

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

Exploring Barriers and Disparities Among Agriculture Farm Workers Who Experience Mental
and Physical Health Issues

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Abstract

Exploring Barriers and Disparities Among Agricultural Farm Workers Who Experience Mental and Physical Health Issues

By

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Master of Social Work

Agricultural farm workers are the backbone that keep America running. Far too often agricultural farm workers are placed under physical and mental exhaustion. Agricultural workers face multiple challenges including language barriers, poor access to health insurance, and high rates of poverty. Ultimately, this affects their mental and physical health and far too often this population is unable to seek the resources they need. This creates difficulties affecting their productivity, hobbies, motivations, ability to handle life's challenges, thus creating an inability to live a content life. Working in strenuous physical health conditions can create poor mental health and negatively impact your overall wellbeing. (NCFH, 2021) The purpose of this scoping review was to explore how mental, physical and substance use health risks and conditions affect agricultural farm workers and to bring awareness on how these numerous factors label agricultural farm workers as an at-risk, invisible, and marginalized population.

Keywords: Agricultural farm workers, Mental Health, Substance Use, Physical Health, Agricultural migrant families, United States

Introduction

For this scoping review, agricultural farm workers are defined as individuals whose occupation involves crop production and support activities (O'Connor et al., 2015). Agriculture involves everything from prepping the soil, seeding, planting, growing, picking, packaging to transporting. Most individuals who work in this occupation are migratory or seasonal agricultural farm workers. Migratory workers are defined as workers whose principal employment is agriculture, have been employed for the last 2 years and have established a home for the purpose of their work. Seasonal workers are defined as workers whose principal employment is agriculture but on a seasonal basis and have not established a permanent home (HRSA, 2017). To support themselves and their families, agricultural farm workers endure long work hours, frequent mobility and limited to nonexistent benefits thus resulting in poor mental and physical health outcomes. While farm workers often undertake back-breaking work and face serious health risks, they are positioned at the bottom of the social hierarchy with few protections or access to healthcare (Holmes, 2013).

In association with mental health risks, substance use is connected to this population. Borges et al. (2007) interviewed 5,826 migrants from Mexico and found that those who had family members migrated to the USA, were more likely to consume alcohol, marijuana, cocaine, and other drugs, develop a substance use disorder (Borges et al., 2007). Despite the language and terminology they use, it is inevitable that agricultural farm workers experience symptoms of poor mental and physical health (Holmes, 2013).

Latino culture has traditional values that reject professional mental health services. Some individuals within the Latino community believe that health related problems are beyond the individual's control. (Schmaling & Hernandez, 2008) Respect, familism and faith are joined

together around the principle of courtesy, reliance on family members as opposed to health centers (Donlan & Lee, 2010). This suggests that this community may lack the accessibility to health care services. Furthermore, it is pertinent to explore how mental, physical and substance health risks affect agricultural farm workers.

Literature Review

The purpose of this scoping literature review is to identify barriers that result in limiting agricultural farm workers' health care access; agricultural farm workers experience physical and psychological distress on their bodies. By recognizing the causes, we are able to understand how limited health care access can potentially lead to self-medicating, that may result in substance abuse.

Physical Distress

The longer agricultural farm workers work under strenuous conditions the more likely they will sustain a work-related injury (Villarejo et al., 2010). In their study called MICASA, Xiao et al. (2012) identified chronic pain as lasting for a period of six weeks or more and impacting the person's back, knee, hip, shoulders, hands and/or wrist. As many as 40% of agricultural farm workers reported experiencing musculoskeletal discomfort; within this same period 5% reported working while injured for over a month (Arcury et al., 2021). Primary exposure to physical distress has been connected to repetitive motion, heavy lifting, and engaging in prolonged postures for hours (Xiao et al., 2012). Due to limitations of health care access and the fear of being laid off or loss of income, many agricultural farm workers invest in self-medication using over the counter medications. This method has shown to be cost-effective, safe, and timely for many who are unable to visit a doctor on a regular basis (Horton & Stewart, 2011). Most agricultural farm workers make \$10 thousand per year, and the majority of their earnings go toward providing for themselves and their families (Luque & Castañeda, 2013).

