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Journal

Clinical Nursing Research, 33(4)

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Publication Date
2024-02-26

DOI
10.1177/10547738241235695

Clinical Nursing Research
2024, Vol. 33(4) 231–239

DOI: 10.1177/10547738241235695
journals.sagepub.com/home/cnr
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Relationship Between Acculturation and Mental Health in Korean American Family Caregivers of Community-Dwelling Persons Living with Dementia

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Abstract

Despite the growing number of Korean American (KA) family caregivers for persons with dementia, little is known about how acculturation might affect caregiving stress in this population. Acculturation is a variable of considerable interest in caregiving research due to its significance in understanding the impact of cultural perceptions and expectations on the caregiving role and its relation to mental health outcomes. A cross-sectional descriptive study using baseline data from an ongoing randomized controlled trial of dementia caregiver intervention was performed to examine the association between acculturation and mental health outcomes among KA caregivers ($n = 32$) for persons with dementia. Self-report survey questionnaires including a bidirectional acculturation scale, Center for Epidemiologic Studies Depression Scale, the Perceived Stress Scale, and the Zarit Burden Interview were administered in person in English or Korean by trained bilingual community health workers. The primary independent variable, acculturation, was assessed using a 24-item inventory. It measured two sets of cultural orientation: Korean orientation and American orientation. The mean age was 67 years ($SD = 11.8$) and 87% were women. Half of the caregivers were spouses of persons with dementia, while the other half were offspring caregivers. In the multiple linear regression model, caregiver acculturation toward Korean cultural orientation had a significant and positive association with depressive symptoms ($\beta = .62$; $SE = 0.25$; p-value = .02) and perceived stress ($\beta = .29$; $SE = 0.13$; p-value = .03) after adjusting for age and self-efficacy. No significant effect of American cultural orientation was found for caregiver burden, perceived stress, or depressive symptoms. Our findings suggest that exploring the role of acculturation in caregiving and its relation to outcomes, particularly caregiver distress, may be valuable for future studies aiming to understand specific elements of cultural values and practices in the acculturation process related to mental health outcomes among immigrant Korean American caregivers.

Keywords

acculturation, immigrant Korean Americans, Alzheimer's disease, dementia, caregiving distress

Introduction

Dementia caregiving is accompanied by physical, mental, and social challenges that place caregivers at risk for significant mental health problems such as depression, anxiety, and emotional stress (Meyer et al., 2015). This is attributed to chronic stress experiences, including managing psychological and behavioral disturbances among persons with dementia (PWD), as well as coping with the physical and psychological strain arising from the extended periods of caregiving for PWD with functional limitations (Y. J. Chen et al., 2023; Lin et al., 2019; Su et al., 2019). Consequently, the burden of caregiving has the potential to compromise not only the immediate well-being but also the long-term mental health of caregivers, underscoring the importance of implementing comprehensive support measures and recognizing the health and mental health of caregivers as a crucial societal concern (Hu et al., 2023).

Asian family caregivers have become critical societal resources in this aging society as the population of older adults in the United States becomes more racially and ethnically

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diverse, and the number of family members serving as their caregivers significantly increases (Ta Park et al., 2018). According to the Centers for Disease Control and Prevention (CDC), as of 2023, dementia affects around 6.7 million American individuals in the United States, and more than 16 million Americans are providing unpaid care for family and friends with dementia (CDC, 2023). Compared to non-Hispanic Whites, Asian Americans and other ethnic minorities are more likely to take on the burden of caregiving for family members with Alzheimer's disease and related dementia due to challenges in accessing and utilizing health services or professional support (Gray et al., 2009; Nguyen, 2012).

