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Social, Occupational, and Spatial Exposures and Mental Health Disparities of Working-Class Latinas in the US

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Abstract Grounded in ecosocial theory, this paper discusses the mental health disparities of working-class Latinas from multiple perspectives. An overview of working-class Latinas' prevalent mental health disorders, barriers to care and suggestions for interventions and future studies are provided.

Keywords Ecosocial theory · Latina · Occupational exposures · Mental health

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Introduction

The ecosocial theory, first proposed in 1994 by Krieger [1], conjectures that individuals biologically embody their social context, which shapes population patterns of health and disease. The interplay of exposure, susceptibility, and resistance is expressed through pathways of embodiment at multiple levels and in multiple domains, including home, work, and other public settings [1-3]. The ecosocial theory provides the framework for exploring who and what drives patterns of social inequality in health [1, 2].

The US population includes 40.4 million immigrants, of whom the majority is Latino [4, 5]. The growing Latino population is now the second-largest racial/ethnic group in the US and is projected to represent 25 % of the US population by 2050 [6]. Further, this population currently constitutes 15 % of the US labor force, a number that is expected to increase to 19 % by 2020 [7]. Studies show that racial and ethnic minorities are disproportionately affected by mental health disorders [8], and that Latinos are identified as a high-risk group for depression, anxiety, and substance abuse [9]. Latinos' mental health thus has a significant impact on the well-being of the US economy, communities, and society and, therefore, deserves research attention.

Mental health is a fast-growing concern among Latinos [10], particularly Latina immigrants, who often experience gender-specific issues such as domestic violence, rape, and sexual abuse [11, 12]. The ecosocial theory implies that working-class Latinas and other immigrants embody their societal context and every aspect of their life affects their social position, including their immigration status, ethnicity, class, gender, sexuality, and nationality [13]. This societal context determines the types of jobs they hold, their employment status, their degree of job stability, the benefits (if any) and pay they receive, and their occupational exposure. Occupation-related health inequities must be analyzed according to the societal and historical context of the people involved [3]. Latina women experience more mental health issues than do Latino men [14] or non-Latina women, and they are also less likely than their non-Latina counterparts to receive mental health support [15]. Research relevant to Latinos' mental health in general and Latina women's mental health in particular is limited [16, 17]. Grounded in the ecosocial perspective, this paper synthesizes existing mental health literature to discuss the mental health disparities endured by working-class Latinas in the context of their social, occupational, and spatial exposures. Specifically, this paper reviews the trends in immigrants' occupational health disparities, critically discusses the occupational, social, and spatial exposures and hazards experienced by working-class Latinas, provides an overview of their prevalent mental health disorders, discusses current barriers to care, examines available prevention and mental health strategies, and finally discusses implications for future research.

Methods

To obtain an in-depth understanding of the prior studies on working-class Latinas' mental health we conducted a thorough review of mental health literature by searching four electronic databases-CINAHL, PubMed (Medline), PsycINFO, and ProQuest Sociological Abstracts-using the keywords occupational health, mental health, psychosocial, psychiatric, psychological, stress/stressor, and depression, paired with Latina workers, immigrant women workers, minority women workers, Hispanic women workers, and Mexican female workers. The selected articles' reference lists were also reviewed. Only peerreviewed articles and reports pertaining to working-class Latina mental health were included in the final sample. Book chapters, newspaper articles, conference proceedings, dissertations, and non-English publications were excluded, as were mental health studies utilizing only male Latinos as study subjects (e.g., day laborers). Since this study focuses on general working-class Latinas' in the US, mental health articles focusing on Latina mothers, pregnant women, postpartum and prenatal women, caregivers, HIV or cancer patients, youths, undergraduate students, adolescents, elders, lesbians, prisoners, sex workers, veterans, and Latina immigrants outside the US were also excluded from the review. In addition, to focus on the most recent research in the field, the search was limited to articles published between 2000 and 2013.

The primary keyword search, conducted in January 2014, yielded 2450 articles, of which 41 meet the inclusion

criteria and were retained for full review. An additional 32 relevant articles were identified from the bibliographies of the selected articles and were also included. In total, 73 articles were used to produce this paper.

Results

Occupational Health Disparities of Latino Immigrants

Immigrants account for 14 % of the total US workforce and 20 % of low-wage workers [18]. Three of the occupation groups with the highest occupational fatality ratesconstruction, agriculture, and transportation-also have the highest proportion of immigrant workers [19, 20]. Additional high-risk occupations held by immigrants include sweatshop and industry workers [21]. Explanations proposed for the greater prevalence of injuries and fatalities among immigrant workers include assignment of more hazardous tasks to immigrant workers, greater risk-taking by immigrant workers, failure of employers to invest in safety training and proper equipment, and workers not complaining about unsafe conditions [20]. The lack of healthcare access and of culturally sensitive healthcare professionals is thought to further exacerbate immigrant healthcare disparities [21]. A cross-sectional study conducted by Krieger et al. [22] supported the association between occupational, social, and relationship hazards and psychological distress. These hazards have the potential to increase health risks independently and interactively; as a result, the likelihood of co-occurrence is as high as suggested by the inverse hazard law, which states that lower power and resources result in greater health hazards to a given population [22, 23]. The Latino community experiences poverty, discrimination, and underutilization of medical services at higher rates than any other racial or ethnic group [24].

The following section summarizes occupational, social, and spatial exposures and hazards that have an adverse impact on Latinos', particularly Latina women's, mental health based on the comprehensive review of relevant literature published between 2000 and 2013.

