



Published in final edited form as:

J Transcult Nurs. 2004 January ; 15(1): 18–25. doi:10.1177/1043659603260010.

Depression Among Korean, Korean American, and Caucasian American Family Caregivers

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Abstract

This study compared depressive symptoms among Korean, Korean American, and Caucasian American female family caregivers of older persons with dementia. The sample included Korean caregivers living in Seoul, Korea (KK); Korean American (KA) caregivers living in the Chicago and Los Angeles areas; and Caucasian American (CA) caregivers from the Chicago metropolitan area. KK caregivers were more likely to be daughters-in-law, KA caregivers were more likely to be daughters, and CA caregivers were more likely to be wives or daughters. Overall, wives were more depressed than daughters and daughters-in-law. KK caregivers were the most depressed of the three cultural groups. When caregiver relationship and cultural group were examined simultaneously, KK and KA wives were most depressed, and KA daughters-in-law were least depressed. Differences in culture and social role appeared to affect depressive symptoms among these caregivers. The findings suggest a need to further examine the associations between caregivers' relationships with their care recipients and their own emotional status.

Keywords

cross-cultural comparisons; depressive symptoms; caregiver relationships; family caregiving; Korean caregivers; Korean American caregivers; Caucasian American caregivers

In the 10-year period between 1990 and 2000, the number of Korean Americans (KAs) in the United States increased by nearly 35%, from 797,304 to 1,076,872 (U.S. Census Bureau, 2001). As the number of KAs in the United States increases, the number of older Korean Americans will also increase, and the number of older persons who suffer from dementia may increase as well. However, little information is available about KA elders with dementia and their family caregivers.

The literature has consistently noted that in the United States, family caregivers of older persons with dementia are at high risk for negative mental health outcomes, such as depression and anxiety (Pearlin, Mullan, Semple, & Skaff, 1990; Schulz, O'Brien, Bookwala, & Fleissner, 1995; Stommel, Given, & Given, 1990). Recent caregiver research also suggests that these poorer mental health outcomes may be associated with changes in caregiver physical health. One recent study found that among caregivers who were stressed, mortality rates were 63% higher than among those who were not stressed (Schulz & Beach, 1999). Fewer studies have addressed these issues from a cross-cultural perspective.

Family caregiving by Koreans in Korea (KK) and by KAs might be expected to differ from caregiving by Euro-American descendants in the United States because of the different attitudes, norms, practices, and expectations for caregiving in traditional Korean culture. Studies have consistently found that KK caregivers were more likely to be female, younger,

married, and sharing a household with their ill family member than American caregivers, and these differences may have resulted from different cultural practices or expectations about caregiving (Choi, 1993; Lee & Sung, 1997; Sung, 1994; Youn, Knight, Jeong, & Benton, 1999). Also, several studies have reported that only 0.4% of U.S. family caregivers were daughters-in-law, whereas 25% to 70% of KK caregivers were daughters-in-law (Choi, 1993; Hong, Lee, Park, Cho, & Oh, 1994; Peter-Davis, Moss, & Pruchno, 1999; Sung, 1994; Yoon & Cha, 1999; Youn et al., 1999).

The primary reason for the much higher percentage of daughter-in-law caregivers among Koreans is very likely because of the cultural norm of filial piety, according to which the first son and his wife are obliged to repay a debt that includes making their parents comfortable and carrying out any difficult tasks for the parents (Chee & Levkoff, 2001; De Vos & Lee, 1993; Hsu, 1971; Kim, Kim, & Hurh, 1991). Filial piety involves “putting one’s family members in a harmonious order by caring for one’s parents with love, respect, responsibility, and desire to repay” (Sung, 1998).

KA families face difficulties in practicing the traditional expectation of filial piety given their changing life situations in the United States and westernization and urbanization (Kim et al., 1991; Yamamoto, Rhee, & Chang, 1994). In the United States, most KA immigrant wives are employed, creating difficulties in maintaining extended families and practicing the expectations of filial piety. Thus, being a KA daughter-in-law may create conflict in providing care for elderly parents (Kim et al., 1991).

