

Health, Occupational and Environmental Risks of Emancipated Migrant Farmworker Youth

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Abstract: This study examines the perceptions of health, health seeking behavior, access to information and resources, work related hazards, substance abuse, and social support of emancipated migrant youth (EMY) who come to the United States without their families to work. **Methods.** Semi-structured interviews were performed with EMY living without their families in Santa Clara County, California. Interviews were digitally recorded in Spanish, transcribed, translated into English, and analyzed by a five-person analysis team. **Results.** Eleven interviews were conducted with 29 participants. Work was identified as the overarching priority of the EMY. Their greatest concern was becoming sick and unable to work. They described their work environment as demanding and stressful, but felt obliged to work regardless of conditions. Alcohol and drug abuse were reported as prevalent problems. **Conclusion.** Emancipated migrant youth are a vulnerable population who have

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significant occupational stress, hazardous environmental exposures, social isolation, and drug/alcohol abuse.

Key words: Emancipated migrant farmworker youth, agricultural workers, migrant farmworker, migrant health, adolescent health.

The migrant farmworker population has historically been characterized as homogeneous: adult men "whose principal employment is in agriculture on a seasonal basis, who have been so employed within the last 24 months and who establish for the purpose of such employment a temporary abode."¹[p.261] Recent data suggest the existence of invisible subgroups of migrant farmworkers. Adolescent farmworkers, 11% of the overall farmworker population, are one important subgroup.² There are three distinct subgroups of adolescent farmworkers: traditional rural youth who work on their family-owned farms, immigrant youth who work and migrate with their parents, and emancipated migrant youth (EMY) who come alone to the U.S. to work. Emancipated migrant youth constitute over half of adolescent workers, are predominantly male (89%), usually undocumented (70%), and have low rates of insurance (23%).²⁻⁴ In California, there are an estimated 265,000 EMY.⁵

Understanding the health and occupational challenges facing EMY is important for three reasons. First, the agricultural industry is among the most dangerous work environments in the U.S.^{6,7} Approximately 100 children die from occupational injuries on farms annually, with approximately 23,000 injuries.⁸ The risk of occupational injury is 3-4 times of that for youth in other industries.⁹ National estimates showed that 4.5% of lost time injuries in agricultural workers occurs in 10-19 year olds. Agricultural workers face increased risk of skin and eye injury, along with systemic disease due to both environmental and pesticide exposure.¹⁰ Second, migrant farmworkers in general have decreased access to health care, are largely uninsured,¹¹⁻¹⁶ and live in extreme poverty, with average annual incomes between \$10,000-\$12,499.² Children of migrant farmworkers have higher rates of pesticide exposure, parasite infections, tuberculosis, chronic diarrhea, lead exposure, anemia, short stature, developmental delay, mental health and substance abuse problems, malnutrition, respiratory ailments, and dental caries compared with the general U.S. population of children.^{6,17-20} Third, as out-of-school adolescents, EMY are more likely to engage in high-risk behaviors such as lack of seat belt use, weapon carrying, tobacco, alcohol, drug use, and sexual promiscuousness.²¹ These health and social risks have been documented in immigrant adolescents in the U.S. and beyond.²²⁻²⁴ As both agricultural workers and out-of-school youth, EMY are an especially vulnerable population.

While demographic information describing EMY has been collected at the federal and local levels, their health needs have not been described. While a few studies with EMY have evaluated perceptions of health and pesticide exposure,²⁵⁻²⁸ previous work has focused mainly on the health and insurance status of adult migrant farmworkers and their children. No prior study has examined access to care, health status, or workplace stressors of EMY, information that could lead to better service and care for these adolescents.

Methods

Because emancipated migrant youth are insular, mobile, and distrustful of outsiders, a community-based participatory research (CBPR) model, engaging established and trusted community members as research collaborators, was ideal for gathering data on EMY health and well being.²⁹ Pediatricians from Lucile Packard Children's Hospital (LPCH) worked with migrant education programs at a local school district and a county outreach program with long-standing, trusted relationships with EMY. Community partners (CPs) expressed concerns about the health and working conditions of EMY. Over one year, community resources and assets for migrant farmworkers and their families in Gilroy, California were mapped. The team then designed a qualitative study to provide an initial, comprehensive exploration of the health, occupational, and environmental risks of the EMY population.