Multiple and Multilevel Risk Exposures and Hazards

Poverty

Hudson [25] found that socioeconomic status is associated with a greater risk of mental disability and psychiatric hospitalization. In 2009, 19.0 % of foreign-born citizens and 25.1 % of foreign-born non-citizens lived in poverty compared to 13.7 % of US-born residents [26]. Foreignborn women earn substantially lower wages than do foreign-born men or native women [18]. Evidence shows that income is a predictor of an individual's psychological wellbeing [e.g., 27], and low household incomes and concentrated poverty are significantly related to lower social support and greater incidence of depression and other stressors [28]. Because Latinos are twice as likely as whites to live below the federal poverty line [29], they can be expected to experience more depression. Low socioeconomic status conditions such as poor nutrition, overcrowding, and inadequate housing can also play a vital part in decreasing mental health [21]. Low education, often associated with poverty, is another strong predictor of depression [30].

Occupational Exposures

Dangerous Jobs

Latinos (both men and women) commonly work in places that are detrimental to their health [31]. Overall, the US occupational fatalities have decreased by 25 % in the past few years; however, this rate has doubled among foreignborn Latino workers. Latinos hold a large percentage of the most hazardous US occupations, including agriculture/migrant farm work [20, 21, 32], construction [20, 21], and sweatshops [21]. For non-agricultural Latino workers in 2008, the average occupational injury rate was 12.2/100, compared to 7.1/100 in the US [21]. In addition, the highrisk jobs do not entirely account for the high incidence of fatalities and injuries among Latino workers, who have higher-than-average rates of fatality within these occupational categories [20].

According to the National Agricultural Workers Survey [33], an estimated 3 million farm workers are employed in the US The majority (95 %) of migrant farm workers are from Mexico, and approximately 20 % of employed farm workers are female [33]. While this figure may not capture the number of unemployed females who accompany family members, friends, or significant others to worksites [32], it is known that Latina migrant workers are the least educated, poorest, and most medically underserved population in the US [34]. Migrant farm workers are susceptible to a number of occupational hazards [21], particularly during the migration season when workers do not perceive health as a priority [34]. These hazards include: mechanical injuries; poor field sanitation; exposure to pesticides, which may lead to acute and chronic pesticide poisoning or negative effects associated with depression [35]; and performing strenuous work in high temperatures, which can lead to heat stroke [21, 32]. An interview of 57 migrant workers in eastern North Carolina reported that one in four migrant farmworkers experienced an episode of one or more mental health disorders such as stress, depression, or anxiety in their lifetime [36].

Often minimal effort is made to educate workers on reducing the risk of occupational harm, and even if education is provided, it is rarely available in Spanish [21]. In a study of adolescent Latino farm workers, very few of the 21 % who reported working with agricultural chemicals had received any training [21]. The same study reported that the individuals responsible for cleaning up the aftermath of September 11, 2001 were mostly uninsured Spanish-speaking Latino workers who received no training to work with hazardous materials, were not provided with adequate safety equipment, and reported respiratory irritation that did not improve after stopping work.

Upward and Downward Occupational Mobility

As a result of their destination countries' labor market, social networks, and required job qualifications many immigrants experience changes in occupational status or occupational mobility after migration [37]. Downward mobility, which occurs when an immigrant's post-migration occupation is not commensurate with his or her previous occupational standing or social status, often causes emotional distress [38]. Stressors related to occupational changes may have a negative influence on mental health, especially for women [39]. Extending previous occupational mobility studies, Ro [38] found that upward mobility not only contributed to Latina women's depression but also resulted in a greater likelihood of depression than downward mobility. Upwardly mobile Latinas may secure higher occupational status, but they still face barriers in transferring their skills to the labor markets. Such challenges include language ability and hiring discrimination, which can contribute to workplace stressors. Their higher status jobs also results in higher levels of stress [38].

Workplace Racial Discrimination

In a 2010 survey conducted by the Pew Hispanic Center, 61 % of respondents identified discrimination as a "major problem," citing immigration status as the leading contributor [5]. Discrimination can create barriers to employment and to finding/securing housing, especially for non-Englishspeaking Latinos [30, 40]. Additionally, hate crimes against Latinos in the US increased by 25 % from 2004 to 2006 [30]. In a qualitative study of 21 female migrant farm workers, all participants reported at least one act of discrimination at work or in their daily lives. In Krieger et al.'s study [13], 45 % of Latino participants reported having experienced at least one instance of racial discrimination [13]. The women reported that discrimination and prejudice increased their anxiety [34]. A vignette-based focus group of Latina working-class women revealed that several participants had personally experienced workplace discrimination either having to work harder or receiving less pay than individuals of other racial/ethnic groups [41]. In a study of Latino farm workers in Oregon 78 % of respondents (including 51 Latinas) had experienced stress-inducing discriminatory treatment [42]. This study expanded previous studies by incorporating biological measures to investigate the impact of perceived discrimination on Latino immigrants' psychosocial stress and physiological effects. The results indicated that discrimination-related stress could predict elevated systolic blood pressure and Epstein-Barr virus antibody levels among male participants but not significantly in Latina workers [42].

Sexual Harassment

Perpetrator power has been proved to be associated with the severity of a Latina's sexual harassment experience [43]. Influenced by the tradition of "respeto", Latinas seem to defer to individuals holding positions of higher prestige, recognition, and power in society and, as a consequence, making them vulnerable to sexual harassment from highstatus individuals in the workplace. Waugh [44] found that proximity to men, male-dominated work, male supervisors, and poverty increased Mexican female farm workers' risk for sexual harassment: 97 % of participants reported gender harassment, 53 % reported unwanted sexual attention, and 24 % reported sexual coercion. Regardless of the type of sexual harassment the women reported their experiences affected their physical and psychological health [13, 44] and led to job and life dissatisfaction as well [43].

External Work-Related Factors

Easter et al. [41] found several work-related stressors among Latina workers including: workplace language barriers that prevent workers from understanding each other and appropriately resolving problems; not having friends and family to provide childcare during work hours; and working both within and outside the home. In particular, this "double work" challenge is new to many Latina women, therefore fewer models for coping away from friends and family may be available to Latina women than to other women.

