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The Michigan Farmworker Project: A Community-Based Participatory Approach to Research on Precarious Employment and Labor Exploitation of Farmworkers

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Abstract

Precarious employment is an important social determinant of health inequities. Through in-depth qualitative interviews ($n = 35$), we examine precarious employment and labor exploitation, their potential impact on the working environment, and, ultimately, the health of farmworkers. We present results from the community-based participatory Michigan Farmworker Project. Our analysis identified dimensions of precarious employment and labor exploitation that involved lacking access to fundamental labor and social rights—including dehumanization—discriminatory occupational practices, and insufficient access to health care and social benefits. Policy reform is needed to address precarious employment and labor exploitation among farmworkers due to their potential long-lasting health effects.

Keywords

precarious employment; labor exploitation; farmworkers; CBPR; health equity

Introduction

Precarious employment is recognized as an important social determinant of health inequities faced by workers (Benach et al. 2014). In the United States (US), farmworkers are a workforce that faces precarious conditions and a long history of marginalization that is a product of colonialism, plantation economics, and today's corporate capitalist agriculture system (Bonanno 2015; Caldbick et al. 2014; Fine and Saad-Filho 2017; Holmes 2013; Minkoff-Zern 2019; Sbicca, Minkoff-Zern, and Coopwood 2020; Sexsmith 2022). We developed the Michigan Farmworker Project (MFP) as a community-based participatory

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research project to further knowledge of the relationship between precarious employment and labor exploitation among farmworkers. This article focuses on identifying dimensions of precarious employment and labor exploitation to contextualize the working dynamics and environment for farmworkers, a workforce characterized by informal, and nonstandard working conditions. We ground this work under the premise of "decent work" based on the human rights declarations and United Nations and the International Labour Organization (ILO) resolutions as the "full and productive employment, rights at work, social protection, and the promotion of social dialogue through employment opportunities, adequate earnings and productive work, decent working time, safe work environment, stability, and job security, combining work, family and personal life." (International Labour Organization (ILO) 2022). While international labor standards set basic principles, protections and rights at work, the US has ratified only 14 of the 189 ILO Conventions, excluding fundamental labor conventions related to farmworkers' compensation, forced labor, occupational safety and health, worker's right to organize and collective bargaining and many other labor related conventions despite being the largest member state and donor of the ILO (ILO n.d.).

Precarious employment and its connection to labor exploitation.

The concept of precarious work is not new and has been discussed in various fields (e.g., sociology, political science, economy, demography) and most recently in public health research (Benach et al. 2016; Binational Center for Indigenous Oaxacan Community Development et al. 2021; Oddo et al. 2021; Saldanha 2022; Sexsmith 2022; Vives et al. 2020). Yet, more research is needed to fully understand the structural factors and systems that enable precarious employment and labor exploitation in workers with informal working arrangements (Bade 2005; Binational Center for Indigenous Oaxacan Community Development et al. 2021; Ramirez and Mines 2021; Sexsmith 2022; Weiler, Sexsmith, and Minkoff-Zern 2020), as is the case of farmworkers.

Currently, the dominant paradigm to define precarious employment tends to come from Western European and North American research on salaried workers with "standard work arrangements" (Benach et al. 2014; Lewchuk 2017; Vives et al. 2010, 2020). But for workers with informal and flexible employment, like farmworkers, the concept of precarity does not necessarily reflect the social reality of these workers (e.g., undocumented, in poverty, foreign-born, limited language proficiency) and for farmworkers, labor conditions are beyond precarious and often exploitative (Handal et al. 2020; Holmes 2013; Minkoff-Zern 2019; Ramirez and Mines 2021; Sbicca, Minkoff-Zern, and Coopwood 2020; Sexsmith 2022; Weiler, Sexsmith, and Minkoff-Zern 2020). Additionally, current research often frames precarious employment as a result of the erosion of work conditions from the expansion of globalized markets and neoliberal policies. While this is a correct assertion, it fails to contextualize labor as a historical and social phenomenon in which structures of inequality originate from oppressive structures that are driven by racism, discrimination, economic interests, and politics creating disparate work trajectories for different segments of the population.

Much of the existing public health research with farmworkers in the US has documented precarious work primarily through proximal-individual occupational and environmental

measures of farmworkers' health (e.g., injuries, exposure to pesticides, chronic diseases) (Arcury and Quandt 2020; Eskenazi et al. 2003; Farquhar et al. 2009; Quandt et al. 2006; Villarejo 2003). While this research has made tremendous contributions to public health, there is a need to more deeply theorize and operationalize the multiple dimensions and structures of precariousness and labor exploitation, currently and historically, that characterize this workforce in order to advance health equity.

We posit that labor exploitation is intrinsically interrelated with precarious work conditions, defined as poor job features (e.g., low wages, long working hours) (Vives et al. 2020), and the lax regulations or lack of enforcement thereof, underfunding of regulatory agencies (e.g., Occupational Safety and Health Administration, OSHA; National Institute of Occupational Health and Safety, NIOSH), and lack of enforcement agents (Michaels and Barab 2020; Mogensen 2015). For example, the US Department of Labor has only one inspector for every 70,000 workers nationwide (US Department of Labor, Occupational Safety and Health Administration n.d.).

Considering the occupational environment as a modifiable factor, identifying precarious work conditions presents an opportunity to prevent unfair and unsafe labor practices before they evolve into more severe forms of exploitation. In this article, we define exploitative labor practices as the harmful use (psychological, physical, sexual) of another person's vulnerability (e.g., social, economic, legal, physical) to obtain some benefit and when the person's consent to the labor practices is irrelevant. We place emphasis on the harmful use of the vulnerability of the worker to circumvent "legal" and "regulatory" definitions with limited scope to qualify employment conditions as exploitative. We propose that, for farmworkers, the characterization of employment coexists on a dynamic continuum that may oscillate between "decent and fair labor," "precarious labor," "labor exploitation," and "labor trafficking"—the latter being the most extreme form of exploitation. This oscillation reflects the potential dynamics of the work environment that may affect workers' trajectories over the life course, shaping their life opportunities and health. The continuum is also intertwined with the multiple social and cultural identities of farmworkers. The labor continuum discussed above is key to understanding the interrelation between precarity and labor exploitation, particularly because existing labor policies and regulations do not fully capture the complex social and occupational reality of workers with informal or flexible forms of employment.