The caregiving experiences of Asian Americans and other ethnic minorities are likely influenced by the acculturation process (Goodyear et al., 2023; Miyawaki, 2016). Acculturation refers to the learning process individuals experience when they are exposed to a new cultural environment and become assimilated into local societal norms, values, and behaviors (Jang et al., 2007). In the process of acculturation, immigrants demonstrate varying orientations toward host cultures and their heritage culture and identity, as suggested by Berry et al. (1987). Within bidimensional models of acculturation, these orientations to both the original culture and the host culture are assessed separately (Jang et al., 2007). This approach facilitates the separate assessment of the individual's varying levels of adherence to their original culture or levels of acceptance of the host culture (Jang et al., 2007; van der Zee & van Oudenhoven, 2022).

The level of acculturation, reflecting the degree to which individuals adopt the cultural norms and practices of the host culture, is associated with mental health among ethnic minorities, such as Hispanic/Latino caregivers (Hahn et al., 2011; Meyer et al., 2018). Recent studies have shown that Hispanic/Latino caregivers who were more acculturated to their host culture were more inclined to seek formal support services for their stress and burnout, such as support groups provided as part of the Alzheimer's serving organizations or a hospital/clinic, whereas less acculturated caregivers were reluctant to use these services due to their culture and language barriers (Hahn et al., 2011; Meyer et al., 2018). These distinct barriers that restrict their comprehension of the services (i.e., caregiver skills and coping strategies) provided in English have resulted in exacerbating caregiver burden and stress (Meyer et al., 2018). Furthermore, several studies have shown that caregivers who had not fully assimilated to the dominant culture, in other words, those who were less acculturated to their host culture, were more isolated and less likely to seek out mental health services which led to the high rates of depressive symptoms compared to those who had assimilated more into the dominant culture and seek out support from others in their community (Meyer et al., 2015; Miyawaki, 2016). These studies underscore the role of the level of acculturation, particularly a lower level of acculturation toward their host culture, in influencing their help-seeking behavior, such as utilizing mental health services. This has a negative impact on their mental health outcomes, including increased stress and depressive symptoms among ethnic minority, Hispanic/Latino, and Vietnamese caregivers. These findings are troubling given that immigrant caregivers already experience significant health and healthcare disparities due to the lack of protective social resources and networks that came from their culture, as well as the burden to adapt and transition (Inman & Yeh, 2007; Nguyen 2012).

Despite the rising numbers of Asian American populations and the significance of recognition of cultural diversity in the United States, only a few studies have explored the experience of caring for someone with dementia among Asian American caregivers, particularly Korean American (KA) individuals (De Gagne et al., 2014; Lee Casado et al., 2015). Most research on caregiver distress has predominantly focused on Whites and, to a lesser extent, African Americans and Hispanics, leaving little attention given to other minority caregivers, such as KA caregivers (Dilworth-Anderson et al., 2020). However, it is essential to recognize that findings targeting these populations may not directly apply to KAs, especially those who have immigrated from Korea, due to their distinct cultural differences and values regarding the care of older family members. According to De Gagne et al. (2014), in discussing the interconnectedness of ethnicity and cultural norms, these factors intertwine with the caregiver role, impacting individuals' burden and shaping their perceptions and utilization of social support. This interplay may potentially result in different caregiving outcomes, such as their mental health. For example, family care is considered a normative and integral part of traditional family duties in Korea (Lee et al., 2014). Due to this cultural emphasis, individuals might hesitate to seek help from external sources or formal support systems, even when overwhelmed by caregiving responsibilities, which may exacerbate caregiver burnout (Kim et al., 2019). This present study therefore aims to investigate the association between acculturation, reflecting both the varying degrees of individuals' adherence to their cultural orientations and acceptance of their mainstream culture, and caregiver distress—specifically, depressive symptoms, perceived stress, and burden—among KA caregivers for PWD. Based on empirical evidence from previous research, we hypothesized the following:

Immigrant KA caregivers, with higher acculturation toward their original culture, reflecting limited English proficiency and restricted social networks within their racial/ethnic background, may experience elevated levels of perceived stress, burden, and depressive symptoms.

