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## Financial Hardship and Health Related Quality of Life Among Older Latinos with Chronic Diseases

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### Abstract

**Background:** Financial hardship influences health-related quality of life (HRQoL) of older adults. However, little is known about the relationship between financial hardship and HRQoL among vulnerable populations.

**Objective:** We examined the associations between financial hardship and HRQoL among older Latinos living with chronic disease, including cancer.

**Methods:** This cross-sectional study included 68 Latinos (age range 50-87) with one or more chronic health conditions who participated in a pilot randomized clinical trial. Participants responded to 11 financial hardship questions. We used factor analysis to explore constructs of financial hardship. HRQoL was assessed using the 27-item Functional Assessment of Cancer Therapy-General (FACT-G). Multiple linear regression examined the associations between financial hardship and HRQoL subscales (physical, social/family, emotional, functional well-being).

**Results:** The factor analysis revealed three constructs of financial hardship: medical cost concerns, financial hardship treatment adherence, and financial worry. A one-point increase in the factor score for financial hardship treatment adherence was associated with a 2.1-point (SE=0.771) decrease in physical well-being and with a 1.71-point (SE=0.761) decrease in functional well-being. A one-point increase in the financial stress factor score was associated with a 2.0-point (SE=0.833) decrease in social/family well-being, and with a 2.1-point (SE=0.822) decrease in functional well-being.

**Conclusion:** In this study of older Latinos with chronic diseases, financial hardship was associated with worse HRQoL across several domains. Healthcare providers should refer older

Latinos living with chronic disease to appropriate support providers, such as care coordinators, social workers, or patient navigators, who can assist them with obtaining financial assistance and other resources.

### Keywords

Financial Hardship; Health-Related Quality of Life; Latinos; Health Disparities; Chronic Disease; cost of illness; healthcare costs

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### Background

Financial hardship impacts individuals living with chronic illness who have ongoing financial obligations and are seeking medical treatment.<sup>1,2</sup> Food insecurity, lack of affordable housing, lack of funds for medications, inability to seek medical care, and lack of health insurance are examples of financial hardship. Financial hardship can also become evident with reduced income or unemployment after the diagnosis of a serious medical condition; and this hardship can persist over time as individuals are unable to return to work.<sup>3,4</sup> Further, financial hardship can deteriorate over time as disease progresses or as individuals are diagnosed with additional health conditions.<sup>5-7</sup> The National Health Interview Survey (2015 – 2017) found that some adults in the United States (U.S.) between the ages of 18-64 experience medical financial hardship. Those with lower educational attainment and greater number of health conditions experienced greater medical financial hardship.<sup>8</sup> Additionally, minority populations are likely to experience financial struggles and live with insecurities that negatively impact their lives.

Notably, Latinos comprise 18.3% of the U.S. population.<sup>9</sup> Foreign-born Latinos are highly vulnerable to experiencing both health and economic inequalities with lower socioeconomic status, lack of employment, housing instability, and gaps in healthcare.<sup>10</sup> Latinos living in the U.S. experience financial burden with the costs of healthcare when seeking treatment because they lack employer-based health insurance. Many Latinos living in the U.S. lack citizenship which makes it difficult to garner employment that provides health insurance as a medical benefit.<sup>11</sup> There is a high prevalence of chronic disease among Latinos accessing health care services, and many Latinos have one or more comorbid medical conditions.<sup>12,13</sup> Additionally, Latinos can experience structural barriers in healthcare if they have no usual source of healthcare (e.g., no primary care provider); this may be due to some Latinos having low income or rates of education, being unable to take time off from work, or losing their job due to health problems, all of which limits them economically.<sup>14</sup> Finally, many Latinos experience inadequate chronic disease management, face multiple barriers to receipt of supportive services, and lack needed resources (e.g. affordable housing, health insurance, and access to healthy food).<sup>15</sup>

Financial hardship may significantly impact health-related quality-of-life (HRQoL) among Latinos with a chronic disease,<sup>16</sup> which becomes more pronounced when dealing with chronic disease and end-of-life care.<sup>17</sup> HRQoL involves individuals' abilities to maintain social, emotional, and physical functioning as an essential part of everyday life and well-being. Individuals who live with a long-term, chronic disease may realize an accumulative

economic burden related to their illness and associated costs of medical treatment. Managing a chronic disease can cause stress when financial hardship requires that individuals and their families make difficult decisions to obtain or not obtain medical care based on their income.<sup>18</sup> Additionally, individuals who report deprivation, poverty, and cash-flow problems are more likely to experience mental illness compared to those who do not experience such problems.<sup>19</sup>