The cultural context also affects the way individuals perceive and express feelings of distress or depression (Weiss & Kleinman, 1988). Family caregiving is widely recognized as a stressful experience in the United States, and one study (Youn et al., 1999) found that it was even more stressful for Korean caregivers than for Caucasian Americans (CA) as KK caregivers were significantly more depressed than CA caregivers. However, it is not known whether level of depression differs by caregiver/care-recipient relationship (wife, daughter, or daughter-in-law). The focus of this study was to compare depressive symptoms among KK, KA, and CA female family caregivers of older persons with dementia by the caregiver relationship to the care recipient.

The study was based on the stress process model (Perlin et al., 1990), which has the following four domains: background and context of stress, stressors, mediators of stress, and outcomes or manifestations of stress. Stressors are of two types, primary and secondary. Primary stressors are caregiving conditions, experiences, and activities that cause stress to caregivers. Secondary stressors are role strains and intrapsychic strains, such as self-esteem or self-concept. The mediators of stress, such as social support, help caregivers to cope with stressors. The outcomes of caregiving may be observed as the caregivers’ physical or mental health. This study examined background variables, such as demographic characteristics and cultural context; primary stressors, such as care receiver cognition, activities of daily living (ADL), and behaviors; and the outcome variable, depression.

KK caregiving is known to be profoundly influenced by traditional filial piety, whereas CA caregiving is much less influenced by such expectations. KA caregiving was expected to lie between the two extremes based on a continuum of acculturation. Based on the literature concerning cultural contexts and caregiver/care-receiver relationships, three following hypotheses were identified.

Hypothesis 1: KK caregivers were expected to be more depressed than KA and CA caregivers.

Hypothesis 2: Daughters-in-law were expected to be more depressed than daughters and wives are in general.

Hypothesis 3: KK and KA daughters-in-law would be more depressed than CA daughters-in-law.

METHODS

Sample

Using a cross-sectional survey method, female family caregivers were recruited using multiple recruitment sources. The sample of KK caregivers ($N = 100$) was recruited through a multipurpose social service center in Seoul, Korea; caregivers who visited the social service center for counseling or for information were asked to fill out the questionnaire. KA caregivers ($N = 59$) were recruited through Korean senior centers, Korean physicians, Korean churches, adult daycare centers, and long-term institutions by a snowball sampling method. Because it was extremely difficult to locate KA subjects who provided care at home even after multiple recruitment methods were used, caregivers who had placed their relatives in long-term care institutions were also included in the KA sample ($n = 46$, or 76% of the KA sample). CA caregivers ($N = 78$) were recruited through a Midwestern Alzheimer's Disease Center. After names, telephone numbers, and addresses of 400 CA caregivers were obtained from the Alzheimer's disease center, subjects were contacted by letter and telephone and invited to participate in the study.

A purposive sample of 237 caregivers was selected. Inclusion criteria required that the caregivers be wives, daughters, or daughters-in-law; older than 21 years of age; and KKs, KAs, or CAs. KA caregivers had to be first-generation Koreans who were born in Korea, lived in the United States at the time of the data collection, and were able to speak and read Korean. KK caregivers had the same inclusion criteria as KA caregivers except that they lived in Korea. CA caregivers were non-Hispanic Whites who were born in the United States.

Caregiver subjects were family members who had major responsibility for providing care on a daily basis to an elderly person because of their relative's impairment in activities of daily living (ADLs), cognition, or behaviors. Care recipients were persons who were over 60 years old, had dementia, required daily routine care, and were KKs, KAs, or CAs. A small pilot study indicated that many Korean caregivers would not bring their family member to a health care professional unless symptoms were very severe because they were afraid or ashamed of a diagnosis of dementia for their relative. As a result, many KK care recipients were not formally diagnosed with dementia. Therefore, if the caregiver had to provide care to the relative because of impairment in the area of ADLs, cognition, or behaviors, the caregiver was included in the study.

