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Research Article

Characterizing Caregiving Intensity Among Mexican-origin Women Caregivers

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Abstract

Purpose of the Study: Objective (physical) caregiving burden has not often been associated with subjective (emotional) burden among Mexican-origin women caregivers. Yet, many studies show that Latina caregivers suffer from negative psychological outcomes related to caregiving at a higher rate than non-Latino Whites. This study considered whether self-rated intensity of ADL/IADL support explained the relationship between number of care recipient illnesses and caregiver emotional drain among Mexican American women caregivers.
Design and Methods: Participants included Mexican-origin women caregivers (n = 132) in East Los Angeles, CA who completed a survey that asked culturally appropriate questions about their experiences caring for elderly relatives.
Results: Logistic regression models indicated that ADL/IADL supports ranked as difficult were also chosen as causing emotional drain. Mediation models revealed a significant indirect effect of number of care recipient illnesses on caregiver emotional drain for English-speaking caregivers but not for Spanish-speaking caregivers. These results indicate that Mexican-origin women caregivers do experience subjective burden associated with specific objective ADL/IADL supports and suggest that culturally relevant survey design can assist in better understanding the emotional drain among this population.
Implications: Cultural values should be considered when discussing aspects of care provision with Mexican-origin women caregivers in order to elicit an accurate description of their informal caregiving experiences that may contribute to caregiver burden.

Keywords: Mexican American, Latina caregivers, Immigrants, Cultural values, Burden

The number of Latinos aged 65 and older is expected to quintuple by 2050, making them the largest and second fastest aging subpopulation in the United States (Federal Interagency Forum on Aging-Related Statistics, 2012). Mexican-origin Latinos make up the largest subgroup of U.S. Latinos (64%) and arrive at old age with higher rates of multimorbidity and disability than their White counterparts (Hayward, Warner, & Crimmins, 2007). Comorbidities are also increasing at higher rates among Latinos compared with non-Hispanic Whites (Centers for Medicare and Medicaid Services, 2012). Furthermore, Latino older adults are more likely than White older adults to receive care outside of a formal health care system and rely more heavily on informal care from family (Crist et al., 2009; Mausbach et al., 2004). Perhaps not surprisingly, therefore, Latinos providing care to elderly relatives tend to be in more intensive caregiving situations than non-Latino caregivers (National Alliance for Caregiving & Evercare, 2008).

Similar to other populations, caregiving for elderly relatives has traditionally been a role adopted by women in Latino cultures (Jolicoeur & Madden, 2002). Mexican American (MA) women often take on the task of providing care for their elderly family members to fulfill role expectations and obligations (Jolicoeur & Madden, 2002). Recent research has found that MA women caring for elderly family members with high levels of impairment are especially vulnerable to caregiver burden (Rote, Angel, & Markides, 2014). This research points to the need for greater understanding of the effects of MA women's assistance with activities of daily living (ADLs; Katz, 1983) and instrumental activities of daily living (IADLs; Lawton & Brody, 1969) on their mental health (Rote et al., 2014).

Cultural factors have been shown to shape the caregiving experiences of Mexican women (Cromwell et al., 1996; Jolicoeur & Madden, 2002) and therefore impact appraisals of their experiences. For example, MA women's sense of duty may originate from the female *marianismo* role in Mexican culture, which emphasizes putting the needs of the family above one's own, even if it causes personal hardship (Mendez-Luck & Anthony, 2015; Stevens, 1973). Other cultural forces include familism and *respeto*, which refer to the interdependence of family members for support rather than on formal institutions (Flores, Hinton, Barker, Franz, & Velasquez, 2009) and the deference shown to older adults (Cox & Monk, 1996; Beyene, Becker, & Mayen, 2002). The social expectations embedded in these cultural values may put MA caregivers at elevated risk for caregiver burden and emotional strain because they may be less willing to seek help or speak up when their caregiving responsibilities become overwhelming.

