the more fruit they pick, for example, the more money they are paid.

The population of hired farm workers is composed of both migrant and seasonal farm workers. Migrant farm workers are individuals who migrate from one place to another to earn a living in agriculture. Seasonal farm workers, in contrast, earn a living in agriculture but live in one location throughout the year. Migrant farm workers generally live in the southern half of the United States during the winter months and migrate north before the planting or harvesting seasons. The population of migrant farm workers is ethnically diverse, with ethnic composition differing according to region of the country. For example, the majority of migrant farm workers in the Midwest stream are of Mexican descent, and many of these individuals are immigrants.

In a sample of Mexican-American farm workers in central California, Vega et al. (33) found that environmental stressors and reduced physical health status were related to high levels of psychological distress as measured by the Health Opinion Survey, a measure of general psychopathology. In addition, they found that individuals aged 40 to 59 years reported elevated distress in comparison to other age groups. They conjectured that middle age is an especially high-risk period for farm workers since significant occupational and life hazards exist to progressively degrade farm workers' health and functional capacities. Vega et al. concluded that the high frequencies of environmental stressors and hazardous working conditions experienced by Mexican American hired farm workers place them at extraordinary psychological risk.

Hovey and Magaña (34–37) studied Mexican migrant farm workers in Ohio and Michigan. They found that the farm workers experienced relatively high levels of anxiety and depression. Nearly 40% of the farm workers revealed significant depression on the Center for Epidemiologic Studies–Depression Scale (CES-D). Typically about 20% of individuals from the general population have depression on the CES-D. About 30% of the farm workers demonstrated anxiety on the Personality Assessment Inventory (PAI). Typically about 16% of the general population indicates anxiety on the PAI. The authors found that high acculturative stress, low self-esteem, family dysfunction, ineffective social support, low religiosity, and a lack of control

and choice in the decision to live a migrant farm-worker lifestyle were significantly associated with greater anxiety and depression. It thus appears that positive self-esteem, effective family and social support, and religiosity may serve to help migrant farm workers cope against anxiety and depression.

In addition to collecting quantitative data such as the above, Hovey and his research team (38,39) collected interview data from each participant in their effort to explore the experience of being a migrant farm worker. As part of each interview, the interviewer probed for information regarding stress and coping by asking the farm workers about their perceptions of the difficulties that they had encountered as migrant farm workers. The interviews were conducted in an open-ended format so as to generate data in the participants' own words. Through the use of content analyses, the narrative data were organized thematically. These analyses resulted in the identification of 23 stressor categories that represent the stressors that the farm workers commonly experienced. These are listed in Table 22.2.

The narrative data also suggested that many migrant farm workers utilize an inactive coping style. The migrant farm workers frequently perceived the stressors of rigid work demands, poor housing conditions, hard physical labor, exploitation, and unpredictable work as external, uncontrollable, and unchangeable. Their perceptions ("This is how life is . . . we just put up with it") appear to reflect the chronic nature of their stresses. Given this chronicity, some migrant farm workers have difficulty identifying immediate mechanisms for coping, which may lead to a learned helplessness similar to that mentioned earlier for farmers. This inability to avert ongoing stress creates an increased susceptibility for anxiety and depression (38,39).

Implicit in the stress model is the notion that two migrant farm workers, for example, may experience the same stressor(s) with equal frequency and duration, yet may not experience the same severity of stress. This is because one of the farm workers may appraise the stressor(s) as relatively more threatening, thus inducing more stress.

To more precisely explore the relationship of migrant farm worker stress to anxiety, depression, and other mental health indicators, Hovey (40) developed the Migrant Farm Worker Stress Inventory (MFWSI). The MFWSI measures both the type of stressors experienced by migrant farm workers and the severity of stress experienced in response to the stressors. Respondents rate each of the 39 items on a five-point scale (0 = "have not experienced"; 1 = "not at all stressful"; 2 = "somewhat stressful"; 3 = "moderately stressful"; 4 = "extremely stressful"). The MFWSI items are listed in Table 22.3. Possible overall MFWSI scores range from 0 to 156.

After its validation, Hovey (41–43) utilized the MFWSI in a large-scale project that examined the mental health of migrant farm workers in western Colorado. Data particular to the scale itself are summarized in Table 22.3. The mean scores and standard deviations of each item are given, according to gender. Gender differences were evident for several items. For example,

TABLE 22.2. Stressors experienced by migrant farm workers.