Caregiver sociodemographic characteristics are summarized in Table 1. The KK, KA, and CA caregivers differed in age, years of education, religion, and relationship to the care recipient. KK caregivers were significantly younger ($M = 50.1$, $SD = 12.2$) than the KAs ($M = 57.8$, $SD = 12.3$) and CAs ($M = 60.0$, $SD = 12.6$). On average, the KK caregivers were significantly less educated ($M = 12.9$, $SD = 4.1$) than KA caregivers ($M = 13.9$, $SD = 3.3$) and CA caregivers ($M = 14.5$, $SD = 2.5$). KK caregivers tended to be Protestants (35%) or atheists (31%), whereas 81% of the KA caregivers were Protestants and more than half (53%) of the CA caregivers were Catholics. As expected, the most notable difference was in the relationship of the caregivers to the patient. KK caregivers were more likely to be daughters-in-law (50%), KA caregivers were likely to be daughters (42%) or daughters-in-

law (29%), and CA caregivers were more likely to be either wives (49%) or daughters (46%).

Care-recipients' demographic characteristics are summarized in Table 2. Care recipients included both male ($n = 96$, 41%) and female ($n = 141$, 59%) subjects. All care recipients lived in the community except the 76% of the KA sample as noted above. There were more female than male patients in the KK (62% vs. 38%) and KA (71% vs. 29%) samples than in the CA female sample (47% vs. 53%). Significant differences among the groups were found by age and years of education. The KA patients were the oldest ($M = 81.3$, $SD = 6.7$), followed by the CA ($M = 78.9$, $SD = 6.9$) and the KK ($M = 74.7$, $SD = 7.5$) patients. The KK patients were less educated ($M = 5.4$ years, $SD = 5.6$) than the KA ($M = 7.5$, $SD = 5.0$) and CA ($M = 12.7$, $SD = 3.4$) patients. Similar findings have also been reported by other studies of KK elderly and KA immigrant elderly (Koh & Bell, 1987; Lee, 1995; Moon, Lubben, & Villa, 1998; Woo et al., 1998). Like their caregivers, KK care recipients tended to be atheists (44%) or Protestants (30%). The distribution of religion among KA and CA care recipients was also similar; 73% of the KA care recipients were Protestants, and more than half of the CA care recipients (55%) were Catholics.

Procedures

Data collection procedures differed depending on the preferences of the caregivers and the agencies used for recruitment (Choi, 2000). The social service center in Seoul preferred that the investigator not mail out questionnaires; therefore, caregivers who visited the social service center for counseling or for information were asked to complete questionnaires after they signed a consent form. Data from KA and CA caregivers were collected primarily through mailed surveys; a consent form was enclosed in the mail. The Rush-Presbyterian-St.Lukes Medical Center Institutional Review Board approved the study prior to data collection.

Measures

Depression—Developed for use in studies of the epidemiology of depressive symptoms in populations (Radloff, 1977), the CES-D (Center for Epidemiologic Studies—Depression Scale) is a self-report scale intended to elicit symptoms associated with depression and to identify high-risk groups for research and screening purposes. The 20 items ask about feelings or symptoms experienced during the past week. Responses are scored according to how many times the symptom was experienced (0 = *rarely or none of the time or less than 1 day*; 1 = *1 to 2 days*; 2 = *3 to 4 days*; and 3 = *most or all the time or 5 to 7 days*). A score of 16 or greater has been reported in the literature as a criterion for clinically relevant depressive symptoms (Radloff & Locke, 1986). Reliability and validity of the CES-D have been established, and the measure has been used with various populations including African Americans, Hispanics, and Asian Americans (Farran, Miller, Kaufman, Donner, & Fogg, 1999; Kim & Theis, 2000; Kuo, 1984; Roberts, 1980; Vernon, Roberts, & Lee, 1982).