Associations between financial hardship and HRQoL outcomes have been reported. Research in cancer care has examined these relationships and found cancer-related financial hardship is common among cancer patients and is associated with worse HRQoL in the physical, emotional, and functional domains.<sup>20</sup> Less is known about these relationships among individuals with chronic diseases and less so about vulnerable Latinos. However, older adults with multiple chronic diseases are considerably more likely to experience poor HRQoL<sup>21</sup> and a negative impact in how they feel about life in general.<sup>22</sup> Their experience of depression can become more severe, experiencing depressed feelings almost every day. Health disparities encountered by vulnerable populations can intensify emotional suffering. Although much has been written about financial hardship in relation to mental health and psychological distress (e.g., depression, anxiety)<sup>23</sup> among cancer patients,<sup>24</sup> limited data exist to help us understand the unique effects of such hardship for chronically ill Latino populations experiencing various chronic illnesses. In this study, we examined the association between financial hardship and HRQoL among population of older adult Latinos with chronic, comorbid illnesses.

## Method

### Study Design

This cross-sectional study used baseline data collected from a pilot randomized clinical trial; and the methods for this study have been reported elsewhere.<sup>26</sup> This study received IRB approval from New Mexico State University review board. Participants were screened and provided written informed consent prior to participating in this study and were provided a \$20 gift-card after they completed the study as a token of appreciation for sharing their perspectives and time.

**Research Setting**—This study took place in Southern New Mexico with participants living near the U.S.-Mexico Border. This area is one of the most deprived places to live in the U.S; many older-Latinos living in this region experience substantial disparities in income, housing, food insecurity, existing close to the U.S. poverty level and lack adequate health insurance.<sup>27,28</sup>

**Eligibility Criteria**—Participants in this study included 68 Latinos living with chronic diseases (e.g. meaning they had been diagnosed with and were in treatment for one or more chronic diseases). Participants were eligible for the study if they self-identified as Latino, were 50 years of age, and reported having one or more chronic health conditions (e.g, cancer, heart disease, renal/liver failure, stroke, hypertension, diabetes, chronic obstructive pulmonary disease, and/or HIV/AIDS).

**Sampling**—Purposive sampling was used to recruit participants using a community-engaged approach from rural areas in and around Las Cruces, New Mexico.<sup>29</sup> Recruitment for this study involved connecting with community networks and by offering an opportunity to be engaged in learning about Advance Care Planning (ACP).<sup>30</sup> Participants were recruited from the community at the Farmer’s Market, Community Senior Centers and through meetings with governmental agencies, social service programs, low-income housing projects, food banks, grocery stores, local churches, and assisted living facilities. During recruitment, individuals were first given information about the study. Then, they were asked if they would like to participate. Those who were interested were recruited at that time. Some individuals requested that we contact them later. They provided contact information and were later recruited over the phone. Individuals were also given an information flyer and asked to pass it along to others who might be interested in participating, who then contacted us by phone at a later date. Research assistants screened interested individuals to determine if they met inclusion criteria. Two research assistants from the local area and proficient in English and Spanish recruited participants and conducted interviewer-administered surveys either in person or over the phone in the language which the participant preferred (21 were conducted in English, 36 in Spanish, and 11 used both English and Spanish).

### Measures

**Socio-Demographics and Health Status:** Demographic data collected included age, gender, marital status, education, birthplace, primary language, and health insurance. Comorbid chronic disease was assessed by self-report. Participants indicated whether they had one or more chronic diseases, which ranged from having only one condition to multiple co-morbid conditions, up to 4. Hospitalization in the last six months was assessed by asking participants, “In the last six months, have you stayed overnight in a hospital as a patient?” with response options of “Yes” and “No”.

