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Prevalence of and Risk Factors for *Nervios* and Other Psychological Disparities in Latinx Migrant Farm Workers in Central California

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Migrant Farm Workers in Central California**

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Abstract

Through the following literature review of data spanning over more than a decade, readers will be introduced to the concept of *nervios* and other mental health disparities and what implications they have on Latinx migrant farm worker's health in Central California after acculturating into the United States. Latinx adults make up 92% of California's migrant farm worker population and that number continues to grow rapidly each year. However, the Latinx population is suffering from physical and mental health disparities and are doing so in silence due to limited resources and documentation status. Reviewed data shows that there is an epidemiological health crisis within this growing population of Latinx people in California and the effects are generational. Several studies show that migrant men and women are at high risk for substance and alcohol abuse due to these psychological stressors within their daily lives, especially when exposed to harsh and dangerous work conditions, adverse childhood experiences, migrating for work and high acculturation into the United States.

Keywords: migrant, Latino/a, Latinx, *nervios*, farm labor.

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Latinx in California

The Latinx population is the largest non-white racial or ethnic group in the United States, numbering at 63.7 million, making up 19.1% of the population as of May 2023 (Pena et. al., 2023). Because the Latinx population is rapidly growing, it is important to review research conducted on mental health disparities in order to provide adequate resources to Latinx migrant farm workers and their families. Ninety-two percent of migrant farm workers are classified as Latinx, 69% were born in Mexico and had more than fifteen years of experience in farm labor (National Center for Farmworker Health, Inc., 2019). The National Agricultural Workers Survey (NAWS) has defined a migrant as a person who reported jobs that were at least 75 miles apart or who reported moving more than 75 miles to obtain a farm job during a 12-month period. Thirteen percent of California crop workers in 2019 had migrated, half of them being international and 87% considered being settled in the United States (NAWS 2019).

Farmworkers are predominantly male, making up approximately 69% of the farm workers in the United States, with 32% reporting being separated from their immediate family (NAWS, 2015-2018). Over half (63%) of farm workers are married, and 39% have more than 2 children living with them. Fifty-seven percent of farm workers came to the US without their spouse or children (NAWS 2015-2018). Farmworkers make up a large portion of the population in California, as of 2019 about 162,500 men and women work in agriculture (Public Policy Institute of California, 2022). According to The Department of Agriculture and The U.S. Department of Labor, there are 2 to 3 million farm workers working in the U.S. as of 2018 (National Center for Farmworker Health, Inc., 2015-2018). These statistics are reflective of

factors that contribute to mental health disparities in the Latinx community and will be shown in the next sections.

Many farm workers seeking essential health resources are often undocumented making acquiring these resources very difficult for this population. Not only are resources scarce for the migrant farm worker population, very few migrants seek mental health resources in general due to unfortunate stigmas revolving around mental health disorders within the Latinx community. Only 3-5% of migrant farm workers ever actually receive needed mental healthcare resources, while the remaining percentage deals with their depression, anxiety or *nervios* completely on their own, often repressing these feelings for long periods of time contributing to an array of physical and mental health disparities. In the following review, research results will reflect high levels of self-reported depression and anxiety or *nervios* is directly correlated with high levels of acculturation into American society.

Nervios is a culturally specific condition of experiencing psychological distress especially pertaining to Latinx mental health disparities. *Nervios* is characterized by symptoms of depression, anxiety, fear, distractibility and irritability (O'Connor, 2015). Factors that often contribute to symptoms of *nervios* stem from many different aspects of daily life for Latinx migrant farm workers such as poor or uncertain living conditions, low wages, work hazards and injuries, low family support, acculturation levels and the lack of culturally adequate mental health resources within their underserved rural communities. Many studies focus solely on the physical aspects of workforce hazards, but few have studied the psychodynamic factors that contribute to symptoms of *nervios*. Effects of *nervios* have been linked to long term mental and physical health disparities for Latinx migrant farm workers in the Central Valley. The importance of reviewing available literature ensures better understanding of migrant farm workers' ability to

acculturate to their host community and to develop culturally appropriate mental health resources for this important population of people within their communities.

Reviewing the literature within this essay will show positive correlations between symptoms of *nervios* and negative mental health outcomes for migrant Latinx farm workers and their families. The data reviewed was gathered using web-based searches that included information pertaining to the term *nervios* and that were based in the Central Valley, California. Only sources that included Latinx, Latino/a, Mexican, migrant farm worker, *nervios* and California were included.