Being away from family or friends
Hard physical labor/physical pain related to farm work
○ Difficulties due to the actual work itself:
■ Difficult physical nature of work
■ Physical pain and health consequences related to work
■ Not having enough water to drink while in the fields
Rigid work demands
○ Difficulties associated with the structure of the work environment:
■ Long hours
■ No days off
Unpredictable work or housing/uprooting
○ The unpredictable nature of finding work or housing
○ The feeling of instability due to constantly being uprooted
Poor housing conditions
Low family income/poverty/poor pay
Limited access to health care
Language barriers
Geographical and social isolation
○ Being physically isolated
■ Difficult to meet people
■ No place for grocery shopping
Emotional isolation
○ Inability to confide in others
○ Keeping feelings inside rather than sharing feelings with others
Lack of transportation/unreliable transportation
Education of self or children
Discrimination from society
Exploitation by employer

women were more likely to feel worried about being deported and not having a work permit. Men, on the other hand, were more likely to feel unsettled and to worry about transportation and the structural demands of farm work. The table also rank-orders each of the 39 items. Language difficulty is the highest endorsed stressor for women (fourth for men), whereas being away from family members is the highest endorsed stressor for men (second for women). In regard to overall MFWSI scores, greater migrant farm worker stress was heavily linked to lower self-esteem and social support and greater hopelessness, anxiety, depression, and suicidality.

Hovey's overall work in the area of farm-worker mental health suggests that migrant farm-worker stress—defined as the stress resulting from the stressors associated with the migrant farm-worker lifestyle—increases the risk for hopelessness, anxiety, depression, and suicide. His work has also identified possible coping resources including family support, social support, self-esteem, religiosity, and hopefulness for the future. Healthy usage of these

TABLE 22.2. Stressors experienced by migrant farm workers. (continued)

Lack of day care and supervision of children
○ Worries over not having anyone to supervise their children while they worked
Socialization of children
○ Worrying about possible negative influences in the social environment of their children
■ Drug use
■ Fewer moral values of friends of children
Loss of spouse
○ The spouse no longer being in the home
■ Death of spouse
■ Spouse leaving
■ The spouse being kicked out of the home
Domestic abuse/poor spousal relations
Undocumented status
Acculturating to new environment
○ Lack of familiar foods
○ Lack of Spanish-language media
Migration experience
○ Stressors related to the migration experience itself
■ Owing money to individuals who helped them cross the border
■ Dangerous situations such as swimming across polluted waters or walking extremely long distances in the desert to avoid being caught by immigration authorities
Paperwork for social services
Responsibilities specific to being a woman
○ Duties that some view as belonging solely to women
■ Husband not helping with childcare and household duties because it is the responsibility of the woman

Source: Data from Hovey and Magaña (38) and Magaña and Hovey (39).

coping strategies may influence one's appraisal of stressors and lead to reductions in stress, anxiety, and depression (44).

Clinical Implications

Although much work remains to be done in terms of elucidating the phenomenology, risk factors, and effective treatments for mental health problems in agricultural workers in the United States, the current literature does provide some guidance for physicians serving this population. First, it is important for physicians to understand the link between the physical symptoms (including those that result from pesticide exposure) that farmers and farm workers may present with and common mental health problems faced by these groups. Because physical health problems and injuries are a major source of stress for farmers and farm workers and can lead to secondary

TABLE 22.3. Migrant Farm Worker Stress Inventory (MFWSI): mean stressor scores and stressor rankings from Western Colorado.

Item numbers and stressors	Female rank	F for females	Male rank	M for males
(01) I have difficulty communicating in the English language.	1	2.93	4	2.48
(08) It is difficult to be away from family members.	2	2.91	1	3.29
(37) I have difficulty understanding others when they speak English.	3	2.79	7	2.41
(06) I worry about not having medical care.	4	2.77	5	2.45
(05) I have not been able to buy things because of lack of money.	5	2.70	2	2.98
(38) I worry about my children's education.	6	2.64	9	2.34
(14) I worry about not having a permit to work in this country.	7	2.57*	20	1.68
(39) It bothers me that other people use drugs.	8	2.38	3	2.61
(30) I worry about being deported.	9	2.35*	29	1.39
(31) Migrating to this country was difficult.	10	2.07*	28	1.44
(25) It bothers me that other people drink too much alcohol.	10	2.07	14	1.98
(23) It is difficult to be away from friends.	12	1.98	13	2.10
(29) I sometimes have difficulty finding a job.	13	1.84	14	1.98
(26) I sometimes worry because I do not have reliable transportation.	14	1.71	9	2.34*
(09) I have had to adjust to the different foods in this country.	14	1.71	8	2.37*
(18) I find it difficult to talk about my feelings to other people.	16	1.70	19	1.73
(13) Sometimes I don't feel at home.	17	1.54	17	1.79
(07) At times I have to work long hours.	18	1.46	11	2.26*
(35) It is difficult to complete the social services paperwork.	19	1.38	24	1.60
(02) I have to work in bad weather.	20	1.36	12	2.22*
(03) There are not enough Spanish radio or television shows in area.	20	1.36	22	1.65
(11) Because I feel isolated, I find it hard to meet people.	22	1.34	23	1.64
(20) I worry about not having day care for children while working.	22	1.34	35	0.83

mental health issues, it is important for physicians to routinely screen for mental health difficulties as part of the physical exam. This can be done relatively quickly either with a brief interview during the course of the exam or with one of several paper-and-pencil screening instruments (e.g., the Beck Depression Inventory and the Beck Anxiety Inventory). Because of the increased risk for suicide observed in this population, it is advisable for physicians to include at least a few brief general mental health screening questions even in routine physical exams. Moreover, the risk for suicide, coupled with the risk for substance abuse disorders, should be considered when decisions are made regarding pharmacological treatments.