**Financial Hardship:** We examined financial hardship using questions adapted from a study by Ell and colleagues (2007) which examined economic stress on quality of life among low-income women with cancer.<sup>31</sup> In this study, we measured financial hardship using the following concepts: information about employment status, medical cost concerns, wage worries, and financial worry. Each concept was operationalized through the following questions. For *employment status*, participants were asked: “Are you currently employed?” (Yes, employed, No, unemployed, and No, retired). *Medical cost concerns* questions included: (Yes/No): “I worry about the costs of hospitalization.”; “Do you have concerns about the costs of medications?”; “Do you have concerns about the cost of hospitalization?”; “Does your financial situation prevent you from getting the treatment you need?”; “Does your financial situation prevent you from filling your prescriptions?”; and “Are you able to get all the medications your doctor prescribed?” *Wage worries* questions included: (Yes/No): “Do you have money left over at the end of the month?” and, “Do you have difficulty paying bills?” *Financial worry* questions included: (Yes/No): “Are you worried about your current financial situation?”; “Do you think your current financial situation will get better soon?”; and “Would you say your financial situation is getting worse?” (See Table 1).

**Health Related Quality of Life:** The Functional Assessment of Cancer Therapy-General (FACT-G) is widely used as a measure of HRQoL in cancer patients and constitutes core HRQoL domains in the physical, social/family, emotional, and functional context.<sup>32</sup> The FACT-G uses a 5-point Likert scale for each of its 27 questions; each item's response ranges from 0 (Not at all) to 4 (Very much). The items from each of the subscales (e.g., Physical Well-Being (PWB), Social/Family Well-Being (SFWB), Emotional Well-Being (EWB), and Functional Well-Being (FWB)) were summed. PWB (7-items, possible range 0 to 28) assesses level of energy, pain, nausea, and physical functioning. SFWB (7-items, possible range 0 to 28) assesses feeling close to friends, emotional support from family and satisfaction with family communication. EWB (6-items, possible range 0 to 24) is about feeling sad, nervous, losing hope, difficulty coping, worrying about the condition getting worse, and worrying about dying. FWB (7-items, possible range 0 to 28) assesses inability to work, enjoy life, accept illness, sleep well, enjoy fun things, and be content with quality of life. The FACT-G total score is calculated by summing the four subscales and ranges from 0 to 108, with higher scores indicating better overall HRQoL. While much research has validated the use of the FACT-G examining HRQoL with cancer patients, there is less research on HRQoL and patient populations with chronic illness. Some research suggests that the FACT-G can be used in community settings with older adults having chronic conditions;<sup>33,34</sup> however, it has not been tested for this use with older Latinos recruited from community settings.

**Statistical Analysis:** We first examined the distributions of the HRQoL subscales and overall well-being scores. Negatively worded items were reverse coded prior to summing each subscale and total overall well-being, so that higher scores indicated a better HRQoL. Cronbach's alphas were used to assess the internal consistency of the items in the subscales and overall scale. We then used exploratory factor analysis (FA) with an orthogonal rotation to identify constructs that grouped together based on the financial hardship questions.<sup>35</sup> The FA included the 11 items assessing financial hardship. We used a factor loading cutoff of 0.50 and retained factors using an eigenvalue greater than 1.0 and retained the regression scores for all three factors that emerged for use in the regression analysis. The results of the factor analysis were evaluated using the Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity. For each subscale, we computed Cronbach's alphas to assess internal reliability of the items in each factor. We then conducted five multiple linear regressions to examine the relationships between the financial hardship factors identified from the factor analysis and the FACT-G total score as well as four FACT-G subscales of PWB, SFWB, EWB, and FWB, adjusting for a priori variables as potential confounders including demographic variables, comorbid medical conditions, and employment status. Analyses were conducted using IBM SPSS Statistics Version 25.0 (IBM Corp., Armonk, NY).<sup>36</sup>

**Results:** As shown in Table 2, of the 68 Latino participants in this study, the majority were female ( $n=52$ ), currently single ( $n=46$ ), and had greater than high school level of education ( $n=37$ ). Fifty-one percent of participants self-reported having two comorbid medical conditions with 38% of participants having three or more conditions.

In Table 3, HRQoL was indicated by the overall well-being sum score on the FACT-G (internal consistency, Cronbach's alpha=  $\alpha$ ); and HRQoL well-being showed (range: 18–108; M=71.03, SD=19.35,  $\alpha$ =0.924). FACT-G subscale scores ranged from 4 to 28 for PWB ( $\alpha$ =[0.845]), 1 to 28 for SFWB ( $\alpha$ =[0.825]), 3 to 24 for EWB ( $\alpha$ =[0.805]), and 2 to 28 for FWB ( $\alpha$ =[0.885]).