Sample. Emancipated migrant youth were defined as emancipated adolescent migrant farmworkers "here-to-work" in the U.S., who had not graduated or attended U.S. schools. Community partners recruited EMY for the study from January to September 2008, after normal working hours. Recruitment occurred in three migrant camps and one residential housing complex in Gilroy, California, locations where CPs regularly conduct outreach. Emancipated migrant youth aged 13–22 years old were approached by CPs and asked if they were interested in participating in small-group interviews with a Spanish-speaking doctor to discuss their needs and identify opportunities to establish and expand services.

Procedures. Qualitative data collection was selected to provide comprehensive exploration of needs and concerns, allowing for the generation of new hypotheses regarding the health of a vulnerable youth population.³⁰ Small-group interviews were conducted by a two-person interview team consisting of one representative from the research team and one CP. Each interviewer was bilingual and trained to conduct the interviews in a standardized manner to reduce variability. Interviews were designed to last no more than 45 minutes. Emancipated migrant youth were informed of study aims and told that participation in this study was voluntary, anonymous, and without financial or other incentives for participation. Oral consent was obtained to take part in the study and digitally record the session for transcription purposes.

Interview guide. A semi-structured interview guide was developed to assess the domains of interest: daily routines and life challenges, perceptions of general health, health care-seeking behavior, health education and resources, work-related injuries and hazards, alcohol and drug use, and social support (Box 1). The guide was written in English and translated into Spanish by a professional translator; the Spanish version was approved by CPs fluent in Spanish. Questions were pilot-tested and refined based on feedback from CPs.

The open-ended interview guide was designed to increase the scope and depth of responses, allowing youth the opportunity to express experiences, attitudes, and opinions in their own words.

Data analysis. Interviews were transcribed and translated into English by a translator not associated with the study. Responses were labeled by session number and combined by question to generate a master transcript. An independent analysis team

Box 1.**DOMAINS AND SPECIFIC QUESTIONS
FROM EMY FOCUS GROUPS^a****Domain 1: Daily routine and life challenges**

- Tell me about your typical day.
- What problems do you face every day?
- What is the best part of your day?

Domain 2: Perceptions of general health

- How would you describe your health?
- What specific health problems have you had?
- What are your health concerns?
- How would you describe your oral health?
- Have you seen a dentist?

Domain 3: Health care seeking behavior

- When was the last time you went to see a doctor?
- If you were sick and needed to go to a doctor, where would you go?
- How would you pay for these services?

Domain 4: Health education and resources

- If you were sick and needed information about health or where you could go to the doctor, where would you go for that information?
- What information do you want to have in regards to health?

Domain 5: Work related injuries and hazards

- Do you worry about hurting yourself when you're at work?
- If you got hurt during work, what would you do?
- When you're working, are there times when the sun affects you?
- What kinds of precautions do you take against exposure to pesticides?

Domain 6: Alcohol and drug use

- How much, if any, do you think drinking is a problem in your community?
- What can we do to help people with alcohol problems?
- How much, if any, do you think drug use is a problem in your community?
- What can we do to help people with drug problems?

Domain 7: Social support

- Is it difficult to communicate with your family?
- If you had a problem, how would you communicate with your family?

^aPrompts not included

conducted the analysis with representatives from migrant education, a pediatrician, a medical student, and an undergraduate student. Data were examined using transcript-based theme analysis, consisting of independent highlighting and margin coding of relevant themes.^{31,32} Team meetings were held to validate the thematic coding through discussion of emerging themes and resolution of differences by consensus. Quotations representative of individual themes were identified.

The study protocol and recruitment methods were approved by the Institutional Review Board of Stanford University. A waiver of written consent was obtained.