Self-medication has created a sustainable approach for remedies to help treat musculoskeletal problems, headaches, and other ailments (Weigel & Armijos, 2012). The lack of affordable medication and accessible health care has created a consumption of over-the-counter

medication (Horton & Stewart, 2011). In addition, affordable health care access, limited income, and lack of public or personal transportation create barriers in bridging the gap between musculoskeletal problems and treatment. Luque and Castañeda (2013), explored the possibility of providing agricultural farm workers with mobile health clinics. These types of medical health clinics would be able to provide adequate care when needed and workers would not have to prolong their physical needs out of fear of losing their jobs or loss of income. Luque and Castañeda (2013), found that inter-disciplinary clinical partners funded federally utilizing students in the medical field would benefit both education and agricultural farm workers who need health care (p. 405).

Mental Health

It is essential for health care providers to be culturally competent and well-informed about the elements that are deep-rooted with the population of agriculture workers. The elements include culture values, migration experience and trauma that contribute to agriculture workers' poor mental health and work against treatment-seeking behavior. Agriculture farm workers and their families are more inclined to seek treatment from a curandero (Arcury et al., 2016). Curanderismo is a practice in which a person who is gifted can diagnose mental and physical illnesses and act as a curandero, a relationship between illness, healing, and religion, and have the trust from the Hispanic community about symptoms, healing treatment practices and the source of illness. To see a curandero, you need to meet them at their home and bring a gift offering for their services. There needs to be a bridge between western medicine and traditional holistic healing to bring awareness, support, and confidence to rely on a health care services that value and understand (Arcury et al., 2016).

Substance Use

Substance use has been connected to coping with elevated levels of stress in relation to employment, finances, and limited health access (O'Connor et al., 2015). Stressors that affect mental health are more often addressed with alcohol consumption (O'Connor et al., 2015). Alcohol is often normalized as a coping tool when introduced to agricultural farm workers who face adversities. (Zúñiga et al., 2013). This includes mental health exhaustion and being overworked, however due to work restrictions they are unable to attend to their health needs (Zúñiga et al., 2013). Grzywacz et al. (2013) found in their research that while 75% of agricultural farm worker abstained from consuming alcohol, 15 % reported to drinking up to 10 drinks per week (p. 622). For those that reported drinking more than their counterparts it was found that there was a limited or a nonexistent support system within their employment or family. This is a barrier many agricultural farm workers face when they are harvesting (Grzywacz et al., 2013).

Alcohol use among male agricultural farm workers has been found to fluctuate within the population. In a study by Arcury et al. (2016) in North Carolina, 18% of male workers had never consumed alcohol and 35% had not consumed alcohol in the past three months, but half (49%) had engaged in heavy occasional drinking in the past three months and 24% consumed alcohol regularly. Agricultural farm workers were found to be at greater risk for alcohol dependence compared to other non-agricultural worker immigrants. (Arcury et al., 2016)

Purpose of the Present Study

The purpose of this scoping review was to bring awareness to numerous factors that labels agricultural farm workers as an at-risk, invisible, and marginalized population by exploring how mental, physical and substance use health risks and conditions affect agricultural

farm workers. Though research has been and continues to grow in relation to agriculture farm workers and access to health services, limited research is currently available for the impact that mental and physical conditions has on this vulnerable population and their families. In addition, less is known about factors that aid in the prevention of self-medicating leading to substance abuse within this population. In doing so, this scoping review aims to identify the ongoing barriers and disparities that have been experienced for decades. This highlights the importance of having accessible programs that will support agriculture farm workers in longevity. This study utilized literature published over the past 20 years (2000-2021). The last two decades that were selected for the data collection was due to relevance and lack of preventative measures created for this vulnerable population. After a comprehensive review of current and credible literature related to this topic 16 relevant research studies were identified. Recurrent themes observed between the studies recognized mental and physical health conditions among agricultural farm workers.