However, our current understanding of how MA women appraise burden and stress may be limited to the extent that cultural values and terms are not adequately included in caregiver burden measures and investigations (Calderon & Tennstedt, 1998; Evans, Coon, & Belyea, 2014; Mendez-Luck, Kennedy, & Wallace, 2008). Recent studies have found that common measures of caregiving burden may not sufficiently capture MA women's experiences of emotional drain and stress, possibly because the questions are not phrased or presented in culturally relevant ways (Crist et al., 2009; Mendez-Luck et al., 2008; Wells, Cagle, Marshall, & Hollen, 2009). For example, the word "burden" does not have an exact translation in Spanish; some caregiver burden scales that are translated to Spanish from English utilize the terms *carga* or *sobrecargado* (Martin-Carrasco et al., 2010), which translate to load and overloaded in English. A study on Mexican caregiving women (Mendez-Luck et al., 2008) showed that caregivers instead expressed views of burden using the word *pesado*, a culturally relevant concept that translates to heaviness in English. Mendez-Luck and colleagues (2008) found that *pesado* in the context of caregiving referred to situations when emotional and physical drain were present in the caregiving experience, similar to descriptions of caregiver emotional drain documented in other studies among other racial/ethnic caregiver groups. These findings contrast with those of the Evercare Study of Hispanic Family Caregiving in the United States, which were based on a burden-of-care index that included the number of hours and types of care provided and a question on how stressful it is to care for their relative. The Evercare study showed that high objective burden scores were associated with low subjective or emotional burden scores among MA caregivers compared with non-Hispanic Whites (National Alliance for Caregiving & Evercare, 2008).

These mixed results suggest the need for examining caregiver burden using culturally relevant language to gain a more complete understanding of the stress, burden, and drain experienced by this population. To move this literature forward, we conducted a study that examined emotional drain and caregiving intensity among Mexican-origin female caregivers. This study supplemented the caregiver stress process model (Pearlin, Mullan, Semple, & Skaff, 1990) with additional elements from the sociocultural stress and coping model (Knight & Sayegh, 2010). The caregiver stress process model posits that caregiver stress is a consequence of a process that involves interrelated conditions and stressors. These stressors include primary stressors, such as problems directly resulting from caregiving activities, and secondary stressors such as role strains and intrapsychic strains related to self-concepts. The value of this model is that the many characteristics of the caregiver, the care recipient, and the caregiving situation are interwoven throughout the stress process. This synthesis provides a holistic view of the caregiver's life and the context in which the care is being provided.

The sociocultural stress and coping model (Knight & Sayegh, 2010) complements Pearlin and colleagues' (1990) model by emphasizing the importance of cultural values when measuring stress and burden among minority caregivers. This model specifically focuses on obligation values, family solidarity, and support values of familism as key cultural components of caregiving. This multidimensionality may resonate among Latinas and influence their reasons for caregiving and interpretations of caregiving burden such as emotional drain.

With these two caregiver stress models as our underlying framework, we analyzed data from a survey of Mexican-origin caregivers that included culturally relevant wordings of questions assessing the physical and emotional intensity of caregiving. We used these data to evaluate the associations between caregiver emotional drain, caregiving intensity, and care recipient illnesses. Specifically, we tested two hypotheses in this study:

(1) Caregivers who report greater difficulty providing specific ADL/IADL supports will be more likely to report providing those supports as emotionally draining (H1).
(2) The number of care recipient illnesses will be positively associated with intensity of ADL supports, and intensity of ADL supports will in turn positively predict the number of supports reported as emotionally draining (H2).