Prevalence of Symptoms of Nervios

In an epidemiological population study examining Latinx migrant farm workers in Mendota, CA., O'Connor et al. (2013) utilized The Mexican Immigration to California: Agricultural Safety and Acculturation (MICASA) Study to determine the extent of symptoms of *nervios* within a cohort of 422 migrant men employed as farm workers. The MICASA study is a common technique used to survey migrant farm workers all over California to assess their acculturation levels into California. O'Connor's study determined that the prevalence rate for symptoms of *nervios* was 22% among men between 18-55 years of age employed as farm workers within this small rural community. Using extensive interviewing techniques, O'Connor et al. determined the biggest risk factors for these symptoms were 28% familial problems, 14% personal/emotional problems, 13% personal illness and 12% financial instability. These findings suggest that symptoms of *nervios* are strongly associated with drug use, poor self-rated physical and/or mental health and high acculturation levels. One important key factor this study noted was that 64% of males that migrated alone, without their families, reported low family support as the main factor for their symptoms of *nervios*, as opposed to accompanied males only reporting

family problems at 23% significance indicating social support and familialism as dampers for *nervios* symptoms.

Additionally, this study loses validity due to small sample size and use of probability sampling within a small sample. Also, the study is not applicable to Latinx women. More research on how *nervios* affects Latinx migrant women who are a part of the farm worker population needs to be done to further understand the implications it may have on their mental health over all.

In a similar study focused on causes of symptoms of *nervios*, Xiao et al. (2013), also utilized The MICASA Study to determine how fear of workplace injuries play a significant role in reports of these negative symptoms of *nervios* in the same town of Mendota, CA. This study used a larger sample of 759 Men and women working in agriculture. The main difference in this study was that it mainly focuses on the fear and anxieties or *nervios* that come along with working in hazardous environments with exposures to dangerous chemicals. Results of the study showed that 68% of workers reported some type of injury in the prior year, among these respondents, 29.6% reported symptoms of *nervios* pertaining to fear of getting injured again, decreasing hours due to injury or losing their position due to severe injury or physical handicap.

A third study conducted by Guarnaccia et al. (2010) employed data from the Latinx sample of The National Latino and Asian American Study (NLAAS) reported 7-15% of respondents experiencing *ataques de nervios* (nervous attack, similar to a panic attack) and explored multiple social and migration variables that play into these symptoms. By using information from 2,554 men and women working in agriculture across the United States, then pulling the distinct Latinx subgroup of 886 respondents out of the sample to analyze the data, results were implicative that *ataque de nervios* was a direct indicator of social and psychiatric

vulnerability in future studies within the Latinx community. This study was important as it was the first of its kind to address the cultural symptoms of *nervios* as a serious mental health epidemic within the Latinx community. Results were not however reflective of the studies initial hypothesis which stated that those that were less acculturated to the United States would have more *ataques de nervios*. In contrast, the results showed that those who were born in the United States or those who had higher acculturation levels were more likely to have these *ataques de nervios* and accompanying symptoms.

Commonalities within the reviewed studies found that the issues most related to symptoms of *nervios* were familial problems which included poor family support, migrating alone, and relationship strain/divorce. High acculturation levels to American culture was another risk factor for respondents answering yes to questions about whether or not they have had symptoms of *nervios*. Hazardous work environments, getting hurt on the job and being exposed to dangerous chemicals were all additional factors when expressing symptoms. Differences within these studies were the sample characteristics of respondents, most survey studies focused on men and very few studies focused on women suffering from symptoms associated with *nervios*. However, results from the studies that did included women showed results concluding women were much more likely to suffer from *nervios* than men, especially when facing marital strain or those that were divorced, again, confirming the fact that familial problems seem to be at the root of most Latinx' psychological distress and symptoms of *nervios*.

Prevalence of Symptoms of Depression and Anxiety.

Alderete et al. (2000) studied the prevalence of 12 different psychiatric disorders among men and women working in Fresno County using the Mexican American Prevalence and Services Survey (MAPSS) to find the correlation between migrant farm labor and depression and

anxiety symptoms. Participants were selected using a fully probabilistic, stratified, multistage cluster sampling design. Results showed that women (16.3%) had a much lower rate for overall lifetime prevalence of any psychiatric disorder than men (27.6%). Men were 9 times more likely to have alcohol dependence and 5 times more likely to abuse drugs than women. However, results showing rates of mood disorders between men and women were very similar statistically. Alderete et al. (2000) data showed that higher acculturation rates lead to higher reports of depression and anxiety. Those born in the United States and those that have lived in Fresno County for more than 13 years showed much higher rates of acculturation and higher rates of depression and anxiety, at almost double the prevalence rates than those that are newer to the area. Alderete et al. (2000) theory that the variable for high rates of depression and anxiety in those with higher acculturation rates is that weakened sociocultural ties to their home of origin may be strained the more they acculturate to their host society, directly linked to depression and anxiety.

In a similar study focusing on depression, anxiety and acculturation levels, Fitch et al. (2004) used a cluster sampling design to maximize representativeness among 1,001 adult migrant farm workers in Fresno County, CA. The results of this study were very similar to those of Alderete et al. (2000) in that the relationship between higher acculturation levels to the host country results in higher levels of stress and anxiety, or *nervios*. These negative symptoms were directly associated with decline of overall health of migrant farm workers in Fresno County, CA (Fitch et al., 2004).