Methods

Study Design, Participants, and Data Collection

The present study employs a cross-sectional descriptive research design utilizing baseline survey data derived from an ongoing randomized controlled trial of dementia caregiver intervention, with the clinical trials registered under NCT04894006 (ClinicalTrials.gov, n.d.). For this study, a KA family caregiver of PWD is defined as an individual of Korean descent currently residing in the United States and immigrated from Korea. This individual is responsible for providing care to a community-dwelling spouse, parent, or other family member diagnosed with Alzheimer's disease or related dementia. Participants were recruited via flyers, letters, emails, phone calls, Korean newspapers, Korean radio stations, or word of mouth among Korean community groups (i.e., Korean churches, Korean-speaking medical offices, local ethnic grocery markets, local Alzheimer's serving organizations, and caregiver resource centers). Inclusion criteria for this study consisted of individual family members or significant others who were aged 18 and above and currently providing primary care for a person with Alzheimer's disease or related dementia, living in a community setting, having no intention to place the PWD to a long-term care facility within 6 months, and able to comprehend both oral and written information in either Korean or English. Exclusion criteria included participants with (1) cognitive impairment, as determined by a standard cognitive screening tool (i.e., Mini-Cog) if they are 65 or older, (2) current active cancer, or (3) other significant health problems (i.e., terminal illnesses, acute stroke, epilepsy, or neurological disorders), and (4) a need of hospice care. During the recruitment process for the parental study, potential participants in Orange/Los Angeles County, California, eligible for a home visitation intervention, underwent screening via a phone interview. Out of the 37 potential participants screened, 5 individuals were found ineligible for the study due to various reasons, such as critical illnesses and cognitive disorders. Consequently, a total of 32 KA dementia caregivers were selected to participate in the study.

The authors' affiliated University of Institutional Review Board (IRB) on Human Subject Research approved the study protocol before the collection of data. Each participant was provided a study information sheet including the study purpose, procedure, and safety. Due to the nature of the minimal risk of the study, written consent by participants was waived by the IRB. Participants were compensated with $40 cash upon completion of the surveys. Self-report survey questionnaires were administered in person in English or Korean, depending on the participant's preferences, by trained bilingual community health workers at the participants' homes. The community health worker asked for demographic information (i.e., caregiver's age, gender, education, income, health insurance, and English proficiency) and caregivers' physiological and psychological measures (i.e., self-efficacy, burden, depression, health-related quality of life, stress, sleep, and PWD behaviors). On average, the questionnaire took approximately 30 min to complete.

Measures

Outcome Variables.

Our analysis focused on three outcomes of interest: caregiver's depressive symptoms, perceived stress, and burden. Cronbach's alpha was utilized to assess the internal consistency of each scale used to measure these outcome variables (Cortina, 1993).

Depressive symptoms: Depressive symptomatology was measured with the Center for Epidemiologic Studies Depression Scale (CES-D) (Radloff, 1977). The CES-D is a widely used 20-item scale designed for assessing symptoms related to depression in the general population (Radloff, 1977). The possible range of scores is 0 to 60, with items ranging from 0 (rarely or none of the time) to 3 (most or all of the time) that reflected the frequency of respondents' experiences of depressive feelings. Higher scores indicate more depressive symptoms (Radloff, 1977). Previously, this scale has demonstrated validity and reliability in identifying caregiver depression (Ying et al., 2019). In the current study, Cronbach's alpha was .86.

Perceived stress: The perceived stress scale, consisting of 10 items, reflects a composite score drawn from a self-report questionnaire, allowing a caregiver to express their level of perceived stress. Frequency was assessed on a scale from 0 to 4 (0 = Never, 1 = Almost Never, 2 = Sometimes, 3 = Fairly Often, and 4 = Very Often). Scores range from 0 to 40, with a high score indicating a high degree of perceived stress (Nielsen et al., 2016). The reliability of the scale in a caregiver study has been previously reported (Cronbach's alpha: .79) (Xiao et al., 2023). In this sample, Cronbach's α was .71.