Immigration Status and Debate

Global migration is at an all-time high approaching 200 million individuals per year among whom 1.25 million are immigrants to the US largely from Mexico [40]. Although the receiving countries gain resources and monetary

benefits from this migration [20], there is a national disinclination to provide health services for immigrants due to an overestimation of immigrants' utilization of services, underestimation of immigrants' contribution to the US economy, and xenophobia [30]. To further complicate matters, the local, state, and national immigration debate has increased discrimination against Latinos in the US. The Southern Poverty Law Center reported that hate groups, mainly against immigrants, increased by 40 % from 2000 to 2005 [30].

A number of laws have limited immigrants' access to health services. The Personal Responsibility and Work Opportunity and Reconciliation Act of 1996 barred all documented immigrants from receiving non-emergency Medicaid services. Also in 1996, federal, state, and local public benefits were taken away from undocumented immigrants with the Illegal Immigration Reform and Immigrant Responsibility Acts. Such laws are passed despite evidence that funneling immigrants into acute-care facilities is much less cost-effective than providing preventative services to all immigrants [21].

Being undocumented presents an independent risk for occupational fatalities. Fearing deportation, these individuals are less likely to ask for necessary safety training and education [20]. Generally, non-citizen or undocumented Latinos have higher rates of mental health disorders and lower rates of access to health care than citizens [24].

Acculturation

Acculturation, defined as "a dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members" [45], is thought to negatively impact the mental health of immigrants. However, further research is necessary as conflicting findings exist [15, 46]. Acculturation stress is caused by the accumulation of stressors relevant to resettlement from one nation to another [47], including separation from family, children, and social supports [24, 41, 48], socio political vulnerability, learning a new language, unauthorized immigrant status, and fear of deportation [49]. For Mexican women, higher levels of acculturation and associated stressors have been linked with higher levels of depression [50]. Hovey and Magaña [51] examined the mental health of Mexican migrant farm workers in the Midwest and found that acculturative stress was strongly associated with anxiety and depression, which increases the risk of psychological problems. A study of lifetime prevalence of and risk factors for psychiatric disorders among 1001 Mexican migrant farmworkers in California also concluded the association between cultural adjustment problems with the potential for progressive deterioration of this group's mental health [52]. In contrast,

another study found that more traditional cultural beliefs were associated with a greater likelihood of depression and less utilization of mental health services among Latina women [6].

Symptoms of acculturative stress may include shock, anxiety, and emotional distress [24]. Acculturative stress has also been found to affect decision-making and occupational functioning [24]. Strong, stable family support systems may help to buffer the effects of acculturative stress [24]. In addition, findings show that bicultural Latinos are less likely to be depressed and more likely to have social interests [24, 53].

Caetano et al. [54] found that Latino couples with at least one medium-acculturated member were three times more likely than couples with two low-acculturated members to experience male-to-female domestic violence. The authors attributed this finding to difficulty adjusting between two cultures and a general lack of social support [54]. Generally, US-born and long-term Latino residents, compared to recent Latino immigrants, report higher rates of mental disorders, suicidal ideation, and substance use and abuse [24].

Latinas' Traditional Gender Roles

The traditional Hispanic gender role concepts of marianismo and machismo continue to influence Latino immigrants to the United States. Marianismo calls for women to be self-sacrificing and submissive to their male partners [55], as well as being good mothers forgoing their own needs and well-being for their family [56]. If unable to satisfy these roles, women may feel that they are unfit mothers thereby impacting their mental and physical health [34, 50]. The negative aspects of these gender roles can be exaggerated for some Latina immigrants when trying to adapt to an unfamiliar social context where acceptable gender-based behavior differs from their previous experience [57]. As traditional gender roles interact with the socioeconomic factors of poverty, lack of education, and social mobility or marginalization, Latinas are potentially at risk for mental health problems.

Machismo promotes hyper-masculinity, aggressiveness, and individual power [58]. With more Latinas entering the workforce and often faring better than their male partners, males may experience displacement and insecurity. When combined with low wages and discrimination this may cause males to feel unproductive and emasculated, possibly escalating to domestic violence [24, 59]. Along with unemployment, poverty, and substance abuse, Latinas are susceptible to victimization of domestic violence due to the interplay of the negative traits of Machismo (e.g., sexual prowess, high alcohol consumption, and aggressiveness), an*marianismo* [60, 61].

Domestic and Community Violence

Domestic violence is a serious issue with numerous mental health consequences for victims and their families [62, 63]. In both the National Family Violence ReSurvey and the National Alcohol Survey about 17 % of Latino couples reported male-to-female violence [64]. The rates increase for migrant and seasonal workers. According to Rodriguez [65], 25 % of migrant women reported physical abuse and 16 % reported sexual abuse in the preceding year. According to a report from the US Department of Justice, more than 50 % of Latino women are exposed to some form of interpersonal violence during their lifetime [66]. Additionally, Latinas born in the US are at greater risk than foreign-born Latinas [64].

Latina women exposed to domestic violence suffer more personal injuries and miscarriages, struggle with depression and suicide attempts, and may become addicted to drugs [61, 64].

Factors associated with the incidence of domestic violence among Latinas include low socioeconomic status, educational level [24], occupational stress/unemployment, heavy drinking, and generalized violence among males [54, 64]. Cultural or social dynamics can reinforce traditional patriarchal structure and tolerance of domestic violence [67]. Overlapping issues such as a lack of available Spanish-speaking mental health professionals, being undocumented and fearing deportation, shame, and preserving family harmony may contribute to preventing Latinas in abusive relationships from seeking help [64, 68, 69].