Precarious employment and labor exploitation have important public health implications at multiple levels, including structural (e.g., exclusion of farmworkers from labor law protections available to workers in other sectors), community (e.g., lack of social networks and support), interpersonal (employer and employee relationships) and individual (health outcomes, behaviors, and sociocultural vulnerability such as language barriers or legal status). The multilevel interplay of these factors suggests that factors at one level may influence factors at another level and, therefore, addressing precarious employment, research and actions across multiple levels is critical. An important scientific need exists within the public health field to more deeply understand precarious employment, labor exploitation, and the health of farmworkers in the US. This research is particularly critical for health equity research, since agriculture is predominantly composed of U.S. and foreign-born

Latino(a) (~80%) workers (Gold, Fung, and Gabbard 2022), who often lack social and labor protections (Dixon 2021).

It is not the aim of this article to provide a comprehensive review of farmworker history and public health research in the US, as this has been well documented in the literature (Arcury and Quandt 2020; Eskenazi et al. 2003; Hahamovitch 1997; Holmes 2013; Horton 2016; Mares 2019; Rothenberg 2000; Thompson and Wiggins 2009; Villarejo et al. 2000; Villarejo 2003). Rather, through this study, we conceptualize dimensions of worker precarity and labor exploitation in a rural workforce while postulating the need to integrate these concepts into workers' health research beyond traditional epistemological frameworks in occupational and environmental health. The goal is to contribute to develop and apply other perspectives to address health inequities in vulnerable workers that can deepen scholarship and practice toward social justice. This article presents qualitative findings on dimensions of precarious employment and labor exploitation, drawing attention to the social and working environment of farmworkers in Michigan and potential implications for health inequities faced by these workers that could motivate action.

Methods

Study Context

Michigan has a robust agricultural industry (Michigan Department of Agriculture & Rural Development Overview 2022) with approximately 94,000 migrant and seasonal farmworkers, including family members, (Larson 2013) and approximately 11,000 positions certified through the H-2A program (US Department of Labor 2020) who come to Michigan each year. Farmworker labor is often defined by insufficient wages, job insecurity, irregular working hours, unfair or abusive treatment, and hazardous working conditions (Findlay 2015; Handal et al. 2020; Holmes 2013; Iglesias-Rios et al. 2022; Sbicca, Minkoff-Zern, and Coopwood 2020; Vargas 1993). In 2010, after investigating allegations about conditions faced by farmworkers, the Michigan Civil Rights Commission (MDCR) concluded that the "substandard living and working conditions for many farmworkers in Michigan have not significantly changed in 45 years." (Michigan Department of Civil Rights 2010). Since this first report from the MDCR, little improvement has been achieved as noted by progress reports published by the MDCR and corroborated in our recent report on fair access to housing (Handal and Iglesias-Rios 2023). Yet, scarce formal research has been conducted on this population in the state of Michigan that could help inform sustainable and effective health-promoting interventions and systematic change.

Study Design

The MFP was created as a community–university partnership in response to the need to develop research to inform policies, programs, and interventions for farmworkers in Michigan. Details on the development of the MFP are described elsewhere (Iglesias-Rios et al. 2022). Briefly, the MFP was guided theoretically by Critical Race Theory (CRT) and Community-Based Participatory Research (CBPR) principles, as both are grounded in social justice and critical analysis of systems and institutions that contribute to structural racism and health inequities in our society (Delgado and Stefancic 2017; Wallerstein et al.

2017). Both CRT and CBPR provide a framework to understand how the subordination, oppression, and marginalization of farmworkers are maintained by precarious working conditions and labor exploitation. The current and historical racialization of Latinos(as) related to immigration and perceived agricultural labor shortages in the U.S. and guest worker programs like the *Bracero Program* in 1942 (Craig 2014; Zatz 1993) and today's H-2A temporary agricultural program (Guerra 2004; Oliveira 2002) are examples of how these workers are impacted by the current and historical institutionalization of racism that perpetuates social, economic, and health inequities among farmworkers compared to general workers (Dixon 2021; Guerra 2004).

Moreover, our research approach is guided by CBPR principles, recognizing and empowering community knowledge, building capacity and taking actions to identify, understand and address the root causes of systemic health inequities (Wallerstein et al. 2017). Following CBPR principles, the MFP established community partnerships with the Office of Migrant Affairs, which delivers public benefits and coordinates services to farmworkers through the state of Michigan (Michigan Department of Health and Human Services (MDHHS) n.d.) and two nonprofit legal service organizations for immigrants and farmworkers, the Michigan Immigrant Rights Center and Farmworker Legal Services (Farmworker Legal Services of Michigan n.d.; Michigan Immigrant Rights Center 2017).

Sample and Recruitment

Using a snowball sampling approach, we recruited a convenience sample of 56 participants (35 farmworkers and 21 stakeholders) for in-depth interviews across the state of Michigan. However, for this particular article, we present only the methods and results from the farmworker sample. We recruited migrant, seasonal, and H-2A farmworkers from rural communities in four counties where we expected higher concentrations of agricultural workers. For recruitment, we worked closely with our partners at the Office of Migrant Affairs, which oversees the nine Migrant Resource Councils (MRCs) that cover 51 counties in Michigan. MRCs work with outreach workers who are in contact with the farmworker community and coordinate services (e.g., applications for Medicaid, food stamps) and networks to serve the needs of farmworkers. Three outreach workers from the MRCs, one summer outreach worker, and LIR supported recruitment activities. Bilingual (English/Spanish) outreach workers lived in the communities and counties where we conducted recruitment and had strong ties with the farmworker community, as some were either former farmworkers, or had family members and friends working in agriculture.