Design and Methods

Study Data

We used data collected during 2007–2009 as part of The Caring for My Elderly Relative Study (CMERS). The survey was part of a community-based research project that examined the cultural dynamics of caregiving among Mexican-origin women caregivers living in East Los Angeles, California. The CMERS targeted the Mexican-origin population because the majority of the Latinos in the United States and in East Los Angeles are of Mexican descent (Ennis, Ríos-Vargas, & Albert, 2011). Participants were asked "What is your Latino or Hispanic ancestry or origin?" Caregivers who responded "Mexican/Mexicano," "Mexican American," or "Chicano" were considered being of Mexican origin. The CMERS used multiple recruitment strategies to enroll a convenience sample into the study (Mendez-Luck et al., 2011). Respondents self-reported as being 18 years or older, of Mexican descent, and the caregiver for a family member 60 years or older. Surveys were conducted in English or Spanish, depending on participant preference. This analysis was approved by the Oregon State University and University of California Los Angeles Institutional Review Boards.

Study Sample

The survey included respondent information from 142 adult caregivers 18 years or older. In the present study, we excluded male respondents from the analysis due to the small number of observations ($n = 10$). The final analytic sample used in this study was 132 respondents.

Table 1 presents descriptive statistics of the sample. English-speaking caregivers and Spanish-speaking caregivers significantly differed on many characteristics, including mean age, country of birth, education, employment status, household income, and insurance status.

Measures

Intensity of Specific ADLs/IADLs

Self-rated intensity of specific ADL/IADL supports was investigated individually for each ADL/IADL when testing H1. The CMERS measured ADL and IADL supports by asking caregivers, "In the past week, did you help your relative with….?" Participants answered yes or no to 15 forms of support. Participants then rated the intensity of the above listed ADL and IADL supports on a Likert type scale prompted by, "How would you rate helping your relative with…" with the option of choosing from "*not difficult at all* (1), *a little difficult* (2), *difficult* (3), *very difficult* (4), or *I don't help my relative with this* (0)." The rating of the intensity of ADL/IADL supports integrates both the caregiver stress process model by focusing on primary stressors and cultural values from the sociocultural stress and coping model by investigating the ADLs/IADLs while focusing on the activities of care provided and not on the elderly family member who is being cared for. These questions explored the caregivers' emotions about the specific activities they performed rather than their feelings about the care recipient directly, which would have indicated a lack of *respeto*. This rating of the intensity of ADLs and IADLs added subjectivity lacking in most published burden scales that only count the number of ADLs and IADLs provided by the caregiver.

Care Recipient Illness

The independent variable used to test H2 was the number of care recipient illnesses, which is considered a primary stressor in the caregiver stress process model. This question was asked in the survey as "What would you say are the main problems or illnesses your relative has?" Caregivers were provided with a list of 20 illnesses and could also write in the names of illnesses in a category labeled "other." Caregivers were able to select more than one illness for their care recipients. An index variable for number of care recipient illnesses was created by summing the total number of illnesses reported for each elderly family member.

Emotional Drain

Emotional drain was measured by the following question, "In thinking about all you do to help your relative, which of all the forms of care are the most emotionally tiring or draining for you to do?" Participants then selected all ADL/IADL forms of support that applied from a list of 15 ADL/IADL supports. An emotional drain count score was created for each caregiver by adding up the total number of supports checked as most emotionally draining. Specific individual activities that were chosen as causing emotional drain were investigated in H1 and the total count of emotionally draining activities was used in H2.

Although this measure of emotional drain is limited, it allowed us to investigate specific activities that might play a role in Latina caregiver burden. We used this variable in the present study to explore specific activities that resulted in emotional drain for caregivers and to determine whether the number of activities selected was influenced by our mediating variable, intensity of ADL and IADL supports. This allowed us to investigate Latina caregiver emotional burden in relation to specific ADLs/IADLs so that the caregivers were able to select responses in a manner that was informed by cultural values included in the sociocultural stress and coping model such as familism, *respeto*, and *marianismo*. Caregivers were able to express their experience of emotional drain in relation to the type of care provided instead of linking directly their experience of emotional drain to their elderly relative.