### Factor Analysis of Financial Hardship

The FA on the eleven items assessing financial hardship generated three factors comprised of nine items; two items did not load on any of the factors using a cut-off of 0.50 (Table 4). The three factors were retained using a cutoff eigenvalue greater than 1.0, which accounted for 66.8% of the common variance. The three factors were defined as Medical Cost Concerns indicated by three items ( $\alpha$ = [0.803]); the second factor showed Financial Hardship Treatment Adherence construct indicated by three items ( $\alpha$ = [0.676]); and the third factor was Financial Worry, indicated by three items ( $\alpha$ = [0.680]). Mean scores for the items in each factor indicate the most prevalent concerns related to Financial Hardship. The Kaiser-Meyer-Olkin (KMO) was 0.709 adequate for FA. Bartlett's test of sphericity was 181.838 (df 36,  $p$ =.001), indicating the suitability to support a FA.

### Regression Analysis of Financial Hardship on HRQoL

In Table 5, we report the results from the five multiple regression analyses in which we regressed the total FACT-G score and each of the FACT-G subscales on the medical cost concern, financial hardship treatment adherence, and financial worry factors. The first regression model explained 31.4% of the variance in the FACT-G total score ( $F[9,58] = 2.95$ ,  $p = .006$ ). When controlling for age, gender, hospitalizations in the past 6 months, and insurance status, being retired, having financial hardship treatment adherence, and experiencing financial worry were all negatively associated with total FACT-G scores. These factors were associated with lower FACT-G scores. Interestingly, having medical cost concerns was not associated with FACT-G scale or subscales. Additionally, none of the variables were significantly associated with the EWB subscale.

The second regression model explained 24.8% of the variance in PWB ( $F[9,58] = 2.12$ ,  $p = .042$ ). When controlling for age, gender, hospitalizations in the past 6 months, and insurance status, being retired and financial hardship impact on treatment were negatively associated with PWB scores. A one-point increase in the financial hardship impact on treatment factor score was associated with a 2.082-point (SE=0.771) decrease in PWB.

The third regression model predicted 29.2% of the variance in SFWB ( $F[9,58] = 2.66$ ,  $p = .012$ ). When controlling for age, gender, hospitalizations in the past 6 months, and insurance status, financial worry was negatively associated with SFWB scores. A one-point increase in the financial worry factor score was associated with a 2.03-point (SE=0.833) decrease in SFWB.

The fourth regression model predicted 13.1% of the variance in EWB ( $F[9,58] = 0.973$ ),  $p = .472$ . When controlling for age, gender, hospitalizations in the past 6 months, and insurance status, none of the financial hardship variables were associated with EWB.

The fifth regression model predicted 32.4% of the variance in FWB ( $F[9,58] = 3.085, p = .004$ ). When controlling for age, gender, hospitalizations in the past 6 months, and insurance status, being retired, financial hardship treatment adherence, and financial worry, were all negatively associated with FWB. A one-point increase in the financial hardship treatment adherence factor score was associated with a with a 1.71-point ( $SE=0.761$ ) decrease in FWB. A one-point increase in the financial worry factor score was associated with a 2.13-point ( $SE=0.822$ ) decrease in FWB. As the factors increased FWB became worse.

## Discussion

In this study we examined the relationship between financial hardship and HRQoL among older Latinos with chronic diseases. In general, Financial Hardship Treatment Adherence, Financial Worry, and being retired were associated with HRQoL, but Medical Cost Concerns was not. There were statistically significant associations between Financial Hardship Treatment Adherence and HRQoL in Physical and Functional Well-Being; such associations were not found with Social/Family and Emotional Well-Being subscales. Financial Hardship Treatment Adherence factor is comprised of items indicating participants experienced difficulty filling prescriptions, getting the treatment they needed or getting medications prescribed by doctors. In this inverse relationship, as Financial Hardship Treatment Adherence increased, Physical and Functional Well-Being decreased. Financial Hardship Treatment Adherence was negatively associated with participants' Physical Well-Being meaning they experienced difficulty with lack of energy, feeling pain, ill or nausea, having trouble meeting the needs of one's family, being bothered with side-effects of treatment and forced to spend time in bed. Financial Hardship Treatment Adherence was negatively associated with participants in Functional Well-Being meaning they were unable to work, experienced problems enjoying life or enjoying the things they usually do for fun, difficulty accepting the illness, problems sleeping or not feeling content with current HRQoL.