We used multiple methods to recruit farmworker participants, described elsewhere (Iglesias-Rios et al. 2022). Briefly, we recruited participants from agricultural worksites, church groups, Migrant Head Start programs, and MRC members' offices where workers seek services. We connected via phone calls and text messages with workers who had been in contact with outreach workers and various local community organizations (governmental, nonprofit, and private). For H-2A farmworkers, we developed more specific recruitment strategies that focused on establishing relationships with these workers by attending and volunteering in activities at their agricultural worksites (e.g., volunteering in health clinics, participating in health fairs and food events).

The abovementioned sampling strategies were employed for two reasons: (1) outreach workers from MRCs located in these counties were available to support recruitment activities and (2) given past challenges with immigration enforcement in some areas of the state, the sampling strategy focused on counties deemed by community partners to be relatively safe to conduct recruitment while protecting potential study participants. The study included farmworkers actively working in crop fields, packing plants, nurseries, greenhouses, and miscellaneous work that did not involve contact with animals or derived animal products.

Seasonal farmworkers were defined as those who work during crop seasons or work in agriculture year-round and live permanently in Michigan. Migrant farmworkers were defined as individuals who migrate to Michigan to work seasonally and travel year-round to work in agriculture in other states. H-2A workers were defined as those who are part of the temporary agricultural program and were considered nonim-migrant foreign workers who came to the US with a temporal H-2A visa to perform agricultural labor of a temporary or seasonal nature.

Data Collection

Recruitment and enrollment of farmworkers entailed outreach workers assessing eligibility using a screening form, and then providing the contact information of potential participants to LIR, who obtained consent from all participants. All farmworker interviews were conducted in Spanish from September to December of 2019 by LIR, a bilingual epidemiologist and native Spanish speaker with qualitative research training.

The informed consent for farmworkers often involved two phases, as was deemed culturally appropriate for this population. Once LIR received information from recruiters about a potential participant, she contacted the participant to explain the research study and to listen, build rapport, and trust. On a different date, for those interested in participating, LIR explained the informed consent and prompted questions to participants to ensure that issues of volunteer participation, privacy, and confidentiality were understood by participants. This informed consent process was a successful recruitment approach and many potential participants felt comfortable enough after the first contact to request support for services (social, legal, health) that were provided by the referral system established with community partners. Interviews lasted between 60 min and 90 min. Farmworkers were compensated with $25 cash for their time.

Instrument development.—We collected sociodemographic information about the participants at the time of the interview. For the development of the research instrument and qualitative questions, we considered some of the ILO dimensions and indicators of *labor exploitation* derived from the theoretical and practical experience of the *ILO's* Special Action Programme to Combat Forced Labour (SAP-FL) (2012). While the ILO indicators are considered common signs that point to the possible existence of human trafficking, we considered those indicators that we deemed captured the vulnerability of this workforce. The interview questions were also informed by scales developed for salaried workers; namely, the Employment Precarious Index developed as part of the longitudinal survey Poverty and

Employment Precarity in Southern Ontario (PEPSO) (Poverty and Employment Precarity in Southern Ontario n.d.) and the validated multidimensional Employment Precariousness Scale (EPRES), developed in Europe (Vives et al. 2010). Both scales overlap on some of the dimensions of precarious employment and while they do not necessarily fully represent the work and social context of farmworkers in the US, they were generally used to inform our understanding of the dimensions of precarious employment. We pilot-tested our open-ended questions and the brief sociodemographic questionnaire with farmworkers and outreach workers to finalize our interview guide.

Topics of discussion for farmworker interviews included knowledge and experiences with social, occupational, and environmental exposures (e.g., interpersonal dynamics at work with supervisors/crew leaders, contractors, growers/employers[1], and coworkers, injuries, quality of water or exposure to chemicals and pesticides), and workers' knowledge and experiences with worker protection laws, policies and services (e.g., experiences in regards to demanding compliance or presenting complaints, social and legal support from advocacy groups and governmental agencies, language and cultural barriers). For workers with families, we discussed their working and living situations and how this affected their families and family life. Farmworkers were also asked about their perceptions, experiences, and knowledge of labor exploitation, including labor trafficking. These last topics emerged naturally during the interviews given the goal of the study.

All members of our racially and ethnically diverse community-university team were trained in ethical principles and are committed to the ethical conduct of research. All participants provided consent to participate following proper linguistic, cultural, and ethical guidelines and procedures. The study was approved by the University of Michigan IRB (HUM00165344).

Data Analysis

Quantitative sociodemographic data was double-entered, reviewed, and reconciled for quality control. We calculated descriptive statistics of sociodemographic information to characterize the study sample. Except for one farmworker's interview where the audio was lost, all interviews were audio-recorded and transcribed verbatim in the original language of the interview by a professional transcription company. We analyzed interview transcripts in the original language, Spanish, to avoid losing the cultural richness of the language when translating information.

We used a framework analysis approach (Smith and Firth 2011; Strauss 1987) for the qualitative data working individually with each transcript and using NVivo 12.0 software. The analysis used a systematic process with the following key stages: (a) read each transcript and accompanying field observation notes entirely one at a time; (b) document the range of responses and emerging themes; (c) develop coding categories and code, and sort data into code categories based on the interview and focus group questions/probes; (d) document the range of responses for each code category; (e) search for substantively

[1]In this article, we use the terms "employer" and "grower" interchangeably. The term "contractors" refers to agencies/individuals in charge of recruiting and hiring H-2A farmworkers.

meaningful patterns and conclusion in the data; (f) review transcripts to ensure full report of all responses; and (g) summarize the range of responses for each category. For validity purposes, LIR and MVC wrote memos of common themes and developed preliminary coding schemes independently, using the same transcripts, then compared coding schemes, then discussed and reviewed iteratively to reach a consensus and resolve discrepancies on final codes, working closely with AJH. Then, the research team organized sessions with the full study team and community partners to read transcripts, document responses and emerging themes, review existing coding themes and develop new codes as needed. This process was important to understand unexpected findings, identify potential biases, and to have a deeper understanding of the data. The full codebook included 42 codes, but this paper focuses on the analysis of 10 codes specific to the aim of this study. Coding outputs were used to organize the data around dimensions of precarious employment and labor exploitation (Table 1). During all stages of the research process, we carefully reflected on issues around subjectivity and positionality. Community partners actively collaborated on all aspects of the study design and data collection procedures, including the development of the informed consent documents and procedures, the development of the semistructured interview guide, analyses, and interpretation of results. Results are presented with illustrative quotes of farmworkers and are deidentified to protect participant confidentiality.