Hazen and Soriano [64] found that 33.9 % of the Latina women surveyed had experienced physical violence at some point in their lives with 18 % in the year prior to the study. Fedovsky, Higgins, and Paranjape [69] found that abused women were three times more likely to meet posttraumatic stress disorder (PTSD) criteria than nonabused women and women meeting these criteria were ten times more likely to have major depressive disorder. In addition, Latinas with victimization experiences of domestic violence and sexual abuse experience greater levels of depression, lower self-esteem [61, 70], and longer periods of distress symptoms than do non-Latino women [71]. Cuevas et al. [66] who studied Latino women from a national sample also found the association between interpersonal violence victimization and psychological distress and that this distress is especially stronger for those with lower levels of Anglo orientation.

In addition, violence witnessed or experienced outside the home may also have detrimental effects on the health of Latinas, as exposure to community violence can create distress for adults and children [72, 73]. A study of the effects of community violence on Latina mothers and children found that those exposed to violence experienced anxiety, depression, and PTSD. The mothers' distress also contributed to their children's behavioral problems [72]. Similarly, in another study by Shattell et al. [30], children reported greater stress when their mothers had higher levels of stress and depression.

Barriers and Buffers to Healthcare Services

According to the National Alliance on Mental Illness only 21 % of Latinas seek care or treatment for mental health [74]. Additionally, those who seek care mostly visit general health care providers and over half do not return after their first visit [24]. Even given equal access to health services, Latinas are less likely than women of other ethnic groups to use mental health services [75–77]. Factors influencing Latinas' utilization of mental health services include a lack of knowledge of available services [78-80], a lack of understanding of/trust in the US mental health system [8, 81], poor treatment experiences [80], and extensive time elapsed between referral and first mental health appointment [77]. It is worth noting that Latinos are the largest uninsured group in the US (32.1 %) [82], further impeding their use of services [83]. Moreover, undocumented Latinas have much lower rates of health insurance, access, and quality of care compared to documented or US-born Latinas [24].

Cultural and social stigmas associated with mental health services form another substantial barrier for Latinas. In traditional Latino culture problems are to be dealt with in a religious or family environment and not discussed with outsiders [74]. Additional barriers include insufficient Spanish-speaking bilingual mental health services, sense of family-related shame associated with disclosing personal problems [78, 80], and lack of transportation or proximity to treatment centers [24]. The language barrier affects utilization and quality of care through ineffective communication at the time of the visit, thus decreasing the likelihood that the prescribed treatment will be followed correctly [24]. To make matters worse, Latinos are less likely than whites to be prescribed guideline-congruent care [80]. Also, there is a significant lack of Latino mental healthcare providers that contributes to a deficiency in role models and programs developed specifically for the needs of Latinas [24].

Factors including influences from social networks, predisposing, enabling, and need characteristics, were also found to prevent Latinas from accessing formal mental health services. Social support [80] and familial influences [50] may act as barriers to Latinas trying to utilize mental health services during times of need or may delay or replace the urgency with which they seek to use mental health services [80]. Predisposing factors found to increase utilization of mental health services include age [84], unemployment, unmarried status, higher income, higher educational attainment, higher acculturation level, and lower self-reliance [80]. Enabling factors that were found to increase utilization of mental health services include the use of case management services [84], having insurance (particularly private insurance), previous use of mental health services, knowledge of where to access services, and living in an urban area [80]. Hochhausen et al. [84] also found depressive symptomatology as a predictor of attending mental health services among Latina participants.

Mental Health Disorders of Latinas

Depression and Anxiety

Major depression, the most common form of depression for all populations, is particularly debilitating and results in loss of productivity [24]. Many psychological, biological, environmental, occupational, and social factors can contribute to the development of depression [74]. The National Co-morbidity Survey found that 17.7 % of Latinos suffer from major depression in their lifetime [24]. Depression symptoms for Latinos tend to include somatic symptoms, feelings of nervousness, tiredness, and irritability [24].

Increased depressive symptoms in Latinas have been associated with separation from family and family conflict [81]. One study found that Latinas who had immigrated to the US without their children were 1.52 times more likely to experience depression than those who had immigrated with their children or had no children [85]. Increased time in the United States has also been associated with increased levels of depression among women of Mexican origin [50].

Shattell et al. [15] found that among Latina women residing in an emerging Latino immigrant community in the US that separation from family in their native country, financial worries, loneliness, consequences of not being able to meet family obligations, fears for their children, and concerns about immigration status were contributing factors for depression. Fox and Kim-Godwin [86] found that multiple factors, including religion, marital status, migrant status, immigration status, and living arrangements are potential sources of stressors for Latina women in rural southeastern North Carolina. Coffman and Norton [87] found immigration demands (measured by feelings of discrimination, occupation, novelty, language, and feeling "not at home") and low levels of health literacy were associated with higher depression scores among recent Latino immigrants to the US. Additionally, Latino youth are at increased risk for depression, anxiety-related behaviors, drug use, and suicidal ideation compared to other racial/ethnic youth groups [24].

Substance-Related and Addictive Disorders

Mental illness is often associated with excessive alcohol and illicit drug use [24]. Cultural dissonance, discrimination, socioeconomic pressures, loss of social support from country of origin, and exposure to substances can lead to alcohol and drug abuse among Latinos [24]. Latinos have the highest death rates from alcohol-related conditions of any racial/ethnic group [24]. Dealers often come to work sites, and most Latinos report their first drug use occurring in an occupational setting [24]. As such, a rise in methamphetamine use, which allows workers to work longer hours and receive higher pay [24], has been detected among migrant farm workers, construction workers, and food service workers [87]. Moreover, adapting to US social norms contributes to increased substance use and abuse, particularly alcohol consumption [24, 53]. In a comprehensive review of 32 articles on Latinas' drinking behavior. Zemore [53] found that highly acculturated Latinas are consistently more likely to drink, even when controlling for demographics. Substance abuse is often used as a negative coping method for immigrant Latinas/Latinos to deal with anxiety, depression, or psychological disorders [88].