Our previous research explored the relationship between financial hardship and the effects on HRQoL among Latina cancer survivors, which found a statistically significant relationship between economic concerns and poorer functional, emotional, and affective well-being.<sup>16</sup> The findings of this study are similar to other research in this area; for example, cancer-related financial hardship among head and neck cancer survivors was significantly related to lower physical, emotional, and functional well-being.<sup>37</sup> Our study supports the growing evidence that financial hardship is associated with poor HRQoL among those with chronic diseases.<sup>16,38-40</sup> However, our study with older Latinos showed that while the relationship between Financial Hardship Treatment Adherence and Physical and Functional Well-Being was statistically significant, Financial Worry was the only variable associated with Social/Family and Functional Well-Being. Financial Worry is the experience of being concerned about one's current financial situation. The majority of our study population (75%) noted that they did not have money left over at the end of the month, indicating their financial status. Such concerns negatively influence personal relationships or Social/Family Well-Being. Individuals experiencing Financial Worry can have lower connections with their main support persons, such as friends and family members, and experience worse family acceptance of and communication about the illness.

In this study, financial hardship was not associated with the FACT-G subscale of Emotional Well-Being. While previous research shows a relationship between financial hardship, mental health, and psychological distress,<sup>23</sup> particularly among cancer patients,<sup>24</sup> this study did not indicate this finding. The combination of experiencing financial hardship and poor HRQoL is often complicated by emotional factors; however, it was not true for this study.<sup>31</sup> Perhaps participants had adaptive coping strategies that supported them in their experience with financial hardship and chronic illness? While financial issues appear to have an important role when dealing with chronic diseases, it may not be related to Latino individuals' emotional well-being as characterized by the questions we asked in this study (e.g., do you feel sad or nervous, lose hope, worry about dying or that the condition will get worse, satisfied with coping). It could be that Latinos with chronic diseases have already faced various challenges that make them vulnerable (e.g, having limited income and lack of health insurance)<sup>10</sup> and suggest they have learned how to deal with these issues over the course of their lives. Additionally, Latinos' cultural values are important to consider as some are likely to accept their complex circumstances and put everything into God's hands in order to cope. It is also possible that Latinos prefer a family-centered approach to chronic diseases management;<sup>41,42</sup> therefore, having family support may compensate their emotional reactions to financial hardship.

Although these findings are supported by previous research, our study adds the focus on the experience of older Latinos with chronic disease. Older Latino individuals with one or more chronic health conditions who are in treatment may be more vulnerable to the experience of financial hardship, affecting their HRQoL by way of their physical, functional, and social/family well-being. Not being able to pay for medical treatment or prescriptions can compromise everyday HRQoL. Recovery from financial hardship while dealing with a chronic medical condition is often associated with other problems, a type of spiraling effect that stems from multiple issues in health and disease influencing work life, social/family life, and daily functioning, which can appear impossible to resolve. The effects of financial hardship are especially important to consider when working with vulnerable populations represented in this study (e.g., older Latinos with multiple co-morbid chronic conditions). Seriously ill individuals near the end of life who have exhausted their financial resources may receive more aggressive medical treatment, impacting their financial hardship by increasing costs of care and/or depleting family financial resources.<sup>43</sup> Vulnerable older Latinos with chronic disease and their families report experiencing multiple challenges with access to health care and financial insecurity. Furthermore, they experience barriers within their communities that impact living and managing a chronic disease.<sup>44</sup> These additional barriers to health care signify sources of stress, which can lead to distress, compounding the difficulties of living with one or more chronic diseases.