Results

Sociodemographic data were collected on all 35 farmworkers; 57% were female and 43% were male with an average age of 42, similar to what has been reported at the national level (Gold, Fung, and Gabbard 2022). All the workers self-identified as Latinos(as) and spoke Spanish as their primary language; 83% were married or in a relationship. The sample included 49% migrant and 46% seasonal farmworkers, and 5% (two) male H-2A farmworkers. Participants worked in different agricultural activities, including crop fields, packing plants, and greenhouses. Most participants (89%) had between one and four children and reported low yearly incomes ($22,984, SD = 12,725). Qualitative analyses of the in-depth interviews were based on 34 farmworker interviews, as one audio file was compromised. Based on the analysis, our team identified themes that captured dimensions of precarity and labor exploitation within the working environment of farmworkers in Michigan. These dimensions captured the social, economic, and legal vulnerability of these workers (Table 1). Despite the efforts described elsewhere (Iglesias-Rios et al. 2022) to interview H-2A farmworkers, we only were able to interview two of these workers due to safety issues in the data collection process and the lack of support by employers and crew leaders for the participation of these workers in the study. As this context speaks to the dynamics of power and control exerted over these workers, we deemed it relevant to report findings from these two workers.

Precarious and Exploitative Working Conditions of Farmworkers in Michigan

We find that precarity and labor exploitation are deeply entrenched in the working environment of farmworkers in Michigan. All farmworkers interviewed related experiences of precarious employment and labor exploitation, even when some did not recognize that these labor practices may negatively impact their health. Our analysis presents key

dimensions that encompass both precarity and labor exploitation within the context of the dynamic continuum of working experiences, emphasizing the impact on the health of the individual rather than on what is "legally" considered exploitative. The social vulnerability dimension is woven into all the other dimensions presented; therefore, we do not present specific quotes for that dimension.

Organization of Work

Excessive Working Hours.—Overall, farmworkers described agricultural work as physically draining and demanding, requiring workers to work long hours and be extremely productive. Farmworkers were subjected to working hours that averaged 12 or more hours per day for 6–7 days a week. Some workers mentioned working nights in the fields during high crop seasons. A female seasonal worker shared "we had to work many hours, we had to and we were there, [until] it was very dark—already night. My sister-in-law and I would be like "Oh, it's already 10:00 pm." For women, working long hours is especially burdensome, given that they often shoulder a large share of household responsibilities and childcare.

Unpredictable Work Schedule.—All workers living in agricultural worker housing sites, including H-2A farmworkers, expressed having unpredictable work schedules and needing to be on call for work. The unpredictability of their working schedule affected their daily lives, including their worship activities and the possibility of having personal or quality family time. As an example, a female migrant farmworker with children described her situation: "Oh, [I feel] very pressured, because you are nervous there. I am just starting to cook, when, if they [referring to crew leader] pass by, they tell you in about an hour [referring to be ready for work]. But if they feel like another hour would be better, then I have to turn off [the stove] the food, put a lid on it, and leave. If it is cooked or not, I leave it there. Because you are racing through and when they come, you are not ready. You are grabbing everything, sometimes you forgot the hat because you are racing through. You have to get ready even earlier."

Another female seasonal farmworker voiced the challenges of being able to plan daily life due to the requirements of being on call for work and the nonstandard working hours: "Yes, [when I started to work] they only told me about the pay and told me that there was no fixed time to end the workday. Sometimes, we started at 7 or 6 a.m. but there was no schedule to end the day. And sometimes they call you, come to work, if we call you it is because we want you to come [to work]. When we are at the end [of the season] of tomatoes, one finishes work later, 9, 10 (p.m.) and they pay you the same [referring to not getting paid overtime]."

Wages

Piece-Rate System.—Workers paid on a "piece-rate system" (i.e., based on the number of units produced) expressed being negatively impacted by this compensation method. Farmworkers expressed feeling significant pressure to work rapidly and often avoided or delayed using the bathroom, eating, or attending medical appointments to meet productivity quotas that would allow them to earn enough money for the day. Many participants expressed that they live *paycheck to paycheck* and experienced the stress of income

insecurity. By law in Michigan, most farmworkers—including those under the piece-rate system—have a right to be paid an hourly minimum wage. However, workers in larger farms expressed that they are reprimanded, threatened, received warnings, and were sometimes even fired if the employer needed to supplement the piece rate to reach minimum wage. A female migrant farmworker describes her experience with the piece-rate payment: “I knew a man who said he was leaving. But he then told me that, while working with blueberries, he did not make it [enough money]. Then, he was making two [buckets of blueberries] per hour and, it was not convenient for the grower to pay him per hour. Every hour that he was there [referring to farmworker], he [the grower] was losing money, and what they [growers] want is for you to give them earnings, meaning that the grower does not lose, does not need to pay out-of-pocket. You have to make at least a thousand pounds per week, and if you do not, they cannot be paying you per hour. They only give you three weeks. If you did not make it [to reach minimum wage] in the piece rate system, they fire you.”

The piece rate system was often referred to by workers as working “by contract,” even though there was no written, formal working contract. Workers called them contracts because, according to workers, they can usually determine themselves their schedules, but this was not the case for all the workers. Some female farmworkers had to quit their jobs, even when working by piece rate, because the employer requested more work hours and they were unable to care for their children.

Some farmworkers felt that working by piece rate can be unfair because crew leaders or supervisors tend to have preferential treatment for some workers, assigning them rows with better crops and therefore giving unequal possibilities for workers to earn money. A male seasonal farmworker exemplified this issue: “Yes, say [the crew leader], now they are going to harvest by contract [piece rate]. They give us lines [rows of crops to harvest in the field] so that the worker gets motivated and earns more. Sometimes, there are workers who get better lines and others who do not.” The piece rate system also entails more job insecurity as workers expressed that the “flexible” relationship with the employer does not always guarantee working hours or maintaining the job during the season. As a result, income fluctuates because it is based not only on how much workers are able to pick but also on the quality of the crop, resulting in economic insecurity. Working hours can also be impacted by weather conditions, the conditions of the crop, or the employer deciding they no longer need the workers.