Results

Between January and September 2008, 31 EMY were approached and 29 (93%) agreed to participate in 11 small-group interviews. Participants were 13–22 years old, and 72% were male. Results are presented below with representative quotations from participants included in the text (Box 2).

Domain 1: Daily routine and life challenges. *Theme 1: Work is the greatest stress in the lives of the EMY.* A typical day for EMY revolves around work. One EMY said: “I think about how to make money all day.” Participants work 8–12 hour workdays. The

Box 2.

THEMES AND REPRESENTATIVE QUOTATIONS FROM STUDIED DOMAINS

Domain 1: Daily routine and life challenges

Theme 1: Work is the greatest stress in the lives of the EMY.

- “. . . I want to work because right now I have a son and I have my mom in Mexico who’s alone. About 6 years ago my dad died and my mom was left by herself. I want to help her by finding work, but I can’t.”
- “I think about how to make money all day.”

Theme 2: Social connections such as seeing friends and talking with family are the best part of EMY life.

- “Yes, and also when we call Mexico we’re happy because everything is fine there.”

Domain 2: Perceptions of general health

Theme 1: Fear of becoming sick and not being able to work is the greatest health concern of EMY.

- “. . . if I got sick, then I wouldn’t be able to work, so the how do I pay rent and everything?”
- “. . . My concerns are: well maybe we think that we’re fine health-wise and because we’re afraid to go to the doctor, we don’t know what illnesses we have. That’s my worry.”

(Continued on p. 1220)

Box 2. (continued)

Domain 3: Health care seeking behavior

Theme 1: Health related emergencies are the most likely impetus for seeking medical care.

- "... but when I had my daughter, yes, I saw a doctor."
- "I saw a doctor and since I was working my stomach was hurting and the pain got worse and I went to the hospital and blood came out. . ."

Theme 2: Lack of awareness of where and how to seek medical services.

- "It's just that I don't know where there is one. I don't know where everything is. If I was sick, I'd go to the doctor."

Theme 3: Lack of knowledge regarding how to pay for medical services.

- "I don't know, we don't have money."
- "It depends on whether they would offer me a payment plan or the different options they gave me. I think that it depends because unfortunately we are people that don't live here and so the money doesn't seem like much, at the same time I eat but everything is very expensive here."

Domain 4: Health education and resources

Theme 1. Lack of knowledge regarding where to find health information, with desire to have information.

- "Well, we're not really well informed."

Domain 5: Work related injuries and hazards

Theme 1. Work environment is very demanding and stressful.

- "...sometimes the overseers push you but if you know the rules and the rights of the workers, and if the overseer says that you hurry and they tell you they won't pay you or they won't punch you in, I don't know my rights so I don't know what to tell them. What if they're right, so I don't know what my rights are."
- "Well yeah, but you just keep working. You can't really rest. If we're really sick, we can take a 10-15 minute break."

Theme 2: Lack of knowledge regarding environmental risks of work.

- "Uh, yeah no we don't take measures to protect ourselves. Because there aren't chemicals because they're forbidden from using them. Well only with the fertilizer that they put on the plants, that's it."
- "... Sometimes in the bathrooms there's dirty water and there's a sign not to drink, but you wash your hands and then go to lunch, but the water is dirty."

Theme 3. In situations of significant work related injury, EMY rely on bosses or employers for help.

- "Since I don't have money, it all depends on if the boss helps me out or not."
- "They go with the boss. Yeah, and they can help us. That how some people are."

(Continued on p. 1221)

Box 2. (continued)

Domain 6: Alcohol and drug use

Theme 1: Alcohol use and drinking and driving are problems in the migrant farmworker community.

- "There are some people who drink and do drugs and they go to bars and that's a problem among us because the majority of the people it's what they like to do."
- "Well yeah, yeah, it affects us, no but we don't understand now until we see the risks it has and then we want to take it back, but it's too late. Yeah, it gets us a lot. Let's say it is a problem because you can quit it, you quit it and then no."
- "With family, it's bad to drink. I think that it's not just you who suffers, it destroys your family. Your family suffers."