Health care providers need to be aware of the impact of financial hardship on HRQoL among older Latinos with a chronic health condition to address problems before they arise (e.g., to improve decision making, address adherence, and/or reduce psychosocial distress). Providers should work together across disciplines in medicine, nursing, social work, and chaplaincy to identify financial hardship early in the course of diagnosis and treatment of a chronic condition. During the diagnosis and treatment of an illness, health care providers can refer patients and families to a social worker, case manager, patient navigator and/or



financial navigator within their medical system or community to link patients to assistance with the financial impact of disease. Furthermore, Nipp and colleagues (2018) recommend specific strategies to assess and intervene in patients' experience of financial burden.<sup>45</sup> They suggest that resource information can be made available in the waiting room to connect patients to financial and psychosocial support services; providers can integrate financial burden screening tools within their practice and link patients and families to a financial counselor when a problem is identified; assessment of financial hardship can be integrated into a general assessment of decision-making needs about the course of treatment and end-of-life care, which could include advance care planning and advance directive documentation;<sup>46</sup> and finally, integrating a routine assessment of financial hardship is important to advocate for improved care to meet the needs of vulnerable Latino patients and their families.<sup>47</sup>

### Limitations

As with other exploratory studies, this study has limitations. First is the sampling method which involved purposive sampling to recruit study participants. The study findings could be biased due to self-selection into the study. Furthermore, we did not conduct a power analysis in this study because it was exploratory and intended to recruit a hard to reach population. For future replication, researchers should consider conducting a power analysis in a planning stage for research to ensure a fully powered study. Notably, research with Latinos and those with multiple vulnerabilities is an understudied area, thus this approach to sampling is reasonable an initial step. Second, we used a cross-sectional design to examine the relationship between financial hardship and HRQoL. The observational design was chosen for the pilot research to generate hypotheses for a larger study. A longitudinal study could be more informative in understanding the points at which financial hardship become important in HRQoL. The FACT-G measure that we used to examine the study outcomes was developed for patients with cancer, whereas our study included participants with multiple chronic diseases with cancers and non-cancers. Additionally, the Financial Hardship measure had not been previously tested for reliability or validity. Finally, we caution about generalizing the study findings, as we had a small sample size in our study. The sample size may have impacted the results obtained from the factor analysis of the Financial Hardship measure, which resulted in two subscales with low internal consistency. The findings may not be representative of other older Latinos' experiences with financial hardship and the impact on HRQoL. Nevertheless, this study sheds light on the relationship between financial hardship and HRQoL and can lead to further research on this topic.

### Conclusions:

In this study, we found that increased financial hardship was associated with worsening HRQoL in mainly physical and functional well-being as well as social/family well-being. The results of our study contribute to a growing literature on the importance of understanding financial hardship within the context of chronic disease. As the aging Latino population continues to grow, we must consider how to manage their multiple chronic health conditions in order to reduce the financial burden that accompanies living with a chronic illness.

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**Table 1****Financial Hardship**

<b>Variable</b>	<b>Category</b>	<b>Frequency</b>	<b>%</b>
Employment Status	Currently employed	11	16.2
	Currently unemployed	38	55.9
	Retired	19	27.9
Medical Cost Concerns	I worry about the costs of hospitalization. (Yes)	37	54.4
	Do you have concerns about the costs of medications? (Yes)	34	50.0
	Do you have concerns about the cost of hospitalization? (Yes)	30	44.1
	Does your financial situation prevent you from getting the treatment you need? (Yes)	17	25.0
	Does your financial situation prevent you from filling your prescriptions? (Yes)	17	25.0
	Are you able to get all the medications your doctor prescribed? (No)	11	16.2
Wage Worries	Do you have money left over at the end of the month? (No)	51	75.0
	Do you have difficulty paying bills? (Yes)	23	33.8
Financial Worry	Are you worried about your current financial situation? (Yes, very worried)	35	51.5
	Do you think your current financial situation will get better soon? (No, not at all hopeful)	17	25.0
	Would you say your financial situation is getting worse? (Yes)	9	13.2

**Table 2**

Characteristics of the Sample, Demographics (n=68)

Characteristics	Number, Mean	% or Range
Age (in years)	65.79 (SD: 8.71)	(50 to 87)
Female	52	76.5%
Latino/Hispanic	68	100%
Birthplace		
United States	31	45.6%
Mexico	37	54.4%
If Born in Mexico, number of Years in the U.S.	35.54 (SD: 15.30)	(4 to 62)
Marital Status		
Married	22	32.4%
Not Married	46	67.6%
Education		
<High School	31	45.6%
> or = High School	37	54.4%
Has Health Insurance		
Yes	64	94.1%
Type of Health Insurance		
Medicaid	28	41.2%
Medicare	20	29.4%
Both Medicaid/Medicare	10	14.7%
Other – Private or VA	6	8.8%
None	4	5.9%
Number of Medical Conditions		
One	7	10.3%
Two	35	51.5%
Three	22	32.4%
Four	4	5.9%
Hospital stay in the past 6 months		
Yes	26	38.2%