Penalties and Wage Theft.—Some participants currently working in the apple fields or that have worked picking apples before shared experiences of receiving penalties and warnings if when picking apples, the fruits were bruised by the pressure of the workers’ hands. Apple checkers count the number of bruised apples, and workers with more bruised apples would receive warnings, have working days taken away, or even get fired: “You have to be really careful with that one [yellow apple], you can have your finger marked [on the apple]. They found us [the apple checker], about six, or seven apples, and they sent us to ‘rest’ [i.e., employee took away work days from worker]. They do not pay for those days. One time my husband and I got ‘rested’, as well” (Female migrant farmworker). The penalty of bruising apples was also corroborated in an informal conversation we had with a crew leader in charge of a large apple field. The crew leader stated that he provides warnings to

the workers and if they "do not work well" they are fired and, especially in the case of H-2A farmworkers, the contractor would not bring the worker back next year.

Many farmworkers, including H-2A farmworkers, perceived or had the experience of being cheated by employers or crew leaders on their wages. Workers expressed having no control over their payment and were often taken advantage of by growers counting down and paying them for a lower number of crop boxes than what was actually harvested.

Other workers shared they were told by their employer that they would receive a "bonus" at the end of the season. Some workers mentioned that the "bonus" is not an extra payment, but rather that it is taken from their weekly paychecks and is paid back only if they complete the harvesting season with the employer. Workers who leave without completing the season do not receive the "bonus," one participant shared: "In each box [of apples] they take out $2 in bonus and if you finished the season they give you back that money but if you do not finish, they do not give you a job next year and no bonus" (Male migrant farmworker). Regarding wage theft, a male migrant farmworker with many years working in the apple fields, provided an example of how the wages are withheld by the contractor: "The grower pays one price, the contractor pays another price. The American [referring to the grower] pays to the contractor and the contractor, steals some money. He pays people, but he takes a part of it. For example, if the American says, 'I am going to pay you $10 per hour' the contractor, what he does, pays you $8 or $8.50. Or $9, let us say. At $9 and he takes $1 for each person. If they are boxes, he also earns a percentage."

The housing made available to agricultural workers and their family members, which is often "no-cost," owned by employers, and located on agricultural worksites, must meet inspection requirements and state standards. However, some farmworkers living in agricultural worker housing sites (in Michigan and Florida) shared experiences of being charged for services or rent when living in housing units owned by growers: "They rent to us. We work for him [grower] but he charges us rent and we pay $80 dollars per week. If you want a larger apartment then he charges like $100 and this is on top of paying a deposit. It is a lot. It is difficult for people [farmworkers] to pay rent here or where we go, Florida or Texas and they pay me $9.50 per hour" (Female migrant farmworker).

Work Environment, Workplace Dynamics, and Leadership

Unfair Treatment, Coercion, and Threats.—Except for one farmworker, all participants reported seeing or experiencing abusive, unfair treatment and threats by growers, supervisors or crew leaders. Two (male and female) farmworkers working in the same packing plant reported that the supervisor timed the workers in the bathroom and even asked them to sign a piece of paper every time they used the bathroom. Those that went over the "limit of time" in the bathroom received a warning. Participants mentioned that they and various coworkers would suffer constantly from urinary tract infections due to foregoing the use of the bathroom. One participant recounted the experience of a female coworker who was essentially ostracized when reporting this abusive treatment: "Because it has happened to people [abuse], one woman from work [packing plant] reported how they were treating her that they did not allow them [workers] to go to the bathroom. And because of it, they blacklisted her with all the growers and no one wanted her [to hire her]. She could not come

back to Michigan for work. Now a lot of people come and say: if you report, here we are going to notice and you are not going to work with any other grower" (Female seasonal farmworker).

The psychosocial vulnerability of farmworkers was salient for undocumented workers. Several participants reported experiencing or witnessing coworkers' mistreatment because of their legal status. The fear of being reported to Immigration & Customs Enforcement or alienated from job opportunities maintains a culture of silence and fear and affects the ability of workers to submit formal complaints to the respective authorities and employers. The following quote illustrated this situation: "Ah, well, we have to follow the rules, because otherwise, well, where are we going to go? We do not have where to go and, worse, nowadays there are a lot of H-2A workers. They [growers] want single people, single men, that do not have families" (Female seasonal farmworker). Another seasonal farmworker expressed how her social vulnerability from being undocumented impacts her likelihood of finding a job with better working conditions and compares her work obligations with American workers: "There is a man and two women [American] and they only water the plants but they do not work in the field, or get dirty, they do not get wet, they do not lift or work bending all day. When is time for planting they do not make three or four carts of plants, they do not carry heavy containers, they do not do anything of that nature, they only do the easy work. We [the workers] sometimes we get mad because I think it is very unjust [the work]. But I also know that I cannot ask for anything else if I do not have my papers [referring to being undocumented]. I mean, I cannot be asking for a better job or say 'I am going to get another job' because I know that I would not get a job anywhere else."

Hostile Working Environment and Dehumanization of Farmworkers.—For many farmworkers the working environment was perceived as hostile and dehumanizing, deeply affecting their working and living conditions as well as their mental and physical health. Some of these experiences were related to racism and discrimination from growers, contractors, crew leaders, and peers in higher positions than themselves. The experience of a U.S. born female migrant farmworker embodies these experiences of hostility and dehumanization: "[The grower] wanted me to stay working in the blueberry machine. I suffer from epilepsy and I also have a heart condition, so I cannot get agitated. My husband told him that I already worked and that we could leave it for tomorrow. The grower got very upset and said 'I am not going to have people that do not want to work with me. Why don't you just leave the house tonight?' My son was only 10 months old, where were we going to go? We do not have anywhere else to go and not only that he was very racist. He mistreated [people], he did not have water for my husband and the other worker and he did not want them to take their lunch break and he did not want to pay us."