Method

The principal framework we utilized for this review is the Preferred Reporting Items for Systematic Reviews and Meta-Analyses, or otherwise known as the PRISMA approach (Moher et al. 2009) and the article, “Systematic Review and Scoping Review, Guidance for Authors When Choosing Between a Systematic or Scoping Review Approach” as outlined by Munn et al. (2018), which starts with identifying relevant research records. The goal of a scoping review is to define key words related to the topic, identify available evidence, and highlight the specified key words in the literature (Munn et al. (2018). The publications we utilized were dated from 2000 to 2021, to reflect the latest information published in the last 20 years.

For this scoping review agricultural farm workers are defined as individuals whose occupation works in crop production and support activities. Studies were included if they discussed agricultural farm workers that have limited access to medical health coverage, physical exhaustion that results in physical distress, struggle with their mental health, and struggle with substance use.

Search Strategy

The search was conducted using two databases which includes PsycINFO and EBSCO Host. A comprehensive search of peer-reviewed journals on the topic between 2000 and 2021 was completed using key search terms such as agriculture farm workers, mental health, physical health, substance use and agriculture migrant families from data collected in the United States. The search included 148 articles from the combined databases dating back to 2000, however a correlation between the articles explain that these barriers and disparities date back decades. (Arcury et al., 2012, Horton & Stewart, 2012, Magaña & Hovey, 2012, Mucci et al., 2020,

Weigel & Armijos, 2012) Despite the research, it is evident that these gaps still exist within this population. Please see Appendix A on page 20 to review this table.

Screening and Selection of Studies

These chosen studies were determined to be relevant to the scoping research question. This determined how mental, physical, and substance use conditions can affect agricultural farm workers. The subsequent steps of screening and determining the eligibility of studies was then applied to narrow down the potential literature review sources. We then examined the articles to identify studies that met our inclusion criteria. Articles that included research on agricultural farm workers, their mental and physical health resulting in substance use were included. Studies were only included if they were peer-reviewed, they met our definition of agricultural farm workers, and if their mental and physical health adversely impacted. The exclusion criteria included studies of farm workers who owned their land, studies that were conducted outside of the United States, we excluded individuals under 18 years of age, studies that were not written in the English language, or if the research was not specific in the primary prevention or intervention of mental and physical health.

Furthermore, the title and abstracts were divided among two people to review independently. Applying the inclusion and exclusion criteria to this review, 124 articles were excluded, leaving 24 articles for full-text review. These were independently reviewed by the two individuals and then discussed to meet consensus. Through this procedure, 8 additional articles were excluded based on the focus of the agricultural work being seasonal and no information or discussion of the workers' health outcomes were disclosed leading to a total of 16 articles.

Results

For the purpose of analyzing this data for this scoping review, 16 studies were found relevant. The main findings of the results section were carefully analyzed and manually coded. All of the 16 studies included in this scoping review (Arcury et al., 2012, Bletzer, 2014, Grzywacz et al., 2007, Hiott et al., 2008, Horton & Stewart, 2012, Luque & Castaneda, 2012, Magaña & Hovey, 2003, Mucci et al., 2020, O'Conner et al., 2013, Peach, 2013, Pulgar et al., 2016, Ramos et al., 2015, Villarejo et al., 2010, Weigel & Armijos, 2012, Xiao et al., 2012, Zuñiga et al., 2013) were descriptive and nonexperimental. The title and abstracts of these articles were screened by the reviewer using search terms based on exclusion criteria.