The Korean version, CES-D-K (Center for Epidemiologic Studies—Depression-Korean), was used in this study. Psychometric properties of the CES-D-K were established with a sample of Koreans in Canada and found to be similar to the CES-D. The CES-D-K was pilot tested with five KA adults prior to conducting this study. In that process, the Korean translation of CES-D Item 4—“I felt that I was just as good as other people”—appeared to be troublesome for the KAs. The translated item read, “I felt that I was at least as good as other people” (Noh, Avison, & Kaspar, 1992); but the two words *least* and *good* seemed to contradict each other and caused confusion to KA caregivers. Therefore, the item was retranslated into Korean as I felt that I was as good as other people. For this study, Cronbachs alphas were comparable across the three groups: KK = .93; KA = .94; CA = .91.

This is similar to the internal consistencies reported earlier with Koreans and higher than the consistencies reported earlier with CA caregivers (.92 with KK and KA and .74 with CA; see Youn et al., 1999).

Data Analysis

When the two KA caregiver groups (community and nursing home residents) were compared, they did not differ significantly on any study variables, including demographic characteristics (age, type of relationship, years of education) and level of depression. Hence, they were combined for the remaining analyses. Remaining data were analyzed using analysis of variance (ANOVA) and analysis of covariance (ANCOVA). Only one demographic variable, education, was significantly related to depression; namely, caregivers who were less educated reported higher levels of depression. Therefore, caregiver education was entered as a covariate in the subsequent analyses of depression. Throughout these analyses, the .05 level of statistical significance was used.

RESULTS

The first hypothesis was supported. KK caregivers were more depressed ($M = 27.4$, $SD = 11.7$) than KAs ($M = 21.7$, $SD = 12.2$) and CAs ($M = 20.2$, $SD = 11.5$), and the differences in levels of depression among the three cultural groups were significant ($p < .001$) (see Table 3). However, most of the caregivers—85% of KK, 71% of KA, and 63% of CA—scored higher than the clinically significant cutoff score of 16, suggesting depressive mood.

For hypothesis two, the levels of depression differed by relationship to the care recipient ($p < .05$). Although the authors expected that daughters-in-law would be more depressed than their counterparts, wives were actually more depressed ($M = 26.8$, $SD = 11.4$) than daughters ($M = 22.1$, $SD = 12.1$) and daughters-in-law ($M = 22.9$, $SD = 12.7$). Eighty-two percent of wives scored higher than 16 on the CES-D, while 70% of daughters-in-law and 69% of daughters also scored higher than 16. Further, the KK and KA wives were much more depressed than the CA wives (mean scores on the CES-D for both KK and KA wives were 29.9) (Table 4). One hundred percent of the KK wives and 93% of the KA wives scored higher than the cut-off score of 16 on the CES-D. Even though the CA wives were less depressed, their mean depression score was still quite high ($M = 22.2$), and 73% scored above 16 on the CES-D.

The last hypothesis was partially supported. KK daughter-in-law caregivers were strikingly more depressed ($M = 27.0$) than CA daughter-in-law caregivers ($M = 18.7$; $p < .01$). Surprisingly however, KA daughters-in-law reported fewer depressive symptoms ($M = 11.3$) than KK daughters-in-law (see Table 4). Eighty-four percent of KK daughters-in-law scored higher than 16 on the CES-D, compared to only 41% of KA daughters-in-law. Therefore, KK wives were the most depressed group, whereas KA daughters-in-law were the least depressed group when the levels of depression for each cultural group and relationship were compared (see Table 4).

DISCUSSION

This study examined depressive symptoms among KK, KA, and CA female family caregivers along with the caregiver's relationship to the care recipient. The sampling strategy used allowed comparison of caregivers by relationship to care recipient and cultural group and beginning examination of acculturation in the Korean American group. The three major findings included the following: (a) Korean caregivers (KKs) were the most depressed group; (b) wife caregivers, regardless of cultural group, were most depressed; and (c) KK daughters-in-law were much more depressed than KA daughters-in-law.