The vulnerability of workers and work dynamics also encouraged unhealthy competition and lack of collaboration between workers. Some workers expressed that often other Latinos(as) who get promoted or were able to obtain legal residence would look down on or denigrate other Latino(a) workers. A female migrant farmworker relates her experience as follows: "To me the most fundamental thing is housing and also the inequality when you are working, because that [inequality] is very uncomfortable. During a working season I lost a lot of weight because of the stress with the crew leaders. For me it was an awful experience.

From the ones that give orders, they were very aggressive and [I felt] humiliated. He [crew leader] sometimes would throw [the herb wires] to the floor just for his enjoyment and everyone needed to kneel on the floor to get them."

Some workers shared experiences in which basic human rights were denied, such as situations with availability of clean water and even cases in which workers were not allowed to drink water. Two female migrant farmworkers described their experiences: "We were very thirsty and he [grower] did not give us water and I left my line, I went to drink water and the grower looked at me very upset and asked why did you leave the line and I told him 'you know that it is very hot, I feel dizzy, I need to drink water'." The other female worker mentioned "Some bathrooms have water to wash your hands and others do not, we need to wash our hands with the same water that they provide us to drink water but nobody drinks that water because they leave the water right next to the bathrooms." Other workers were forced to work under extreme weather conditions including dangerous heat conditions or rainfall. Workers related experiences of suffering from heat exhaustion, and experiencing serious accidents and falls from ladders because they had to work while it was raining.

One of the workers knew of a farm with prior labor violations that are well-known among farmworkers for being "bad people" and where H-2A workers have been verbally and physically abused. "They said they had hit workers. Verbal abuse and I think they did not let them talk with local people. If they are contratados [H-2A] they tell them that if they do something then they would not come back next year. A friend of mine was working there and he said they push workers hard to produce more. He left because he could not handle the pressure they placed on him. He said, you are doing that [abuse] to your own people, he [my friend] was one of the crew leaders, and at the end [he said] you would lose your morals, you yourself are abusing people" (Male seasonal farmworker). This information was also mentioned in informal conversations that we had with migrant outreach workers in that community:

The vast majority of farmworkers expressed observing or experiencing inhumane treatment; feeling they are not valued by employers, dehumanized and easily replaced and disposed of by employers: "I felt like we were animals, and it was when I told him [crew leader], I am going to go to the office, I told him, I am going to make a complaint, you are treating people like animals. I told him no one should yell at people, I told him, we have the rights to take a break and drink water, go to the bathroom, right? But as I told you, all day being bent down and [working] quickly, quickly and without breaks and drinking water." (Female migrant farmworker).

One of the H-2A farmworkers we interviewed mentioned the workers follow certain rules that prohibited leaving the agricultural worksite or set limits on the allowable distance a worker can leave the entrance of the agricultural worksite: "Well, I remember that they prohibited that we have parties, we cannot have loud music because we are a lot [of workers]. And I think there are rules of the distance we can step out [from the agricultural worksite], but I do not remember [the distance]. We cannot go out" (Male H-2A farmworker).

In the same agricultural worksite where this H-2A participant was recruited, the crew leader received a call from the contractor with orders to not allow the workers to participate in our study, arguing that "[sSomeone] was investigating the camps and taking people out of the camps." At that time, all the workers turned around, and went inside their houses and the crew leader informed us that the contractor had called him and ordered that our study staff leave the premises of the agricultural worksite.

Power and Control Over the Vulnerability of Farmworkers

Participants explained different dynamics of power and control over them. Those living at agricultural worker housing sites have a higher dependency on employers given that housing access is intrinsically tied to employment. Some workers describe situations in which they felt forced to work: "If you are not in the field, you can leave at the time you wish and start work at the time you want but living in the houses of the grower one needs to work for him because they are paying, they are giving you the house and they are right to expect this because you are living in their houses" (Male migrant farmworker). In other situations, they were given only one day to vacate the agricultural worker housing site after the crop season ended without prior notice, which was particularly challenging for migrant workers with children. Other workers expressed that, when living in agricultural worker housing sites, there is little-to-no privacy, as they experienced that growers and crew leaders went into their houses as they pleased.

More than half of the study participants had limited English proficiency, which also contributed to workers being taken advantage of, and growers distancing themselves from any relationship with workers. Many workers have important financial needs and feared losing their job; therefore, they tolerated precarious employment conditions, abuses and humiliations by employers and supervisors. Workers also expressed that being sick was not an option because they lack health insurance and sick leave pay, and depend on their income to make ends meet.

H-2A and Displacement of Migrant and Seasonal Farmworkers.—Most farmworkers experienced or knew about changes in hiring practices by growers and expressed not being hired in many farms because growers prefer *contratados* [H-2A farmworkers]. Some workers, irrespective of legal status, mentioned that the preference of H-2A farmworkers by growers is the result of growers feeling that they can exert more control and exploit these workers, given that their future employment prospects in the US are contingent on their performance and decided by the contractor. Workers reported knowing about and seeing H-2A workers working under adverse weather conditions and for excessively long hours, and being in agricultural worksites in which workers lack access to community resources, unless transportation is provided by the employer.

Seasonal and migrant farmworkers also expressed that growers "do not want families living in agricultural worker housing sites or employer-provided housing because the children 'occupy' space and they do not work." Therefore, growers preferred hiring H-2A workers who are usually young males and who are not accompanied by their family members. A male migrant farmworker expressed: "We need to follow the rules … we do not have

anywhere to go and right now they are a lot of contratados [H-2A workers], the growers only want single people, like single men that they do not have family. Maybe because they have more time to work and they do not have to go to appointments for their children. Like my mother [who is a farmworker], she is always worried about us, with [doctor or school] appointments and everything."

In informal conversations we had with various H-2A farmworkers from various agricultural worksites, workers expressed being unaware of Michigan's geographical location in the US, the physical address of the agricultural worksite in which they lived and worked, the name of the employer or contractor and had little to no knowledge about their rights and the obligations of their contract and housing arrangements.