Thematic analysis was then utilized to identify reoccurring themes/patterns across the numerous studies. Ten out of sixteen studies (Arcury et al., 2012, Grzywacz et al., 2007, Horton & Stewart, 2012, Luque & Castaneda, 2012, Magaña & Hovey, 2003, Mucci et al., 2020, Peach, 2013, , Villarejo et al., 2010, Weigel & Armijos, 2012, Xiao et al., 2012) focused on physical risks and outcomes working in agriculture and some touched on either mental health, substance use, and limitations to accessing health care.

Nine out of the sixteen studies (Arcury et al., 2012, Hiott et al., 2008, Horton & Stewart, 2012, Magaña & Hovey, 2003, Mucci et al., 2020, O'Conner et al., 2013, Pulgar et al., 2016, Ramos et al., 2015, Weigel & Armijos, 2012, Zuñiga et al., 2013) focused on mental health stigma associated with agriculture farm workers and some touched on either physical health, substance use, and limitations to accessing health care.

Agriculture farm workers share a lack of accessibility to health care, limited insurance coverage, and physical distress that are often left untreated (Horton & Stewart, 2012). Work related injuries are ignored due to fear of being retaliated against for seeking health services.

Physical distress has been found to be related to musculoskeletal problems this is often associated with back pain, knee pain, foot, and hand pain (Xiao et al., 2012). Common themes within the research indicated that many agricultural farm workers participated in self-treatment and self-medication due to limited health coverage (Weigel & Armijo, 2012).

The studies chosen provided valuable information. It provided agriculture farm workers their own, unique perspectives on their mental health experiences. This is crucial to know as previous studies neglect to directly ask our target population about conditions associated with their occupation and risk of mental health distress. The studies allow for more in-depth awareness of those factors that contribute to stress and how they cope in reaction to stress. (Magaña & Hovey, 2013)

Six out of sixteen studies (Bletzer, 2014, Grzywacz et al., 2007, Hiott et al., 2008, Horton & Stewart, 2012, Mucci et al., 2020, O’Conner et al., 2013) focused the consumption of substance use and some touched on either mental and/or physical health, and limitations to accessing health care. Other forms of self-medication included alcohol abuse due to the impact of poor mental health and depression among agricultural farm workers who experienced poverty and high levels of work stress (Zúñiga et al., 2013). Mobile clinics can benefit agricultural farm workers in receiving medical attention while not interfering with a workday. This can alleviate any fears of missing a day of work due to loss of income (Luque & Castañeda, 2013).

When the identifying reoccurring themes were finalized, the results were compiled into Appendix A which illustrates the findings of the study. Appendix A demonstrates articles containing physical health impact, mental health implications, substance use as a coping mechanism, and limitations to accessing health care. Please see Appendix B on page 21 to review this table.

Discussion

Major Findings

The findings of the literature revealed the connection among agricultural farm workers and self-medication. Studies found that due to limitations such as little or non-existing health care coverage, lack of time off and other factors contributed to over-the-counter self-medication. Agricultural farm workers would benefit from sick pay and paid time off, this would positively affect their health and their overall livelihoods. As long as agricultural farm workers are unable to have access to health care their mental and physical health will continue to be affected, thus resulting in self-coping that can potentially lead to substance abuse. Alcohol has been found as a tool when dealing with the stressors of work life and can potentially lead towards substance reliance. Furthermore, this highlights the need for accessibility in health care.

Agricultural farm workers are vital to the United States economy. Key findings on mental health and agriculture workers included necessary interventions for work safety directed to employers and labor employees. Poor work environment was associated with musculoskeletal discomfort and working while injured resulting in a high risk for *nervios* (anxiety) which in turn is associated with high risk of other mental health issues, including depression. It is crucial that health professionals working with this population be culturally competent. As a result, mental health issues among Latino immigrants present a potential public health crisis that has yet to be carefully measured.