Burden: The Zarit Burden Interview was used to measure the level of burden experienced by caregivers of PWD. With 22 items measuring caregivers' responses to questions about physical and emotional strain, scores are summed to yield a total ranging from 0 to 88, with 88 representing the highest level of burden (Yap, 2010). This scale has demonstrated internal consistency and validity elsewhere (Lin, Ku, et al., 2017; Lin, Wang, et al., 2017). Cronbach's α for the Zarit Burden Interview was .91 in this sample.

Exposure Variables.

The primary independent variable, acculturation, was assessed using a 24-item inventory of acculturation where two sets of cultural orientations (Korean orientation and American orientation) were asked (Jang et al., 2007). Each scale includes multiple components of acculturation such as language proficiency, media consumption, food consumption, social relationships, and familiarity with culture and customs (Jang et al., 2007). Each response was coded from 0 to 3, and total scores could range from 0 to 36, with a higher score indicating a greater level of acculturation to the respective culture (Jang et al., 2007). In other words, the highest score on the Korean orientation scale indicates higher levels of connectedness to and familiarity with Korean cultural values and activities, retaining all parts of their culture of origin (Hahn et al., 2011). Conversely, the highest score on the American orientation scale indicates individuals who are fully acculturated to the host culture and have learned all aspects of their host culture (Hahn et al., 2011; Meyer et al., 2015). The scale has previously demonstrated good internal consistency in a sample of KA older adults (Cronbach's alpha = .79 for the Korean orientation scale and .92 for the American orientation scale; Jang et al., 2007).

Data Analyses

Statistical data analyses were performed using R Studio software, version 4.2.2. Descriptive analyses were conducted for the sample sociodemographic characteristics. Categorical variables were described using the percentage frequency. Continuous variables were described using means and standard deviations.

Based on the association between acculturation level and health outcome found in previous studies (Hahn et al., 2011; Meyer et al., 2018), we hypothesized that caregivers' acculturation would be associated with the level of their distress. To be more specific, our working assumption was that individuals more acculturated toward Korean culture, exclusively interacting with their racial/ethnic backgrounds and reluctant to engage with the native culture, will experience a higher level of caregiver distress. To investigate the association between acculturation and distress, separate bivariate linear regression analyses were conducted with each outcome variable, including depressive symptoms, perceived stress, and burden, with acculturation as the independent variable in the primary model. To evaluate the association between acculturation and distress along with covariates, multiple linear regression analyses were performed to produce the adjusted standardized coefficients (β) and the standard error (*SE*). In this study, statistical significance was set at $p < .05$.

The sociodemographic variables (i.e., caregiver's age, gender, relationship with PWD, education, and income) and some of the caregivers' physiological and psychological measures (i.e., physical health, total quality of life, sleep, self-efficacy) were evaluated in the models to identify potential confounders that may be associated with both the independent and dependent variables. Given a small sample size ($n = 32$), a potential confounder with the lowest *p*-value was selected through the forward stepwise variable selection method where potential confounders were added one at a time. Potential confounders with *p*-value $> .05$ were not selected to be included in the primary model.

As per our analysis plan, age was not found to be associated with the outcome at a significance level of $p < .05$. However, we made a deliberate decision to include age as a covariate in our analysis based on previous studies that have demonstrated its potential impact on the outcome of caregiver's mental health and acculturation process (Berry et al., 1987; Ward & Geeraert, 2016). Therefore, a secondary analysis was conducted with potential confounders that were not included in the primary model but could potentially affect the results and interpretation of the analysis.

Multicollinearity was assessed using the variance inflation factor values for each predictor variable including acculturation, self-efficacy, and age in a regression model.

Results

Description of the Study Sample

A summary of the key characteristics of the caregivers of PWD is presented in Table 1. In total, 32 participants were included in this study. The mean ages for spouse caregivers and non-spouse caregivers were 77.3 years (*SD* = 6.1) and 56.7 years (*SD* = 4.5), respectively, and 87% of the participants were women. The majority of the sample (78%) had obtained higher education, including college/university and graduate school degrees. Nearly 70% ($n = 21$) reported having an English proficiency that was equal to or greater than the average level. Half of the caregivers were identified as spouses of the PWD, while the other half of the sample consisted of offspring caregivers of the PWD. The mean score for the general health survey (SF-12) was 55.5 (*SD* = 18.5) in the sample for this current study.