A husband-and-wife migrant farmworker couple who migrated yearly from Florida to Michigan for work shared that, upon arriving at the agricultural worksite, they and several families were told that there was no work for them, given that the grower decided to hire H-2A farmworkers instead. These workers mentioned that they were never informed about this decision, although the grower knew they were coming from Florida. The couple had to spend some nights in their car with their children and, although they eventually found work with another grower, they were struggling financially: "This year we were surprised by the grower that he did not want us working with him because he hired H-2A farmworkers. We had been working with him for 4 years and we helped him a lot and he suddenly said 'there is no more work for you' and you can see what you do, we ran out of money because what we brought wasn't enough and we were used to working right away with him and now we do not have money for gasoline, food, to wash our clothes."

Discussion

The analysis of the Commission on the Social Determinants of Health (CSDH) by the World Health Organization indicates three principles of action to achieve population health equity: (1) improving the daily life and working conditions, (2) tackling the inequitable distribution of power, money and resources—the structural drivers of those daily life conditions—, and (3) measuring the problem and taking action on the conditions of daily life and on the structural drivers of those conditions (World Health Organization (WHO) and Commission on Social Determinants of Health (CSDH) 2008). Under these principles outlined by the CSDH and as presented in this article, we show that precarious employment and labor exploitation, through the organization of labor, work environment and work dynamics, is beyond precarious and often exploitative, including threats, coercion and the overall abuse of the vulnerability of the workers. Thus, precarious employment and labor exploitation are public health issues that contribute to health inequities understood as the unfair, unjust, and avoidable causes of ill health and marginalizing vulnerable workers.

Agriculture, an occupation in which workers are overrepresented by Latinos(as), exemplifies labor segregation that is known to contribute to excess mortality among racially and ethnically minoritized individuals. Many chronic health conditions (e.g., diabetes, cardiovascular disease, obesity), leading causes of morbidity and mortality, are associated with work dynamics and conditions and the overall work environment and are also common

among farmworkers in the US (Arcury and Quandt 2011, 2020; Benach et al. 2016; Eisenberg-Guyot, Finsaas, and Prins 2023; Gray et al. 2021; Handal et al. 2020; NORA 2020; Oddo et al. 2023; Ramirez and Mines 2021; Schnall, Dobson, and Landsbergis 2016; Sexsmith 2022).

Fair employment is a key component to achieve population health equity and calls for existing state and federal labor agencies and organizations to recognize that precarious work and labor exploitation need to be prioritized in their regulatory agendas in order to achieve occupational safety and health for all workers, especially for those with more marginalized social positions (e.g., undocumented, low-income, minoritized workers).

To the best of our knowledge, this is the first study conducted in Michigan that conceptualizes dimensions of precarious employment and labor exploitation with farmworkers. Our analysis demonstrates that precarious employment and labor exploitation shape the social and working environment for farmworkers with potentially harmful health consequences that need further research. Our findings make several contributions to the literature on farmworker health and well-being. We conceptualize labor precarity and exploitation for this rural workforce by identifying salient dimensions and indicators related to the organization of work, wages, working environment and dynamics, leadership, power, and control over farmworkers. While some dimensions may seem generally applicable to characterize precarious employment across all work sectors, our study captures new dimensions in confirming prior findings that the unique social vulnerability of the agricultural workforce, the informality of their work arrangements, and the current and historical agricultural exceptionalism policies facilitate the exploitation of these workers in Michigan. The historical and social context and the intersectionality of workers' identities matter when conceptualizing precarious employment and labor exploitation for health equity research. Overall, previous research on precarious employment conducted mostly with salaried workers with standard work arrangements has not integrated intersectional dimensions of individual vulnerability or considered that workers' trajectories are not fixed and involve ahistorical features. This is an important consideration given that global migration is connected with labor markets and, for farmworkers in the US, the relationship of racism and xenophobia that justified slavery and colonialism in the past, continues manifesting in immigration enforcement raids, fear of deportation, and in maintaining an invisible and essential workforce with minimal rights for the sake of agricultural corporate profits (Gomberg-Munoz and Nussbaum-Barberena 2011; Holmes 2013; Lee 2019; Perea 2011; Provine and Doty 2011; Sexsmith 2022; Wiggins 2020).

Integrating the analysis of precarious employment and labor exploitation with the theories and principles of CRT and CBPR can strengthen efforts toward achieving health equity in public health, advance scholarship, and ensure that our praxis has depth to effect social change. The historical relationships among race, racism, and power as posited in CRT are entrenched within agricultural labor policies, immigration and occupational segregation and are pertinent to the study of precarious employment and labor exploitation (Guild and Figueroa 2018). Historical federal policies like Jim Crow and the New Deal contributed to structural racism and pervasive occupational segregation that has continued until today through policies that intentionally exclude farmworkers from basic labor protections

conferred to other work sectors (Thompson and Wiggins 2009). CBPR principles, in connection with CRT, support equitable community–university partnerships and enhance data quality, with the goal of addressing structural forces over time, avoiding “helicopter research” and setting a path to improve the working and living conditions for farmworkers in Michigan.

The economic influence of agro-business lobbyists at the state and federal level lies in contrast with the relative lack of representation in government and less robustly funded labor organizing efforts to instil legislative change (Thompson and Wiggins 2009; Wiggins 2020). Various pieces of legislation have excluded or provided minimal labor protections for farmworkers, including the National Labor Relations Act, which excludes farmworkers from protections for worker organizing and collective bargaining. Michigan law also lacks labor organizing protections for farmworkers. The Fair Labor Standards Act is another law that applies differently to farmworkers. Under federal law and Michigan state laws, farmworkers are exempt from overtime compensation requirements and those who labor on certain small farms are not guaranteed a minimum wage. In addition, children as young as 12 are allowed to work in the fields, compared to 16 in other industries (Perea 2011; Salinas 2021; Wiggins 2020).