TABLE 22.3. Migrant Farm Worker Stress Inventory (MFWSI): mean stressor scores and stressor rankings from Western Colorado. (continued)

Item numbers and stressors	Female rank	F for females	Male rank	M for males
(24) I worry about the values that my children are being exposed to.	24	1.32	27	1.46
(21) Because of FW, I don't have time to get things done outside work.	25	1.25	18	1.78
(17) I worry about my relationship with my partner.	26	1.18	25	1.50
(16) Sometimes I have difficulty finding a place to live.	27	1.12	16	1.90*
(10) Due to following FW, sometimes I do not feel settled.	28	1.02	6	2.43*
(27) There are no stores nearby.	29	0.98	21	1.66*
(15) Sometimes I feel that my housing is inadequate.	30	0.93	25	1.50*
(32) Sometimes I feel that the conditions of the bathroom are bad.	31	0.91	30	1.24
(04) Because of the physical nature of FW, I have health problems.	32	0.89	33	0.95
(19) There is not enough water to drink when I am working.	33	0.75	35	0.83
(22) My life has become more difficult because my partner is gone.	34	0.71	31	1.10
(33) I worry about whom my children are spending time with.	35	0.65	32	1.00
(28) I have experienced discrimination in this country.	36	0.58	33	0.95
(36) I don't get enough credit from other family members for my work.	37	0.55	35	0.83
(12) I have been taken advantage of by my employer, supervisor, landlord.	38	0.52	38	0.76
(34) I have been physically or emotionally abused by my partner.	39	0.47	39	0.37

FW, farm work; M, mean; SD, standard deviation; *, significant gender difference.

Source: Data from Magaña and Hovey (39).

Note: $N = 98$ (57 females; 41 males). Possible range for each item is 0 to 4. Possible range for overall scale is 0 to 156. Overall M for MFWSI = 63.7 (SD = 30.4); for females (M = 61.0; SD = 30.2); for males (M = 67.4; SD = 30.7); $t = 1.02$, 2-tailed $p = .31$.

Additionally, individuals with disorders such as major depression, generalized anxiety disorder, and panic disorder frequently become fully cognizant of the physical manifestations of these disorders before attending to the psychological symptoms. Therefore, primary care physicians, rather than psychiatrists or psychologists, often provide the first line of treatment for these individuals. Physical symptoms can include tachycardia, breathing difficulties, sleep and appetite disturbances, as well as gastrointestinal and sexual symptoms. Once a physiological basis for these symptoms has been ruled out, a thorough psychiatric assessment should be requested.

When mental health treatment is indicated, economics and time pressures—either because of work-load demands or the need to migrate for work—can present significant obstacles. Many of the most effective treatments for disorders such as anxiety and depression are cognitive-behavioral therapies, which are relatively time-limited. These treatments cut down on both the time required for and expense associated with treatment. Moreover, many state-of-the-art treatments are primarily available through university psychology departments and medical centers, often with sliding scale fees. It is important for referring physicians to note that these treatments, with their focus on skill building and on immediate issues, may be more palatable than traditional psychotherapy to individuals from this population. Since this is not often the stereotype many laypeople have of psychotherapy, physicians may need to educate patients about cognitive-behavioral therapies in order to increase the likelihood that patients will follow through on referrals for mental health treatments.

Conclusion

The manifestation of stressors and associated coping strategies appears to vary according to whether individuals own or operate farms or whether individuals are hired as farm workers. It is apparent that farmers are at risk for the development of stress and other mental health difficulties such as anxiety, depression, and suicide.

Almost all of the studies on the mental health of hired farm workers have been conducted in the last 6 years. Although this literature is more scant than the farmer literature in terms of quantity, the research on stress and mental health in migrant farm workers has been conducted in a methodologically rigorous manner.

Many of these studies produced descriptive findings. Less common were studies that attempted to look at stress, coping, and mental health in a theoretical context. Prospective research is thus necessary to assess the interaction of stress and coping in agricultural workers over time. Also needed is research that looks at the interplay of mental health and physical health over time, given that the literature suggests that severe stress has a negative impact on both facets of health. Intensive, longitudinal work in the area will provide for the type of applied knowledge that will help in the generation of mental health interventions for agricultural workers.

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