Theme 2: General knowledge of resources available for those with alcohol problems.

- "Send them to alcoholics anonymous. Where the drunks go. So that they can advise them there and punish them. . ."

Theme 3: Drug use is a relevant and prevalent community problem, with awareness and education as possible solutions.

- "No, well truthfully the person who falls into those addictions has a hard time getting out. It's not easy because falling into that, that person becomes an addict. It's a difficult problem, drugs. You can try talking to the person and make them understand and if there are other problems there are other ways to deal with them and not to get into drugs and alcohol. Many times that's why they use drugs to forget about their problems."

Domain 7: Social support

Theme 1: Communication with family at home is not perceived as a problem.

- "... No, it's easy."

Theme 2: EMY feel a sense of responsibility towards their families at home.

- "I don't involve them because I'd rather not trouble them. If they're bad problems I don't want to involve them. If I'm at fault or I have a way to fix it, then I face my problems by myself."

challenge of finding work varies with the season. Younger EMY worried about finding work due to their age. Other life stressors included transportation and language. Food insecurity was not an issue.

Theme 2: Social connections such as seeing friends and talking with family are the best part of EMY life. Participants' daily stress relievers include activities such as soccer, TV, and socializing with friends. They gain support knowing people are well back home.

Domain 2: Perceptions of general health. *Theme 1: Fear of becoming sick and not being able to work is the greatest health concern of EMY.* One EMY said: "... if I got sick, then I wouldn't be able to work, so the how do I pay rent and everything?" The EMY perceive that they are healthy, identifying health problems only as urgent health needs.

Specific health issues mentioned included environmental exposure, vision problems, and nose bleeds, with limited concern about oral health.

Domain 3: Health care seeking behavior. *Theme 1: Health-related emergencies are the most likely impetus for seeking medical care.* Most EMY have not visited a doctor or dentist while in the U.S. Health maintenance activities are a low priority.

Theme 2: Lack of awareness of where and how to seek medical services. For seeking care, EMY have a rudimentary knowledge of resources; they access care via the hospital, and not local clinics.

Theme 3: Lack of knowledge regarding how to pay for medical services. Emancipated migrant youth perceive health care costs limit their access to medical care and are unclear about the concept of insurance. Some EMY noted a willingness to pay for services, but a lack of knowledge regarding payment options.

Domain 4: Health education and resources. *Theme 1: Lack of knowledge regarding where to find health information, with desire to have information.* Most participants did not know how to access health-related resources. Some identified a contact person or resource to guide them to appropriate health information: a physician, local community outreach worker, or local school official. Participants expressed an interest in information on preventive health, reproductive care, and emergency services.

Domain 5: Work-related injuries and hazards. *Theme 1: Work environment is very demanding and stressful.* Emancipated migrant youth work under variable conditions, and have limited understanding of their workplace rights. Regardless of hazardous conditions, EMY feel compelled to work. Heat is the primary environmental exposure. Water is available, but there is variable understanding of how and how often to access it. Adding to this stress, EMY have significant concerns about becoming sick and not working. The following statement represents this cycle of stress:

... because there are some overseers that yell a lot and tell us to do things fast and sometimes you can't endure it and you can't go fast so they start to discriminate and saying for you to do things fast and you can't sometimes because they want fast and you can't so you can get hurt. They say fast because if you're doing something there's a danger that you'll get cut and you can't go fast so they lay you off for 2-3 days and then you get worried.

Theme 2: Lack of knowledge regarding environmental risks of work. Participants did not know the signs of heat stroke or precautions to prevent it, except drinking water. There was no knowledge about dangers of pesticides, and varied knowledge about avoiding pesticide contamination.

Theme 3: In situations of significant work related injury, EMY rely on bosses or employers for help. Some EMY will also seek assistance from co-workers and friends.

Domain 6: Alcohol and drug use. *Theme 1: Alcohol use and DUI are prevalent problems in the migrant farmworker community.* Participants expressed a consistent awareness of the hazards of drinking, felt a lack of forethought led to driving under the influence of alcohol (DUI), and that drinking affected friends and family. While EMY understand the consequences of DUI, it did not alter their behavior.