Suicidal Behavior Disorders

Nationally, one in five Latina teens attempts suicide. Although this statistic has prompted research on suicidal behaviors among Latinos, very little is known about the attempts and their causes [89]. The 2003 National Household Survey on Drug Abuse found that Latinas aged 12-17 were at higher risk for suicide than any other youth group, especially if they were born in the US and/or lived in a small metropolitan area [89]. A 2007 study that examined secondary data from the National Latino and Asian American Study found that being a US native and/or having one or two US-born parents were associated with greater lifetime suicidal ideation [90]. In addition, being female and involvement with family conflict were associated with an increased likelihood of suicide attempts regardless of whether a psychiatric disorder was present [90]. Major depression and substance abuse have also been associated with an increased risk of suicide [24].

Latina teens' suicide attempts have also been associated with a number of exposures and hazards including, but not limited to acculturative stress, poverty, traditional gender roles, and the relationship between low-acculturated, restrictive parents and high-acculturated daughters [91]. High suicide rates were also found among Latino males, possibly from feelings of emasculation or acculturative stress. Among the elderly, these high rates may be attributed to lack of social support or exacerbation of chronic illness [91]. The risk factors for Latino suicidal ideation are very complex and require further comprehensive, multilevel, mixed-methods research.

Prevention and Mental Health Promotion Strategies

An overall increase in accessibility and availability of culturally and linguistically appropriate services could increase Latinas' utilization of mental health services. These services include cultural sensitivity training for providers, bilingual/bicultural services, efforts to increase Latinas' awareness of mental health disorders, and supportive family relationships and social support networks [24, 50, 92]. It is necessary to increase immigrant Latinos' cultural understanding that cognitive-behavioral therapy in groups, either with family or in combination with spirituality, is preferable to medicine-based treatment in the Latino community [24, 48, 74]. Specifically, cognitive-behavioral group therapy has shown to normalize feelings and increase recognition of contributing factors to depression [48].

In addition to cultural sensitivity, understanding the Latino narrative, fostering empowerment, and taking a life course perspective will ultimately contribute to an effective individual strategy for mental health providers [24]. Because Latinos are more likely to see primary care providers than mental health providers, it is essential that primary care providers are trained to screen for symptoms of mental health issues in the Latino community and are able to provide referrals [24, 50].

A referral system and mental health education and awareness should be provided by the collaboration between community-based organizations, the health department, clinics, English teachers, mental health providers, and private doctors to increase awareness of mental illness and to facilitate access to mental health services [24, 30]. It would also be beneficial to collaborate with community advocacy and religious organizations to alleviate the stigma associated with mental disorders and increase mutual trust between Latina patients and healthcare providers [30], as well as to train Latino educators in mental health to work in collaboration with these providers to offer social support networks and act as role models to their community [30]. Ultimately, involving Latinos directly in the planning, implementation and evaluation of programs and research would increase empowerment in the community and thus the utilization of mental health services [48].

Suggested strategies to improve conditions at worksites include informing workers regarding their rights, hazards they may encounter, and information on how these workers can be countered [41]. Working with government agencies to improve and fund worksite-safety policies and reporting of data on occupational diseases, injuries, and fatalities [3], as well as making employers aware of laws and policies that prohibit discrimination and educational programs that express the benefits of providing a safe and healthy environment for all employees, are important [41]. Thus, increased federal oversight of working conditions (particularly for migrant farm workers) would increase education, safety, and workers' rights [21]. This could also be accomplished through unions and worker centers, which can provide support to low-wage workers, advocacy, workers' rights education, English classes, and legal representation [21, 41].

Other prevention methods include incorporating Spanish-speaking staff at substance abuse facilities and domestic violence shelters [24].

Using creative, culturally appropriate strategies for educational awareness campaigns and increasing advocacy for mental health, for example by recruiting Latino celebrities to educate people about mental health issues, can break down the stigma impeding Latinos from seeking healthcare [24]. National health and human service hotlines should be mandated to have culturally-appropriate training and Spanish-speaking staff [24]. Hospital signs, especially those in highly populated Latino areas, should include Spanish translations [24]. Translation services need to be easily accessible at any health service site, especially given the stigma associated with mental health treatment [24, 41].

Raising awareness and advocacy is key to translating research into regulation and practice. A national surveillance system would be beneficial in identifying trends and increasing awareness and advocacy for health inequities [21]. Culturally and linguistically relevant programs, methods, measures, and strategies will reduce federal, state, local, and individual costs through effective treatments for mental illness [24]. To be successful, strategies must be comprehensive, multifaceted, and employed on multiple levels (individual, community, and organizational).

Implications

Although a large body of prior research pertains to the embodied exposures, hazards, and mental health issues faced by immigrant Latinos in the US, little work has focused on the ethnically gender-specific perspective of working-class Latinas. The existing literature is not sufficient to provide a comprehensive view of the prevalence, determinants, and effective prevention methods among working-class Latinas. Further research is required to address this gap in order to make health professionals and social policy makers better informed of the mental health needs of this particular group. Specifically, more research is needed on the determinants of suicidal ideation, protective factors for exposures and mental health disorders, contextually embodied lives with multiple exposures and hazards, and effective scales for measuring acculturation and successfully evaluated interventions among Latinas. Most of all, future research needs to be comprehensive and multi-level to address the interplay of multiple variables embedded in working-class Latinas' mental health issues. Mixed-method and longitudinal research designs need to be adopted to collect and establish baseline data systematically.

It is important to understand that, while the majority of Latinos in the US are individuals of Mexican descent, Latinos vary greatly by country/region of origin, political and social histories, educational level, and immigration experience [8, 24]. It is important to be culturally sensitive and avoid assumptions based on race/ethnicity, educational level, or any other single criterion [24]. In order to understand the diverse population of Latinas and to meet their needs for mental health services, future sub-population-specific research is needed in order to fully understand prevalence rates and how to better prevent mental health disorders for Latina sub-populations.