ADL/IADL Intensity

Total intensity of ADL/IADL supports was investigated as a mediating variable in H2. As recommended by Rhemtulla, Brosseau-Liard, and Savalei (2012), the intensity scores for IADLs and ADLs were treated as continuous variables in this analysis. An index variable for a composite ADL/IADL support intensity score was developed for each participant by summing the answers to all 15 ADL/IADL support intensity questions. ADL/IADL support intensity scores had a possible range of 0–60.

Table 1. Sample Characteristics

	English interviews (n = 56)			Spanish interviews (n = 76)						
	M or %	*SD*	Range	*M* or %	*SD*	Range	95% CI for mean difference	*t*	*df*	*z*
Caregiver age (in years)	47.8	1.84		60	1.50		−16.82, −7.58	−5.23***	127	
Caregiver ancestry										
Mexican	34%			92%			−0.71, −0.43			−6.74***
Mexican American	60%			8%			0.37, 0.67			6.20***
Chicano	6%			0			−0.01, 0.12			2.03*
Caregiver education										
Through 6th grade	0			46%			−0.57, −0.35			−5.92***
7th–8th grade	0			18%			−0.27, −0.09			−3.35***
9th–12th grade	29%			26%			−0.12, 0.18			0.38
1–2 years college	40%			4%			0.22, 0.50			5.18***
3–4 years college	9%			3%			−0.02, 0.14			1.49
College graduate or higher	22%			1%			0.10, 0.32			3.99***
Caregiver works outside of the home (yes or no)	54%			12%			0.27, 0.57			5.21***
Household income (U.S. dollars)			13,293–77,273			0–50,000				
Care recipient age (in years)	75.40	1.50		78.50	1.13		−6.72, 0.46	−1.73	128	
Number of illnesses	4.34	2.05	1–8	6.75	3.0	1–14	−3.33, −1.49	−5.19***	130	
Intensity of support	18.11	7.60	6–38	20.31	9.75	7–54	−5.37, 0.97	−1.38	122	
Total emotional drain	3.20	2.48	0–12	3.61	3.63	0–14	−1.52, 0.70	−0.73	130	

Notes: Participants self-reported their Latino origin as Mexican, Mexican American, or Chicano.
*p < .05. **p < .01. ***p < .001.

Covariates

Although Pearlin and colleagues' (1990) full caregiver stress process model allows for the possibility of numerous covariates, we determined that additional covariates were not necessary for examining the raw intervariable relations in this study because none of the covariates significantly correlated with the variables of interest. Additional descriptive variables are presented in Table 1.

Data Analyses

Preliminary factor analysis of a scale within the survey suggested a lack of measurement invariance (results not shown), which indicated variability in item interpretation between participants who completed the survey in English and those who completed the survey in Spanish. Because the two groups were qualitatively different, we stratified our analysis by language of survey administration, Spanish and English.

To test H1, we fit 15 logistic regressions within each language group to estimate the association between specific ADL/IADL support intensity and the probability of each ADL/IADL being chosen as emotionally draining. We regressed the binary indicator of whether or not a participant selected each ADL/IADL as emotionally draining on the level of intensity the participant indicated for the specific ADL/IADL. In order to account for risk of Type I errors, we applied a Bonferroni correction to each test's Type I error rate. The family-wise Type I error rate was set to .10 to accommodate the very conservative nature of the Bonferroni correction, meaning each test was examined at a p value of .003.

To test H2, we used a nonlinear mediation analysis based on the generalized linear model to investigate whether the intensity of ADL/IADL supports mediated the association between the number of care recipient illnesses and the number of supports selected as being emotionally draining. We specified a path model with Gaussian (normal) and negative binomial distributions after creating a count variable that totaled all care recipient illnesses (X), a continuous ADL/IADL support intensity score (M), and an emotional drain count variable (Y). We used nonlinear mediation analysis (Hayes & Preacher, 2010; Stolzenberg, 1980) and Monte Carlo confidence intervals (MCCIs) for indirect effects (Preacher & Selig, 2012) to determine the associations between number of family member illnesses, difficulty of support tasks, and overall emotional drain. Nonlinear mediation models allow the strength of indirect effects to vary across different levels of the predictor. We therefore selected three values of care recipient illnesses at which to test the indirect effect. Analyses were performed using STATA, Mplus, and R.