The high costs and limited access to services include lack of available culturally appropriate information, service providers, resources, the stigma of mental health; and difficulty tracking and following up with workers present barriers to improving mental health and their well-being. Nonetheless, interventions that companies can integrate are through cultural

exchange from implementation of networks, opportunities for dialogue, encouraging new agricultural workers to ask questions, and sharing healthy coping strategies. These strategies that address their environment across the individual and community levels could lead to better health outcomes.

Limitations

Though these researchers carefully followed the suggested guidelines of the PRISMA approach for scoping reviews, the findings within this review may still be subject to the risk of biases. These researchers worked collaboratively when setting the criteria for studies to be included within this scoping review. These researchers also worked collaboratively when interpreting the results and identified overarching themes present within the included studies. The interpretation of results and the selection of articles can vary from researcher to researcher, so it is important to point out the risk of bias with regards to these important steps. Nonetheless, the guidelines set within the PRISMA approach for scoping reviews was carefully reviewed and followed by these researchers in order to decrease the risk of biases within this review. Though these researchers were able to identify 16 studies that met the inclusion criteria for this scoping literature review, the results of this study were limited. This is partly due to the limited research currently available in relation to studies addressing the adaptation process for migrant agricultural farm workers experiencing mental and physical stressors without coping strategies.

Strengths

Observing how these themes arise and how often they intersect across the studies provided valuable insight on what specific barriers exist for agricultural farm workers in addition to the need for future research in the area. Despite the marginalization of being a vulnerable population and struggling with physical and mental limitations, these studies emphasized

agricultural farm workers' resiliency to provide for their families and a better future. Strengths in our scoping review highlighted the traditional healing practices that agriculture farm workers have and continue to utilize.

Recommendations for Future Studies and Clinical Considerations

Future research is encouraged to focus on increasing generalizability within the agriculture farm worker experience. This includes examining commonly reported stressors and challenges in studies conducted in other areas of the United States. Furthermore, longitudinal research is crucial and needed to address the adaptation process for migrant agriculture farm workers experiencing mental and physical stressors without coping strategies. In addition to agriculture farm workers receiving mental and physical health services, research can include how much companies and ranch owners are aware of the impact these stressors have on their employees and how they contribute to aid to decrease barriers for their employees.

All our research studies conclude that there is a need for prevention, treatment, and education services for agriculture farm workers. Clinical considerations for this population benefit from support groups that can be easily accessible such as at their work site or near agriculture housing units where agriculture farm workers can learn healthy coping strategies from their peers. Secondly, a social worker can assist in making monthly or quarterly check-ins to job sites with the goal of assessing and adequately refer agriculture farm workers to appropriate services. This will increase the level of motivation and follow through with referrals and treatment. (Magaña & Hovey, 2013)

Work safety is an important aspect of agriculture. This occupation is hard labor and too often there is no consideration for those producing the labor. By improving worker safety this can expand the time and minimize hazardous working conditions thus benefiting both the

employee and employer (Arcury et al., 2012). Lastly, future research should consider and include the indigenous community within agricultural farm workers and the migration experience interconnected with generation trauma (Zúñiga et al., 2013).