Table 1 also provides characteristics of the PWD. The mean age for the PWD was 83.2 (*SD* = 4.91) years and 50% was male. Of all participants, 56.3% were diagnosed with Alzheimer's disease, 21.9% with vascular dementia, and 21.8% with other types of dementia. The mean score for activities of daily living was 4.72 (*SD* = 1.97), and the mean score for instrumental activities of daily living was 2.78 (*SD* = 2.25) in the sample for this current study.

Relationship Between Acculturation and Mental Health

In the unadjusted bivariate analysis, neither Korean cultural orientation nor American cultural orientation was found to be significantly associated with distress including depressive symptoms, perceived stress, and burden (Table 2).

The results from the multiple linear regression analyses are summarized in Table 2. In the primary model using multiple linear regression, the level of caregiver's acculturation toward Korean cultural orientation was significantly and positively correlated only with depressive symptoms ($\beta = .51$; *SE* = 0.22; *p*-value = .03), adjusting for self-efficacy. No significant effect of American orientation was found for caregiver burden, stress, or depressive symptoms. In the analysis which included age as a confounder, we found positive and statistically significant correlations between the level of

Table 1. Characteristics of Caregivers and Persons with Dementia.

Characteristics of caregivers (*N* = 32)	Frequency (%) or mean (*SD*)
Age	
Spouse	77.3 (6.1)
Non-spouse	56.7 (4.5)
Gender	
Female	28 (87.5%)
Education	7 (21.9%)
Elementary and high school	
College/university	16 (50.0%)
Graduate school	9 (28.1%)
Family monthly income	6 (18.8%)
Less than $2,000	
$2,000–$4,000	8 (25.0%)
$4,000–$6,000	6 (18.8%)
More than $6,000	12 (37.5%)
Health insurance	
Yes	32 (100%)
English proficiency	
Little	11 (34.4%)
Average	9 (28.0%)
Very good	6 (18.8%)
Excellent	6 (18.8%)
Relationship with the person with dementia	
Spouse	16 (50.0%)
Wife	11 (34.0%)
Adult child	16 (50.0%)
Daughter	15 (47.0%)
General health (SF-12)	55.5 (18.9)
Characteristics of persons with dementia (*N* = 32)	**Frequency (%) or mean (*SD*)**
Age	
Gender	83.2 (4.91)
Female	16 (50.0%)
Health insurance	
Medicaid only	6 (18.8%)
Medicaid and Medicare	7 (21.9%)
Medicare only	10 (31.2%)
Other	9 (28.1%)
Type of dementia	
Alzheimer's disease	18 (56.3%)
Vascular dementia	7 (21.9%)
Other	7 (21.8%)
Activities of daily living score	4.72 (1.97)
Instrumental activities of daily living score	2.78 (2.25)

caregiver's acculturation toward Korean cultural orientation and both depressive symptoms ($\beta = .62$; $SE = 0.25$; p-value = .02) and perceived stress ($\beta = .29$; $SE = 0.13$; p-value = .03), adjusting for age and self-efficacy (Table 2). Otherwise, it yielded the same results as the previous model; no significant effect of American orientation was found on caregiver burden, perceived stress, or depressive symptoms. Variance inflation factor values were below 2, which suggests that multicollinearity is not a significant concern in this regression model.

Discussion

Our exploratory study examined the association between the level of acculturation, which addresses individuals' varying orientations to both the original culture and the

Table 2. Association Between Acculturation (Home Culture Orientation Scale and American Orientation Scale) and Distress (Depressive Symptoms, Perceived Stress, and Burden) in KA Family Caregivers of Persons With Dementia.