Results

Table 1 presents descriptive statistics for the variables of interest in the present study. The mean number of care recipient illnesses was significantly higher for Spanish-speaking caregivers (M = 6.75, SD = 3.0) than that for English-speaking caregivers (M =4.34, SD = 2.05; $t(130) = -5.19$, p = .000). The mean intensity of ADL/IADL support and emotional drain were not significantly different for the two groups.

Intensity and Emotional Drain of Specific ADL/IADL Support (H1)

Table 2 presents odds ratios (ORs) from the logistic regressions that estimated the effects of intensity level of specific ADL/IADL support activity on emotional drain among caregivers. The ORs were statistically significant for 12 of 15 activities in both caregiver groups. As the intensity increased for each activity, the odds of that activity causing emotional drain increased. However, the activities reported as intense and causing emotional drain were different for the two groups. Among Spanish-speaking caregivers, the intensity of sharing a meal (OR = 15.15, p = .000), bathing the care recipient (OR = 6.21, p = .000), and providing companionship (OR = 4.80, p = .000) had the highest odds of being a source of emotional drain. Among English-speaking caregivers, the intensity of using the toilet, bedpan, or changing diapers (OR = 5.61, p = .00), managing medications or giving injections (OR = 4.99, p = .000), and providing companionship (OR = 4.77, p = .000) had the highest significant odds of causing emotional drain.

Relationship Between the Number of Care Recipient Illnesses, Intensity of ADL/IADL Supports, and Emotional Drain (H2)

Preliminary regression analysis found a weak but significant association between number of care recipient illnesses and the intensity of ADL/IADL supports for English-speaking caregivers (β = .07, p = .04), but not for Spanish-speaking caregivers (β = .05, p = .19). When analyzing the number of care recipient illnesses as a stand-alone predictor of emotional drain, loglinear regressions (with a negative binomial distribution) did not find a significant direct effect of number of care recipient illnesses on total emotional drain for Spanish- or English-speaking caregivers (β = .01, p = .82 and β = .01, p = .58, respectively). However, stand-alone loglinear regressions (with a negative binomial distribution) indicated a significant relation between intensity of ADL/IADL support and total emotional drain among both Spanish- and English-speaking caregivers (β = .09, p = .000 and β =.07, p =.001, respectively).

Table 3 presents associations between the number of care recipient illnesses, intensity of ADL/IADL supports, and emotional drain. Among English-speaking caregivers, the associations remained statistically significant between intensity of ADL/IADL supports and number of care recipient illnesses (β =.96, p = .04) as well as intensity of ADL/IADL supports and emotional drain (β =.04, p = .007). The direct relation was not statistically significant between total number of care recipient illnesses and emotional drain ($\beta = -.01$, $p = .81$). Among Spanish-speaking caregivers, the associations were not statistically significant between intensity of ADL/IADL supports and number of care recipient illnesses ($\beta = .34$, $p = .48$) or number of care recipient illnesses and emotional drain ($\beta = .01$, $p = .76$); however, the ADL/IADL supports remained significantly predictive of emotional drain ($\beta = .06$, $p = .000$).

Nonlinear mediation analyses with MCCIs suggested a significant indirect effect of number of care recipient illnesses predicting emotional drain through intensity of ADL/IADL supports among English-speaking caregivers but not for Spanish-speaking caregivers (Table 4).