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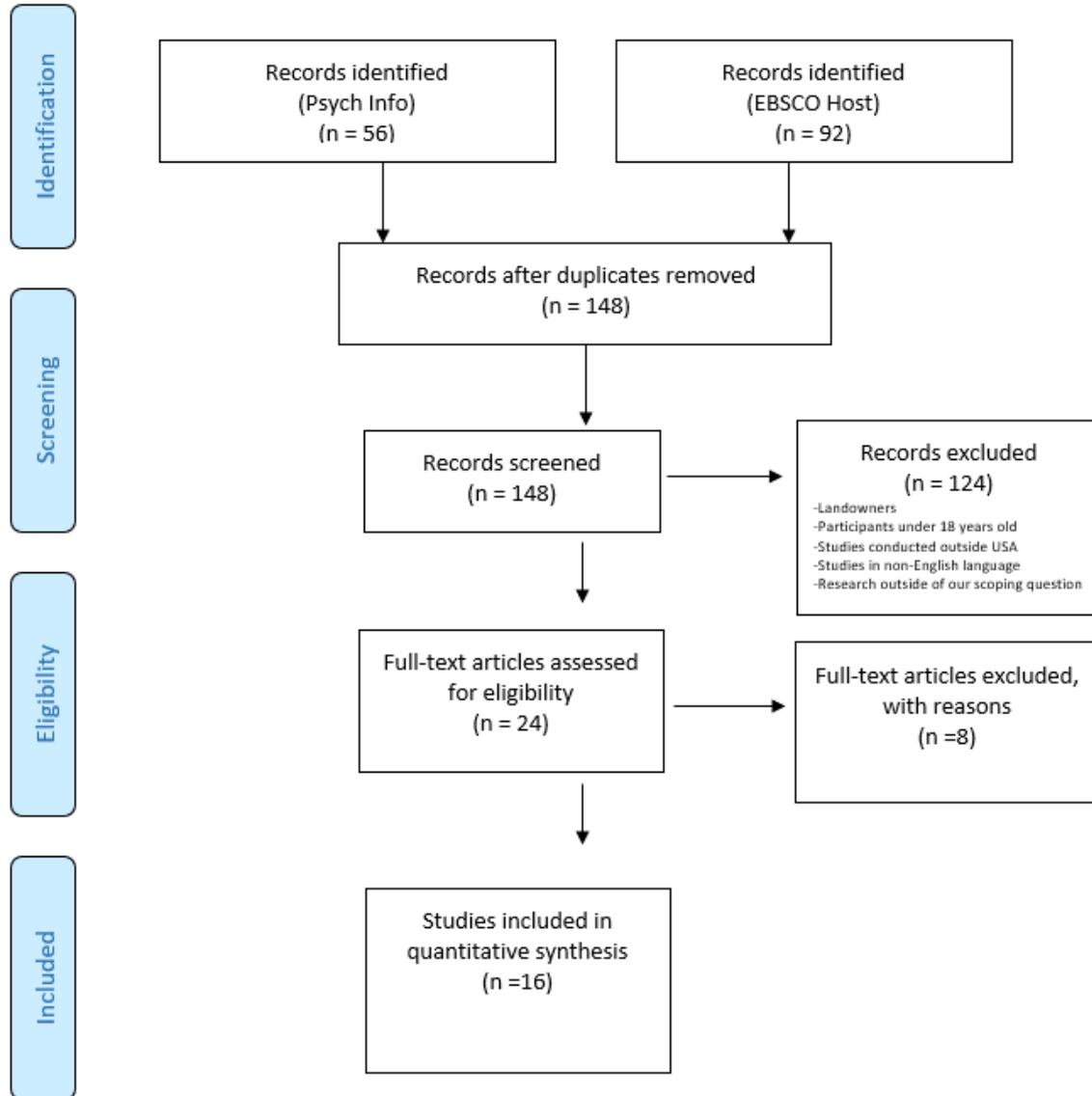
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Appendix A

PRISMA Diagram

(For scoping reviews which included searches of library databases and other sources)



Appendix B

The Findings Table

Author & Dates	Physical health impacted	Mental health implications	Substance use as a coping mechanism	Limitations to accessing health care
Arcury et al. (2012)	X	X		X
Bletzer (2014)			X	
Grzywacz et al. (2007)	X		X	
Hiott et al. (2008)		X	X	
Horton & Stewart (2012)	X	X	X	X
Luque & Castañeda (2012)	X			X
Magaña, Hovey (2003)	X	X		
Mucci et al. (2020)	X	X	X	X
O'Connor et al. (2013)		X	X	
Peach (2013)	X			
Pulgar et al. (2016)		X		X
Ramos et al. (2015)		X		
Villarejo et al. (2010)	X			
Weigel & Armijos (2012)	X	X		X
Xiao et al. (2012)	X			
Zúñiga et al. (2013)		X		X