The 1983 Migrant and Seasonal Agricultural Worker Protection Act (AWPA or MSPA) that specifies certain housing, employment and transportation standards for farmworkers excludes H-2 workers from its protections, does not authorize USDOL to recover actual or statutory damages for the injured worker, and has a maximum statutory damage award of only $500 for violations (Migrant and Seasonal Agricultural Worker Protection Act (MSPA) | U.S. Department of Labor n.d.). While housing that is provided by employers to farmworkers must meet local and federal housing regulations, these standards continue to be minimal. For example, while having1 toilet for every 15 workers and one laundry tub for every 30 workers is in compliance with housing regulations in Michigan, these features are likely insufficient to meet the needs of workers whose employment exposes to daily dirt, pesticides, and large amounts of perspiration (Michigan Immigrant Rights Center (MIRC) n.d.).

Our results highlighted that threats, coercion, and fear were important aspects of the work environment for farmworkers in Michigan. Notably, this hostile and coercive work environment is recognized within ILO’s labor indicators that can potentially enable labor trafficking (ILO 2017; Special Action Programme to Combat Forced Labour (SAP-FL) 2012). Hostility and coercion, the precariousness of informal work arrangements and exploitative labor practices can influence worker safety, health, and well-being; however, more research is needed to understand the long-lasting effects of these abuses on the health of farmworkers.

Workers who were undocumented and H-2A farmworkers were found to be more susceptible to exploitative practices due to their inherent vulnerability and dependency with their employer as reported in previous studies (Garcia 2014; Weiler, Sexsmith, and Minkoff-Zern 2020). An anonymous, confidential and standardized reporting system that is easily accessible to farmworkers managed by a neutral nonstate or non-agribusiness entity may

facilitate referrals of workers for services, mediate labor disputes and empower workers to raise important issues such as the ones identified in this study. Such systems can be enhanced by supporting workers' right to unionize in Michigan.

The piece-rate system based on high quotas of productivity, although preferred by some farmworkers, puts more pressure on workers and favors unfair labor practices. Participants in our study reported that employers tend to dislike this practice because often it is perceived as an economic loss for the employer if the worker does not reach the piece-rate quotes, as the employer then needs to complement the salary of the worker up to the minimum wage. Our findings showed that the unequal dynamics of power and control over workers create a hostile working environment in which workers compete for higher productivity quotas in ways that generate conflict among workers and compromise the safety of workers. As noted in other states where farmworkers have been able to organize and unionized (e.g., California, Florida, and New York), some success has been achieved in passing laws to reduce inequity and protect workers. The Florida Coalition of Immokalee Workers, a community-based model of organizing, supports the development of farmworkers leaders and has a social responsibility program to improve industry standards and protections for farmworkers, including labor exploitation (Berkey 2018; Coalition of Immokalee Workers n.d.; Minkoff-Zern 2014). Farmworkers working in Michigan may benefit from a similar community-based organizing model.

The H-2A program for agricultural workers has grown exponentially, with an increase of more than 200% between 2010 and 2019 (USDA ERS - H-2A Employers 2021). In Michigan, the number of H-2A visa applications increased 157% in the last five years and quadrupled in the last decade with approximately 11,000 H-2A farmworkers coming every year (US Department of Labor 2020). Our study uncovered a potential issue related to the displacement of seasonal and migrant workers in Michigan. Participants discussed that the preference of hiring H-2A workers may be because those workers can be more easily exploited by making them work long hours, asking them to be on call to work at any time, requiring them to work under adverse weather conditions, and abusing their socioeconomic vulnerability. Our findings on H-2A farmworkers and the potential displacement of migrant and seasonal workers are consistent with previous research (Guerra 2004; Martin 2017; Newman et al. 2018; Sanchez-Palumbo 2019).

Consistent with other studies (Weiler, Sexsmith, and Minkoff-Zern 2020), workers shared that if they complain or are not compliant with work expectations they could easily be returned to their country or be threatened with not being invited to work in the US for the following year. Lack of transparency around processes related to the influx of H-2A workers, practices of recruitment in the country of origin of the worker, the hiring process, and accountability of contractors with the workers may accentuate exploitative labor conditions.

Globally, international labor standards are more relevant than ever for workers' labor rights. While the US is a member of the ILO governing body as well as the largest member state and donor, it has failed to adopt most of the standards that would improve farm labor conditions. The US has not ratified 63 ILO conventions protecting workers' right to organize

or the convention on safety and health in agriculture (International Labour Organization (ILO) n.d.). Current labor policies and regulations with farmworkers often are not enforced and have not been modernized to protect this workforce that is defined by complex social, economic, and political realities.

Precarious employment and labor exploitation are social determinants that contribute to health inequities. As shown in our study, labor exploitation may not always be evident or result in labor violations. Our goal here was not to assess the legality of particular acts but to describe the harmful abuse of the vulnerability of these workers. Integrating labor exploitation as a component of the precarious work conditions faced by farmworkers is needed to advance research and practice into action-oriented solutions beyond the characterization of harm typically assessed in occupational and environmental health research.

The potential health effects on farmworkers from the lack of access to fundamental workers' rights could have long-lasting and intergenerational effects. The dehumanizing experiences described by farmworkers in this study, in which basic human rights were often denied (such as rest breaks, safe and accessible drinking water, bathroom breaks, clean facilities, adequate living conditions, and access to health care and social benefits), signal multisystem failures in the protection of these workers in Michigan. Understanding the systems and practices of the work environment that drive precarity and labor exploitation is essential to inform sustainable and effective public health interventions and policies for farmworkers in Michigan and other states with similar occupational experiences. Ultimately, comprehensive policies that ensure high labor standards and equitable labor practices, empowerment and protection of workers including their access to labor organizing are critical actions to address the potentially harmful effects of unfair and exploitative labor practices for farmworkers in Michigan and the US.

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Table 1.

Dimensions of Precarious Employment and Labor Exploitation and Indicators Identified Through the Michigan Farmworker Project Qualitative Analysis of 2019 Data.

Dimension	Indicators
Organization of work	• Excessive working hours • Unpredictable work schedule
Wages	• Piece-rate system • Penalties and wage theft
Work environment, workplace dynamics, leadership	• Hostile working environment and dehumanization of workers • Coercion and threats • Unfair treatment
Power and control	• Dependency and manipulation • Internalized worker oppression • H-2A and displacement of migrant and seasonal farmworker
Social vulnerability	• Race and ethnicity • Country of origin • Legal status • Language spoken