Limitations

This comprehensive review of the literature covering working-class Latinas' mental health was conducted in January 2014. Therefore, it does not contain relevant articles published after that date. It is also worth noting that some of the studies analyzed in this paper had methodological limitations, such as reliance on cross-sectional designs and small sample size. This limited the generalization of the results and placed constraints on knowledge about working class Latinas' mental health. The scarcity of working Latina samples also reflects the difficulties of recruiting this underserved ethnic group and highlights the lack of studies focusing on this group.

Conclusion

This paper presented a summary of the studies relevant to Latinas mental health and poised that working-class Latinas' occupational and social exposures combined with negative oppressions (acculturation depress, immigration status, domestic violence) arising from their disadvantageous socio-demographic status and their strict traditional gender roles, often lead to their mental health challenges. As a result, many suffered from psychological and behavioral outcomes such as depression, anxiety, substance/addictive disorders, and suicides.

Latino health inequities represent an increasingly important human rights issue for our time. Addressing working-class Latinas' inequities requires a strong social value to mental health and to immigrants, social epidemiological research, community-based educational efforts, organized labor movements, improved health care access, culturally competent care, and changes in healthcare policy designed to address inequities from the perspective of occupational, social and spatial exposures and hazards. Future studies can employ systematic scientific methodologies to deconstruct the complicated occupational and social cultural factors that might elevate risk of psychological risks among Latina populations. Additional studies to determine best practices for clinical care, interventions, and prevention of mental health disorders specifically tailored for Latinas are needed to close the mental health gap.

References

- 1. Krieger N. Theories for social epidemiology in the 21st century: an ecological perspective; 2001.
- Krieger N. A glossary for social epidemiology. J Epidemiol Community Health. 2001;55(10):693–700.
- Krieger N. Workers are people too: societal aspects of occupational health disparities—ecological perspective. Am J Ind Med. 2010;53(2):104–15.
- Camarota S. Immigrants in the United States, 2007: a profile of America's foreign-born population; 2007.
- 5. Pew Hispanic Center. Illegal immigration backlash worries, divides Latinos; 2010.
- Cordero A, Kurz B. Acculturation and the mental health of Latina women in the woman, infant, and children program. Affilia. 2006;21(1):46–58.
- 7. US Department of Labor. The Latino labor force at a glance; 2012.
- US Department of Health and Human Services. Mental health: culture, race, and ethnicity. A supplement to mental health: a report of the surgeon general; 2001.
- National Alliance for Hispanic Health. Quality health services for hispanics: the cultural competency component; 2001.
- Jurkowski JN, Westin EL, Rossy-Millán J. Latina self-reported mental health and delay in health care in a new Latino destination. Women Health. 2010;50(3):213–28.
- Miller E, Decker MR, Reed E, Raj A, Hathaway JE, Silverman JG. Male partner pregnancy-promoting behaviors and adolescent partner violence: findings from a qualitative study with adolescent females. Ambul Pediatr. 2007;7(5):360–6.
- Hass GA, Dutton MA, Orloff LE. Lifetime prevalence of violence against Latina immigrant: legal and policy implications; 2000.
- Krieger N, Waterman PD, Hartman C, et al. Social hazards on the job: workplace abuse, sexual harassment, and racial discrimination—a study of Black, Latino, and White low-income women and men workers in the United States. Int J Health Serv. 2006;36(1):51–85.
- Alegría M, Mulvaney-Day N, Torres M, Polo A, Cao Z, Canino G. Prevalence of psychiatric disorders across Latino subgroups in the United States. Am J Public Health. 2007;97:68–75.

- Shattell MM, Hamilton D, Starr SS, Jenkins CJ, Hinderliter NA. Mental health service needs of a Latino population: a communitybased participatory research project. Issues Ment Health Nurs. 2008;29(4):351–70.
- Ramos BM, Jurkowski J, Gonzalez BA, Lawrence C. Latina women: health and healthcare disparities. Soc Work Public Health. 2010;25(3):258–71.
- Huang B, Appel H, Ai AL. The effects of discrimination and acculturation to service seeking satisfaction for Latina and Asian American women: implications for mental health professions. Soc Work Public Health. 2011;26(1):46–59.
- Capps R, Fix M, Passel JF, Ost J, Perez-Lopez D. A profile of the low-wage immigrant workforce; 2003.
- 19. US Bureau of Statistics. Occupational employment and wages; 2012.
- Schenker MB. A global perspective of migration and occupational health. Am J Ind Med. 2010;53(4):329–37.
- Eamranond PP, Hu H. Environmental and occupational exposures in immigrant health. Environ Health Insights. 2008;1:45–50.
- 22. Krieger N, Kaddour A, Koenen K, et al. Occupational, social, and relationship hazards and psychological distress among low-income workers: implications of the 'inverse hazard law'. J Epidemiol Community Health. 2011;65(3):260–72.
- 23. Krieger N, Chen JT, Waterman PD, et al. The inverse hazard law: blood pressure, sexual harassment, racial discrimination, workplace abuse and occupational exposures in US low-income black, white and Latino workers. Soc Sci Med. 2008;67(12):1970–81.
- National Council of La Raza. Critical disparities in Latino mental health: transforming research into action [White paper]; 2005.
- Hudson CG. Socioeconomic status and mental illness: tests of the social causation and selection hypotheses. Am J Orthopsychiatry. 2005;75(1):3–18.
- 26. National Poverty Center. Poverty in the United States frequently asked questions; 2009.
- Kaplan GA, Shema SJ, Leite MCA. Socioeconomic determinants of psychological well-being: the role of income, income change, and income sources during the course of 29 years. Ann Epidemiol. 2008;18(7):531–7.
- Moskowitz D, Vittinghoff E, Schmidt L. Reconsidering the effects of poverty and social support on health: a 5-year longitudinal test of the stress-buffering hypothesis. J Urban Health. 2012;90(1):175–84.
- United States Department of Health and Human Services. Poverty Guidelines; 2013. http://aspe.hhs.gov/poverty/13poverty.cfm. Accessed 01 June 2015.
- Shattell MM, Villalba J, Stokes N, et al. Depression in Latinas residing in emerging Latino immigrant communities in the United States. Hisp Health Care Int. 2009;7(4):190–202.
- Acevado G, Gonzalez MJ, Santiago V, Vargos-Ramos C. The state of Latino health and mental health; 2007.
- Hansen E, Donohoe M. Health issues of migrant and seasonal farmworkers. J Health Care Poor Underserv. 2003;14(2):153–64.
- 33. Carroll D., Samardick RM, Bernard S, Gabbard S, Hernandez T. Findings from the National Agricultural Workers Survey (NAWS), 2001–2002: a demographic and employment profile of the United States farm workers. In: Labor USDo, editor. Washington, DC; 2005.
- Clingerman EM. Conceptualizations of health among Mexican and Mexican American women employed in migrant farm work. Hisp Health Care Int. 2006;4(1):45–55.
- Beseler CL, Stallones L, Hoppin JA, et al. Depression and pesticide exposures among private pesticide applicators enrolled in the agricultural health study. Environ Health Perspect. 2008;116(12):1713–9.
- Winkelman SB, Chaney EH, Bethel JW. Stress, depression and coping among Latino migrant and seasonal farmworkers. Int J Environ Res Public Health. 2013;10(5):1815–30.