Discussion

The present study provides three findings that are especially relevant to understanding the experiences of Mexican-origin women caregivers. First, we found a range of ADLs/IADLs that were associated with emotional drain and intensity of care, indicating that intensity of support influenced subjective burden and emotional drain in this sample of

Table 2. Odds Ratios (ORs) of Logistic Regressions Estimating the Effect of Intensity of ADL/IADL on the Odds of Activity Being Emotionally Draining for English- and Spanish-Speaking Caregivers ($N = 132$)

	English-speaking caregivers ($n = 56$)		Spanish-speaking caregivers ($n = 76$)	
ADL/IADL reported as emotionally draining activity	OR	*p*	OR	*p*
Walking or getting around	1.50	.11	1.37	.15
Eating a meal	2.03	.05	2.19	.00*
Getting in or out of bed	2.15	.03	2.79	.00*
Getting dressed	2.84	.01	3.23	.00*
Medication management	4.99	.00*	4.05	.00*
Bathing	3.38	.00*	6.21	.00*
Using the toilet, bedpan, or diapers	5.61	.00*	3.62	.00*
Doing laundry	2.88	.03	3.44	.00*
Doing things around the house	2.76	.02	2.22	.02
Shopping for groceries or running errands	3.45	.00*	3.49	.00*
Using public transportation	5.52	.01	2.73	.00*
Providing companionship	4.77	.00*	4.80	.00*
Giving emotional support	3.26	.00*	4.29	.00*
Sharing a meal	5.59	.05	15.15	.00*
Checking up by phone	3.07	.03	3.72	.00*

Notes: ADL = activity of daily living; IADL = instrumental activity of daily living.
*$p < .003$, which is statistically significant for a Bonferroni-corrected family-wise Type I error rate of .10; Each result represents its own equation.

Table 3. Associations Between the Number of Care Recipient Illnesses, Intensity of ADL/IADL Supports, and Emotional Drain (H2 results)

		English interviews				Spanish interviews			
Predictor	Outcome	Estimate	*SE*	Estimate / *SE*	*p*	Estimate	*SE*	Estimate / *SE*	*p*
Number of illnesses	Intensity of supports	0.96	.47	2.04	.04*	0.34	.48	0.71	.48
Number of illnesses	Emotional drain	−0.01	.04	−0.24	.81	0.01	.04	0.31	.76
Intensity of supports	Emotional drain	0.04	.02	2.70	.007**	0.06	.01	7.34	.000***

Notes: ADL = activity of daily living; IADL = instrumental activity of daily living.
*$p < .05$. **$p < .01$. ***$p < .001$.

Table 4. Instantaneous Indirect Effects of Number of Illnesses on Emotional Drain at the Mean Number of Illnesses

Language of interview	Mean number of illnesses	Estimate	*SE*	Estimate / *SE*	*p*	95% MCCI
English	4.34	0.13	.07	1.80	.07	0.0014, 0.2892
Spanish	6.75	0.06	.08	0.70	.48	−0.1089, 0.2413

Note: MCCI = Monte Carlo confidence interval.

Mexican-origin women caregivers. Our results support the findings of Crist and colleagues (2009), as MA caregivers who reported high levels of subjective burden also reported high levels of objective burden.

Second, our results showed that the odds of an ADL/IADL being both difficult and emotionally draining varied across specific ADLs/IADLs. Among both groups, providing companionship and emotional support had higher odds of being emotionally tiring as the perceived intensity of the activity increased. These findings uncover new insights into Latina caregiving that are unique from prior studies. Specifically, our findings suggest that the cultural value of familism that encourages family-based social support for elderly family members (Flores et al., 2009) may not be a protective factor for MA women caregivers. These findings lend support to Shurgot and Knight (2004), who found that familism and *marianismo* were not related to fewer caregiver depressive symptoms. Our results are also congruent with recent studies (Anthony & Mendez-Luck, 2016; Mendez-Luck & Anthony, 2015) of Mexican-origin caregivers by showing that providing companionship to elderly family members is an important aspect of being a caregiver yet also has its drawbacks, such as social isolation, and placing cultural values at odds with other activities that promote caregiver well-being. Both groups of caregivers also selected medication management as both difficult and emotionally draining, supporting current research that indicates medication management as a complex process that requires caregiver resources, such as health literacy and general knowledge of diseases and treatments, as well as an understanding of the care recipient's preferences and behaviors (Lau et al., 2009). These complexities could have factored into caregivers' ratings of this form of support as difficult and causing emotional drain.