**Table 3**

## Health Related Quality of Life Scale

<b>Total and Subscale of QOL (means and standard deviations)</b>			
<b>Subscale</b>	<b>M(SD)</b>	<b><math>\alpha</math></b>	<b>N</b>
Physical Well-Being	20.66(6.25)	.845	68
Social/Family Well-Being	16.63(6.45)	.825	68
Emotional Well-Being	17.50(5.06)	.805	68
Functional Well-Being	16.24(6.51)	.885	68
Well-Being Sum Score	71.03(19.35)	.924	68

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**Table 4**

## Factor Analysis of Financial Hardship

	Item Statement	Item#	Factor Loadings			Mean (SD)	$\alpha$
			1	2	3		
Medical Cost Concerns	I worry about the costs of hospitalization?	11	.870			.54(.504)	.803
	Do you have concerns about the cost of hospitalization?	3	.854			.44(.500)	
	Do you have concerns about the costs of medications?	4	.718			.50(.504)	
Financial Hardship Treatment Adherence	Does your financial situation prevent you from filling your prescriptions?	1		.788		.25(.436)	.676
	Are you able to get all the medications your doctor prescribed?	5		.779		.16(.371)	
	Does your financial situation prevent you from getting the treatment you need?	2		.686		.25(.436)	
Financial Worry	Are you worried about your current financial situation?	9			.792	.51(.503)	.680
	Do you have money left over at the end of the month?	7			.740	.75(.436)	
	Do you have difficulty paying bills?	6			.720	.34(.477)	
	Eigenvalues		3.385	1.383	1.240		
	Percent variance		37.611	15.363	13.778		
	Number of items		3	3	3		



**Table 5**

Regression Analysis of Financial Hardship on HRQoL

	Physical Well-Being			Social/Family Well-Being			Emotional Well-Being			Functional Well-Being			FACT-G Total Score		
<b>Model Summary</b>															
F	2.121			2.664			.973			3.085			2.948		
R <sup>2</sup>	.248			.292			.131			.324			.314		
P value	.042			.012			.472			.004			.006		
df	9,58			9,58			9,58			9,58			9,58		
N	68			68			68			68			68		
<b>Covariates</b>															
	β	SE	P	β	SE	P	β	SE	P	β	SE	P	β	SE	P
Age	.119	.102	.248	-.228	.102	.029*	-.076	.089	.397	-.108	.101	.298	-.292	.302	.337
Gender	.451	1.75	.798	-.724	1.75	.681	1.46	1.52	.341	3.10	1.73	.078	4.28	5.18	.411
Hospital <6 months	1.14	1.52	.456	-1.15	1.52	.453	-2.14	1.32	.872	-1.27	1.50	.402	-1.49	4.50	.741
Insurance	-1.038	3.30	.755	-2.54	3.30	.445	-1.72	2.87	.552	-2.02	3.26	.538	-7.32	9.77	.457
<b>Financial Hardship</b>															
	β	SE	P	β	SE	P	β	SE	P	β	SE	P	β	SE	P
Employment Status															
Unemployed	-2.34	2.23	.299	-1.90	2.23	.398	-2.52	1.94	.193	-3.76	2.20	.09	-10.55	6.60	.115
Retired	-5.17	2.57	.049*	-3.87	2.57	.137	-3.36	2.23	.138	-6.93	2.53	.008*	-19.33	7.59	.014*
Medical Cost Concern	-.248	.749	.741	.984	.749	.194	-.279	.651	.670	.257	.739	.729	.714	2.21	.748
Financial Hardship Treatment Adherence	-2.082	.771	.009*	-1.33	.771	.091	-.662	.670	.327	-1.71	.761	.028*	-5.78	2.28	.014*
Financial Worry	-1.243	.833	.141	-2.03	.833	.018*	-1.24	.724	.091	-2.13	.822	.012*	-6.65	2.46	.009*

\* Significant value <.05