- Nicklett EJ, Burgard SA. Downward social mobility and major depressive episodes among Latino and Asian-American immigrants to the United States. Am J Epidemiol. 2009;170(6):793–801.
- Ro A. Occupational mobility and depression among the foreign-born in the United States. J Immigr Minor Health 2014;16(6):1149–1156.
- Lorant V, Deliège D, Eaton W, Robert A, Philippot P, Ansseau M. Socioeconomic inequalities in depression: a meta-analysis. Am J Epidemiol. 2003;157(2):98–112.
- 40. Pew Hispanic Center. 2007 national survey of Latinos: as illegal immigration issue heats up, Hispanics feel the chill; 2007.
- 41. Easter MM, Linnan LA, Bentley ME, et al. "Una mujer trabaja doble aqui": vignette-based focus groups on stress and work for Latina blue-collar women in Eastern North Carolina. Health Promot Pract. 2007;8(1):41–9.
- 42. McClure HH, Snodgrass JJ, Martinez CR Jr, Eddy JM, Jiménez RA, Isiordia LE. Discrimination, psychosocial stress, and health among Latin American immigrants in Oregon. Am J Hum Biol. 2010;22(3):421–3.
- 43. Cortina LM, Fitzgerald LF, Drasgow F. Contextualizing Latina experiences of sexual harassment: preliminary tests of a structural model. Basic Appl Soc Psychol. 2002;24:295–311.
- 44. Waugh IM. Examining the sexual harassment experiences of Mexican immigrant farmworking women. Violence Against Women. 2010;16(3):237–61.
- Berry JW. Acculturation: living successfully in two cultures. Int J Intercult Relat. 2005;29(6):697–712.
- Caplan S. Latinos, acculturation, and acculturative stress: a dimensional concept analysis. Policy Polit Nurs Pract. 2007;8(2): 93–106.
- Cervantes RC, Padilla AM, de Snyder NS. The Hispanic stress inventory: a culturally relevant approach to psychosocial assessment. Psychol Assess. 1991;3(3):438–47.
- 48. Shattell MM, Quinlan-Colwell A, Villalba J, Ivers NN, Mails M. A cognitive-behavioral group therapy intervention with depressed Spanish-speaking Mexican women living in an emerging immigrant community in the United States. ANS Adv Nurs Sci. 2010;33(2):158–69.
- 49. Arbona C, Olvera N, Rodriguez N, Hagan J, Linares A, Wiesner M. Acculturative stress among documented and undocumented Latino immigrants in the United States. Hisp J Behav Sci. 2010;32(3):362–84.
- Shattell MM, Smith KM, Quinlan-Colwell A, Villalba JA. Factors contributing to depression in Latinas of Mexican origin residing in the United States: implications for nurses. J Am Psychiatr Nurses Assoc. 2008;14(3):193–204.
- Hovey JD, Magaña CG. Exploring the mental health of Mexican migrant farm workers in the midwest: psychosocial predictors of psychological distress and suggestions for prevention and treatment. J Psychol. 2002;136(5):493–513.
- 52. Alderete E, Vegam W, Kolody B, Aguilar-Gaxiola S. Lifetime prevalence of and risk factors for psychiatric disorders among Mexican migrant farmworkers in California. Am J Public Health. 2000;90(4):608–14.
- Zemore SE. Acculturation and alcohol among Latino adults in the United States: a comprehensive review. Alcohol Clin Exp Res. 2007;31(12):1968–90.
- Caetano R, Schafer J, Clark CL, Cunradi CB, Rasberry K. Intimate partner violence, acculturation, and alcohol consumption among Hispanic couples in the United States. J Interpers Violence. 2000;15(1):30–45.
- Weidel JJ, Provencio-Vasquez E, Watson SD, Gonzalez-Guarda R. Cultural considerations for intimate partner violence and HIV risk in Hispanics. J Assoc Nurses AIDS Care. 2008;19(4):247–51.
- 56. Santiago-Rivera AL, Arredondo P, Gallardo-Cooper M. Counseling Latinos and la familia: a practical guide. Thousand Oaks: Sage; 2002.