Theme 2: General knowledge of resources available for those with alcohol problems. Participants were aware of resources available for alcohol abuse: Alcoholics Anonymous,

doctors, and local counselors. They understood the difficulty in finding solutions to alcohol abuse: “. . . well I have friends who also drink, use drugs, and when you tell them dude you shouldn’t do that, you can kill someone, you can kill yourself, and they say pfft it doesn’t matter I’m having fun . . . it’s a problem.”

Theme 3: Drug use is a relevant and prevalent community problem, with awareness and education as possible solutions. Participants were candid about drug use as a problem in the community and related this in a personal manner, viewing drugs as an escape from family and life difficulties. Emancipated migrant youth felt it was difficult to break drug addiction, that awareness is important, and that education is a possible solution.

Domain 7: Social support. *Theme 1: Communication with family at home is not perceived as a problem.* Calling cards are typically used to communicate with family.

Theme 2: Emancipated migrant youth feel a sense of responsibility towards their families at home. Supporting family is very important to EMY, which may limit whether they call home during times of trouble, as they do not want to burden their families.

Discussion

Emancipated migrant youth are a unique subpopulation of farmworkers: they are adolescents who live adult lives, working full-time to support themselves and their families in a demanding work environment where the risks for injuries, noxious exposures, and health problems are high. The primary focus for the EMY is work: they express a fear of illness only as it limits their ability to earn a living. While multiple clinics in Gilroy provide service at variable cost to migrant workers, and two mobile van services provide free care once per week, EMY access care mainly via the hospital.

Emancipated migrant youth expressed fear of work injury due to difficult conditions, pressure to work fast despite risk of injury, and variable employer support. The risk for heat stroke is high. There was no consistent understanding of pesticide avoidance measures, even though the sequelae of occupational injury and pesticide exposure is potentially greater for adolescents,³³ and pesticide safety training is required by the United States Environmental Protection Agency.³⁴

Alcohol and drug abuse are common among this young migrant population. Interestingly, EMY demonstrated a nuanced understanding of the negative effects of alcohol and drug abuse. They reported that work and family stress underlies this abuse, support for substance abuse problems exists, and that self-awareness of the issue and education are important to finding solutions. Adolescents separated from their parents secondary to migration patterns experience higher rates of mental health problems.³⁵ Unfortunately, social support, which has been shown to ameliorate alcohol abuse,^{36,37} is limited for EMY. While EMY communicate with their families, they expressed that they needed to handle their problems on their own to avoid burdening their families.

Emancipated migrant youth present unique health services challenges, as the traditional U.S. health care system is poorly designed to meet their needs. Because of the difficulty of funding their care, the overriding prioritization of work, and their distrust of outsiders, preventive and acute health services should be developed in partnership with trusted community groups, be accessible in the camps after working hours, have a granted funding stream, and be delivered by a primary care provider capable of

providing a range of services including health education. Additionally, EMY critically need information about environmental and pesticide exposure, legal rights, and local support services. Future research with EMY should focus on barriers to care, ideal methods of service provision, and understanding how migration patterns affect their health.

This qualitative study conducted semi-structured interviews, and was a convenience sample, with youth recruited in camps at the end of a workday. It may not be representative of the entire population of EMY working in Gilroy, California. Additionally, recruitment was conducted in only one geographical region and may not be generalizable to other regions. Finally, limited demographic data were collected in order to maintain anonymity and encourage responses to the questions of interest. Having additional demographic information would provide a richer description of EMY.

In conclusion, EMY are a uniquely vulnerable subpopulation of migrant farmworkers who are exposed to a difficult work environment with significant workplace stress, environmental exposure, social isolation, and risk of injury. These difficulties appear compounded by considerable drug and alcohol use in their community. This group of adolescents and young adults is in critical need of health care services designed to accommodate their mobility and addressing a range of issues, from preventive care to workers' rights, educational opportunities, and job training.

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