Unadjusted linear regression ana**lysis**

	Depressive symptoms			Perceived stress			Burden		
Mental health condition variables	Beta	*SE*	*p*-Value	Beta	*SE*	*p*-Value	Beta	*SE*	*p*-Value
Korean orientation	2.6	1.7	.14	.86	.95	.37	1.66	2.97	.58
American orientation	−1.15	1.75	.52	−.42	.96	.67	−.73	2.99	.81

Adjusted for self-**efficacy linear regression analysis**

	Depressive symptoms			Perceived stress			Burden		
Mental health condition Variables	Beta	*SE*	*p*-Value	Beta	*SE*	*p*-Value	Beta	*SE*	*p*-Value
Korean orientation	2.63	1.16	**.03**	.90	.62	0.16	1.74	2.51	.49
American orientation	−.28	1.27	.83	.09	.65	0.89	0.44	2.55	.87

Adjusted for age and self-efficacy linear regression analysis

	Depressive symptoms			Perceived stress			Burden		
Mental health condition variables	Beta	*SE*	*p*-Value	Beta	*SE*	*p*-Value	Beta	*SE*	*p*-Value
Korean orientation	3.20	1.27	**.02**	1.47	.65	**.03**	3.21	2.73	.25
American orientation	−.39	1.51	.80	−.43	.76	.58	−.99	3.00	.75

Note. Significant *p*-values are in bold.

host culture, and mental health outcomes. We hypothesized that immigrant KA caregivers would exhibit a higher level of familiarity and adherence to their Korean culture, which would, in turn, influence their mental health outcomes. Our study produced mixed findings regarding the relationship between acculturation and mental health outcomes. No significant association was found between American orientation and caregiver's mental health. Conversely, our study demonstrated a significant and positive association between acculturation toward Korean culture orientation and caregivers' mental health when controlled for potential confounding factors, particularly in relation to perceived stress and depressive symptoms among immigrant KA caregivers of PWD. In this specific study context, individuals who maintain a strong connection to Korean culture, such as being more fluent in Korean than English or exclusively interacting with their racial/ethnic backgrounds, showed higher levels of perceived stress and depressive symptoms compared to those who are fluent in English and engage with the native culture. Although not absolute due to the limited sample size, this finding highlights the potential impact of acculturation, measured by one's efforts to interact with natives, understand, and adapt to the prevailing culture and language, on the caregiver's mental health outcomes. Past findings support the present research. For instance, Brank and Wylie (2016) noted that immigrant KAs are less likely to use long-term care or external support due to preferring to give and receive care in their own homes. These culturally influenced health-related decisions present unique challenges for immigrant KA caregivers in accessing external resources and relying on outside assistance. Given that dementia caregiving can persist over a prolonged period of time, these cultural norms about caregiving duties and familial responsibility would ultimately lead to caregiver burnout (Brank & Wylie, 2016). In support of this, another study noted that caregivers who have a high sense of duty or obligation for caring for their family members but face challenges in providing care alone would not only report increased caregiver burden but also feelings of shame, embarrassment, resentment, guilt, and self-blame (R. K. Chen et al., 2017). The present study contributes to the growing body of evidence in this area with this specific population and provides empirical support for the need to consider one's acculturation level, which incorporates different cultural perceptions and expectations of the caregiving role when assessing one's mental health outcomes.

In addition, recent studies have reported that significant disparities in healthcare use and health status exist between KA immigrants and U.S. residents, leading to disparities in mental and physical health outcomes (Baciu et al., 2017; Yang et al., 2020). For example, a previous study indicates that KA adults have a higher prevalence of health risk factors, such as depressive symptoms, but lower screening rates than the general U.S. adult population (Cho et al., 2015; Jang et al., 2011). Another study has reported that the rates of probable depression, as measured by a standardized depression screening tool, were four times greater among KA elders than the rates observed in White or African American individuals (Jang & Chiriboga, 2010). Despite the observation of underutilization of mental health services among KA adults in these prior studies, outreach and engagement efforts have not been extended effectively to KAs due to a lack of awareness and understanding of their unique barriers to trust and access the services and support (Kim et al., 2019). Our findings are worth further examination to understand how one's acculturation process could affect healthcare service underutilization, potentially mediating the relationship between acculturation and caregiver distress among this specific population.