- Perilla J. Domestic violence as a human rights issue: the case of immigrant Latinos. Hisp J Behav Sci. 1999;21(2):107–33.
- Arciniega GM, Anderson TC, Tovar-Blank ZG, Tracey TJG. Toward a fuller conception of machismo: development of a traditional machismo and Caballerismo scales. J Couns Psychol. 2008;55:19–33.
- Hirsch JS. A courtship after marriage: sexuality and love in Mexican transnational families. Berkeley: University of California Press; 2003.
- Perilla JL, Bakeman R, Norris FH. Culture and domestic violence: the ecology of abused Latinas. Violence Victim. 1994;9(4):325–39.
- Edelson MG, Hokoda A, Ramos-Lira L. Differences in effects of domestic violence between Latina and non-Latina women. J Fam Violence. 2007;22(1):1–10.
- 62. Basile KC, Arias I, Desai S, Thompson MP. The differential association of intimate partner physical, sexual, psychological, and stalking violence and posttraumatic stress symptoms in a nationally representative sample of women. J Trauma Stress. 2004;17(5):413–21.
- Zlotnick C, Johnson DM, Kohn R. Intimate partner violence and long-term psychosocial functioning in a national sample of American women. J Interpers Violence. 2006;21(2):262–75.
- Hazen AL, Soriano F. Experiences with intimate partner violence among Latina women. Violence Against Women. 2007;13(6): 562–82.
- 65. Rodriguez N. Clinical interventions with battered migrant farm worker women. In: Campbell JC, editor. Empowering survivors of abuse: health care for battered women and their children. Thousand Oaks: Sage; 1998. p. 271–9.
- Cuevas CA, Sabina C, Milloshi R. Interpersonal victimization among a national sample of Latino women. Violence Against Women. 2012;18(4):377–403.
- 67. Morash M, Bui HN, Santiago A. Culture-specific gender role ideology and wife abuse in Mexican-descent families. Int Rev Victimol. 2000;7(Special Issue):67–91.
- Kasturirangan A, Nutt WE. Counseling Latina battered women: a qualitative study of the Latina perspective. J Multicult Couns Dev. 2003;31:162–78.
- Fedovskiy K, Higgins S, Paranjape A. Intimate partner violence: how does it impact major depressive disorder and post traumatic stress disorder among immigrant Latinas? J Immigr Minor Health. 2008;10(1):45–51.
- Cuevas CA, Sabina C, Picard E. Interpersonal victimization patterns and psychopathology among Latino women: results from the SALAS study. Psychol Trauma Theory Res Pract Policy. 2010;2:296–306.
- Pole N, Best SR, Metzler T, Marmar CR. Why are Hispanics at greater risk for PTSD? Cult Divers Ethn Minor Psychol. 2005;11(2):144–61.
- 72. Aisenberg E. The effects of exposure to community violence upon Latina mothers and preschool children. Hisp J Behav Sci. 2001;23(4):378–98.
- Davies CA, DiLillo D, Martinez IG. Isolating adult psychological correlates of witnessing parental violence: findings from a predominantly Latina sample. J Fam Violence. 2004;19(6):377–85.
- National Alliance on Mental Illness. Latina women and depression: fact sheet; 2009.
- Alegría M, Canino G, Ríos R, et al. Inequalities in use of specialty mental health services among Latinos, African Americans and non-Latino Whites. Psychiatr Serv. 2002;53(12):1547–55.
- Blanco C, Patel SR, Liu L, et al. National trends in ethnic disparities in mental health care. Med Care. 2007;45:1012–9.
- Wang PS, Lane M, Olfson M, Pincus HA, Wells KB, Kessler RC. Twelve-month use of mental health services in the United States. Arch Gen Psychiatry. 2005;62(6):629–40.

- Vega WA, Alegria M. Latino mental health and treatment in the United States. In: Aguirre-Molina M, Molina CW, Zambrana R, editors. Health issues in the Latino community. San Francisco: Jossey-Bass; 2001. p. 179–208.
- Ortega A, Alegria M. Self-reliance, mental health need and use of mental healthcare among island Puerto Ricans. Ment Health Serv Res. 2002;4(3):131–40.
- Cabassa LJ, Zayas LH, Hansen MC. Latino adults' access to mental health care: a review of epidemiological studies. Adm Policy Ment Health. 2006;33(3):316–30.
- Heilemann M, Coffey-Love M, Frutos L. Perceived reasons for depression among low income women of Mexican descent. Arch Psychiatr Nurs. 2004;18(5):185–92.
- US Census Bureau. Income, poverty, and health insurance coverage in the United States: 2009.; 2010.
- Kimerling R, Baumrind N. Access to specialty mental health services among women in California. Psychiatr Serv. 2005;56: 729–34.
- Hochhausen L, Le H, Perry D. Community-based mental health service utilization among low-income Latina immigrants. Community Ment Health J. 2011;47(1):14–23.
- Miranda J, Siddique J, Der-Martirosian C, Belin TR. Depression among Latina immigrant mothers separated from their children. Psychiatr Serv. 2005;56(6):717–20.

- Fox JA, Kim-Godwin Y. Stress and depression among Latina women in rural southeastern North Carolina. J Community Health Nurs. 2011;28(4):223–32.
- Coffman MJ, Norton CK. Demands of immigration, health literacy, and depression in recent Latino immigrants. Home Health Care Manag Pract. 2010;22(2):116–22.
- Farley T, Galves A, Dickinson LM, de Perez MJ. Stress, coping, and health: a comparison of Mexican immigrants, Mexican-Americans, and non-Hispanic Whites. J Immigr Health. 2005; 7(3):213–20.
- Substance Abuse & Mental Health Administration. NHDSA report: risk of suicide among Hispanic females aged 12 to 17; 2003.
- 90. Fortuna LR, Perez DJ, Canino G, Sribney W, Alegria M. Prevalence and correlates of lifetime suicidal ideation and attempts among Latino subgroups in the United States. J Clin Psychiatry. 2007;68(4):572–81.
- Zayas LH, Lester RJ, Cabassa LJ, Fortuna LR. Why do so many Latina teens attempt suicide? A conceptual model for research. Am J Orthopsychiatry. 2005;75(2):275–87.
- 92. Castaneda X. Mental Health and Latinos in the U.S.: fact sheet. Health Initiative of the Americas; 2010.