Third, we found mixed support for our hypothesis concerning the associations between number of illnesses, emotional drain, and intensity of care. Although intensity of ADL/IADL supports significantly predicted total emotional drain in both groups, emotional drain was indirectly affected by number of illnesses for English-speaking caregivers but not for Spanish-speaking caregivers. Our findings of differences between the two groups are supported by previous research that has found differences in mental health outcomes among Latinos of varying acculturation levels (Escobar, Hoyos Nervi, & Gara, 2000). If language of interview is considered a proxy for acculturation, our results show that the illnesses of the care recipients among the more acculturated English-speaking caregivers impact emotional drain differently than they do among the less acculturated Spanish-speaking caregivers. One reason for this could be a lack of familial support among more acculturated caregivers. Recent research has found that as more acculturated caregivers adapt to life in the United States, they rely less on the traditional Mexican family support structure of familism in which one female family member takes on most or all of the caregiving duties, even if doing so is detrimental to her health (Mendez-Luck & Anthony, 2015). Thus, a lack of additional family support among more acculturated caregivers may be affecting the relationship between care recipient illnesses, caregiving intensity, and emotional drain.

Another factor that may explain these between-group differences is that the total number of illnesses a care recipient has may not impact emotional drain as much as specific combinations of illnesses together. Pinquart and Sörensen (2003) found that informal dementia caregivers reported more psychological distress than caregivers who provided care to physically frail older adults. It is possible that caring for a family member with dementia who also has mobility problems may be more difficult than providing care to a family member who has high cholesterol, high blood pressure, and arthritis. Our finding that caregivers reported caring for care recipients with multiple chronic diseases is consistent with recent studies showing that Mexican-origin older adults experience multimorbidity (Centers for Medicare and Medicaid Services, 2012), however, our study moves beyond these reports by showing the relationship of caring for someone with multimorbidity to emotional drain for some MA caregivers.

This study made unique efforts to characterize the complexities of caregiving intensity and emotional drain among MA women caregivers. We used data from a survey that integrated the Mexican cultural values of *respeto* (Cardona, 2007), *marianismo* (Mendez-Luck & Anthony, 2015), and familism (Flores et al., 2009) into the survey questions by using the terms "emotionally tiring" and "emotionally draining." Using these terms avoided characterizing caregiving as a burden-inducing or burden-causing endeavor that would have violated cultural norms. To our knowledge, no other caregiving survey designed for use with Mexican-origin caregivers has included this kind of wording in their assessment of subjective caregiving burden.

Despite the strengths of this study, there were several limitations. Our results come from of a convenience sample of Mexican-origin women, which may not be generalizable to all female Mexican-origin caregivers. Additionally, the overall sample size was reduced when it was determined that the two caregiver groups should be analyzed independently, therefore care should be taken when interpreting the results (Button et al., 2013). More research is needed with larger and more representative samples to examine the associations identified in this study. Lastly, this study used cross-sectional data to analyze complex dynamic relations. Additional research in this area should collect longitudinal data about these variables to determine specific causal relations between family member illnesses, intensity of care, cultural values, and caregiver emotional drain.

Conclusion

Caring for elderly family members with multiple chronic conditions involves a complex set of tasks that results in emotional drain for Mexican-origin women caregivers. More research is needed to investigate these relationships in order to better assess caregiver burden in this population, especially as it relates to medication management, bathing, toileting, and meal sharing and preparation. Having a better understanding of these domains in Mexican-origin women caregivers' experiences can help identify when emotional drain is most likely to occur so as to provide appropriate supports to a population of caregivers known to underutilize formal services (Crist et al., 2009; Mausbach et al., 2004).

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