Implications

A major strength of this study was its examination of the role of acculturation on the mental health of immigrant KA caregivers, highlighting the importance of understanding cultural norms and expectations on the perception of caregiving in this unique population. However, our sample size was small, consisting of only 32 caregiver-PWD dyads recruited through convenient sampling from Orange/Los Angeles County, CA, which may not fully represent the larger population of KA caregivers of PWD. As a result of this limited sample size, these outcomes may appear statistically significant due to sampling variability (Type I or false-positive errors). Therefore, future studies should utilize a larger sample size in different settings to validate our findings.

In addition, enhancing the comprehension of the underlying mechanisms that contribute to the association between stressful acculturation experiences and mental health outcomes may help in developing effective interventions for individuals experiencing such challenges. We recommend that researchers for future studies evaluate intrapersonal characteristics such as age, self-efficacy, or coping strategies as moderators or mediators of the association between acculturation level and mental health in the context of dementia caregiving. Taking these intrapersonal characteristics into account, a more comprehensive understanding of the mechanisms underlying the correlation between acculturation level and mental health outcomes among KA dementia caregivers can be achieved.

Clinical implications for healthcare providers (e.g., nurses, nurse practitioners) include recognizing the potential role of high acculturation toward their original culture, contributing to linguistic barriers and small social networks within their racial/ethnic background, which could be a mental health risk factor. This understanding may enable healthcare professionals to provide more culturally sensitive and tailored care, such as involving Korean community services in KA caregiver respite for their well-being, to help the caregivers cope with stressors effectively. This support may help prevent caregiver burnout, stress, and depressive symptoms, ultimately leading to positive outcomes for both clients and their caregivers.

Limitations

In light of the findings of our study, the results should be considered within the context of the limitations outlined below. As mentioned above, participants were recruited from southern California, where many KAs reside and maintain their culture through practices such as consuming Korean foods and utilizing other cultural resources. KAs living in states with fewer cultural resources may have exhibited different acculturation experiences. The small sample size collected representing a specific population may limit the interpretation of findings to only immigrant KA caregivers in Southern California. Future research is needed to validate these findings using participants from different regions of the United States and to include a more varied representation of the immigrant KA caregiver population. In addition, our study sample consisted of individuals with moderate to high levels of English proficiency and education. As such, it is important to exercise caution when extrapolating our findings to those who have lower socioeconomic status and limited English proficiency, as they may have more difficulties accessing resources and potentially higher caregiver burden, stress, and depressive symptoms. Given these factors, the results of this study cannot be generalized to the broader and heterogeneous population of KA caregivers of PWD. Last, our findings should be interpreted with caution due to methodological limitations, particularly the cross-sectional design utilized in the study, which precludes assuming causality despite finding a correlation between acculturation and mental health.

Conclusions

Providing primary care for individuals with dementia can be an overwhelming and challenging experience for family caregivers, as the demands can persist over a prolonged period of time. This can be especially true for KA caregivers, who may experience acculturation stress in addition to their caregiving responsibilities. Considering the stressful experiences that many KA caregivers have faced throughout their lives, there is an urgent need to develop, implement, and evaluate culturally appropriate interventions that include multiple components to alleviate the burden in this vulnerable, underserved population. Through our quantitative study, we aimed to shed light on the potential impact of acculturation level on the mental health of immigrant KA caregivers for PWD. The results from our study have the potential to contribute to existing caregiving research by filling the gaps for this specific population. While considering the study's limitations, our findings suggest that exploring the role of acculturation in caregiving and its relation to outcomes, particularly caregiver distress, may be valuable for future studies aiming to understand specific elements of cultural values and practices in the acculturation process related to mental health outcomes among immigrant KA caregivers.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The study was supported by the National Institute of Health (NIH)/National Institute on Aging (NIA) through R01AG069074. This information or content and conclusions are those of the authors and should not be construed as the official position or policy of, nor should any endorsements be inferred by NIH/NIA, or the U.S. Government.

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