In a third survey conducted by Hsich et al. (2015) that highlighted social, occupational, and spatial exposures and mental health disparities of working Latinas in the United States provided the only available research on Latinx women based in California. This research is

important to understand as Latinx women make up 20% of California's migrant workforce. As previously stated, most studies have focused solely on male subjects where Hsich focused only on females. It is important to also take into consideration women's mental health as depression, anxiety or *nervios* can be generational as found by Olvera (2012). Results for Hsich's study included findings consistent with depression and anxiety stemming from multiple factors, the most prevalent factors being separation from immediate family and family conflict, like divorce.

Similarities & Differences Between the Studies

Similarities between these studies were the finding that high acculturation levels to American society brings with it higher rates of depression and anxiety or *nervious* among migrant farm workers in California with even higher rates of these symptoms the longer they live in the United States. Another similarity was the use of the MICASA and MAPSS research designs due to their focus on migrant farm worker population. Using stratified sampling designs to ensure random sampling throughout the sample area. Separation from family continues to be a recurring variable in causing symptoms of depression, anxiety or *nervious* among males and females working as migrant farm workers.

Differences within these studies indicate how men and women respond and suffer differently from psychological stressors, depression, anxiety and *nervios*. Focusing mainly on men in agriculture leaves out a very important demographic in women farm workers, who based on the reviewed studies, suffer from more depression and anxiety or *nervios* (Alderete et al. 2000).

Prevalence of Drug and Alcohol Use Among the Latinx Community.

A study conducted by Vega et al. (1996) measured lifetime drug use of 3012 participants, both men and women, residing and working in Fresno County, CA. Using a fully probabilistic

stratified, multi-stage cluster sampling design, participants were surveyed using the World Health Organization's (WHO) Composite International Diagnostic Interview. Findings implied that compared to females, males were four times more likely to use illicit drugs. However, if a Latinx woman was born in the United States, she would be six times more likely to use drugs. This trend is also shown among Latinx teens, accelerated drug use is seen as a consequence of "Americanization" among Latinx youth (Vega et al., 1996).

The prevalence of drug and alcohol use among Latinx communities is high, especially among men, by nine fold. By reviewing the article from Barerra et al. (2018), results further indicate that the Latinx community is within a high threshold for having multiple variables for putting them at higher risk for substance and alcohol abuse. These variables include previous adverse childhood experiences (ACE) that include neglect, abuse, parent rejection, and household dysfunction (Barerra et al., 2018). It is important to include this article in the review as ACE puts the Latinx population at an even higher risk of developing depression and anxiety, or *nervios*, as they continue to develop and acculturate into American society, regardless of occupation. Barerra et al. uses Avenal Behavioral Health Survey in the small community of Avenal, CA. Results reflected that 28% of Latinx respondents had one ACE, 37% had three or more, while 35% reported no ACEs, 63% of respondents were female. Those with three or more ACEs were significantly more likely to have alcohol dependence or abuse substances, and those with three or more ACEs were eight times more likely to have alcohol dependence than those without ACEs. Barerra et al. also suggests that Latinx abusing drugs and alcohol may be doing so as a way of self-medicating (Barerra et al. 2018). One strength of this study was that focusing on rural mental health gives researchers an insight into the prevalence of drug and alcohol use in these underserved areas populated by the majority Latinx whereas most studies in the past have

focused on populations in urban areas.

Delivery of Mental Health Resources for Migrant Farmworkers in California

Latinx Farm workers suffer psychological as well as physical stressors, including discrimination, separation from family, long work hours, and fear of losing employment due to documentation status, which increase their risks for mental health disparities and substance abuse (Alderete, 2000). Although their work is essential and their exposure to harm is high, farm workers generally receive low wages, and they are rarely provided health benefits by their employers (Carroll, 2002).

Another issue surrounding migrant farm workers is the fear that is associated with seeking out mental health resources is that farm workers generally have lower levels of health insurance compared to the general population of the United States (AWS 2021, Hernandez and Gabbard, 2022). Costs of medical office visits, procedures, medications and the like are often seen as barriers among Latinx people that are considering seeking resources (Espinoza-Kulick, 2022)

Conclusion

By reviewing the available literature on the prevalence and risk factors for *nervios* and other mental health disparities among Latinx farm workers, there are many gaps in research that need to be explored in the field, especially pertaining to Latinx women working in agriculture as well as obtaining larger sample sizes for interviews to ensure that data is being included from all subgroups. Farm workers' mental health is equally as important as their physical health over the course of acculturation into American society. Exploring acculturation levels and how they pertain to drug and alcohol use can better prepare host communities with the proper resources they need to serve the Latinx farm worker population in California. However, continued research

will be difficult to conduct given the current state of the country because Latinx people often have fears about immigration status and often do not trust outsiders. Special measures need to be taken when interacting within this growing population of people in California. One area of special measure being taken by researchers that has shown promising results is focus groups within the Latinx community (Umana-Taylor & Bamaca 2004). Continuing to bring forth awareness of these mental health disparities for a rapidly growing population is essential in maintaining the mental health and well-being of Latinx people immigrating into the United States.

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