Reasons why KK caregivers were more depressed may be because of social sanctions or expectations influencing the individual caregiver's attitude or feelings toward the caregiving experiences (Finley, Roberts, & Banahan, 1988). The Korean government emphasizes the importance of traditional family ethics, which require family caregivers to take almost the entire responsibility for their elders with dementia. Insufficient health and social infrastructures supporting home health care or long-term care for demented elders in Korea impose a heavy burden and distress on family caregivers (Chee & Levkoff, 2001). This lack of social and governmental support may be responsible for the higher level of depression seen among KK caregivers than among KA and CA caregivers.

Wives were the most depressed caregivers in all three cultural groups, and many in all three cultures were severely depressed. Wives' depression may be influenced by a number of factors. It is speculated that closeness and significance of the spousal relationship may be one factor. Wives' depression may also be related to their personal contextual factors, such as their own aging and declining physical health or financial ability (Barnes, Given, & Given, 1992; Li, Seltzer, & Greenberg, 1997; Zanetti et al., 1998). In the studies cited above, spouse caregivers were at greater risk for health problems and depression than adult children caregivers.

Findings concerning KK and KA daughters-in-law suggest that a process of acculturation may be occurring. First, half of the KK caregivers were daughters-in-law, whereas a little less than a third of KA caregivers were daughters-in-law. Similarly, in Youn et al.'s (1999) study, 79.5% of all KK caregivers, but only 18.8% of KA caregivers, were daughters-in-law. These findings suggest that the necessity to practice filial piety may be greater for KK than for KA caregivers. Second, KA caregivers were extremely difficult to recruit; more than 75% of this sample had placed their family member in a nursing home—most likely because there was no one to provide care at home. During data collection, these KA caregivers appeared to be extremely busy and stressed. Unlike women in Korea, most KA wives need to work outside the home to make a living, and placing their relative in a long-term care institution may be interpreted as another expression of the process of acculturation.

The finding of a much lower level of depression among KA daughters-in-law compared to KK daughters-in-law could be interpreted as another expression of the process of acculturation. The high level of depression among KK daughter-in-laws suggests that Korean daughters-in-law are more likely to provide care without having affectionate relationships with their demented parents-in-law; it is done for the sake of meeting traditional expectations and maintaining family coherence. The study findings suggest that there may be a price to be paid (i.e., more depressive symptoms) for upholding Korean cultural values. Because they were more likely to be caregivers as the result of social expectations rather than a choice based on an affectionate relationship, Korean daughter-in-law caregivers have been shown to be more motivated by filial respect and filial sacrifice than American caregivers but also to have less affectionate relationships with their care recipients (Lee & Sung, 1997, Sung, 1994, 1995).

No definitive explanation emerges regarding the finding of a much lower level of depression among KA daughter-in-law caregivers compared to KK daughter-in-law caregivers. As discussed earlier, the lack of social and governmental support in Korea may cause the higher level of depression among KK caregivers as compared with KA caregivers. Practicing filial piety may make the KK daughter-in-law caregivers more depressed than KK daughters and wives. Unlike KK daughters-in-law, when the KA daughter-in-law caregivers had an option of placing their relatives in a long-term care institution or had a choice to be a primary caregiver, they might have felt far less depressed and burdened than KK daughters-in-law. Furthermore, among the KA caregivers, because the KA daughters-in-law were less likely to

have an affectionate relationship with their ill parent-in-law, they might have been less distressed by the fact that they had to place their relatives in a long-term care institution than KA wives or daughters.

Future research should examine broader contextual factors, such as support from other family members as well as formal supports available from government or health insurance that may play a role in predicting depression among KK and KA daughter-in-law caregivers.

Caution must be used when generalizing the results of this study. The study sampled Korean-born caregivers who lived in large urban areas of Korea or the United States. American born Korean caregivers and those who live in rural areas might have different levels of depression. Also, the small KA sample may not have been sufficient to detect differences between caregivers who placed their relatives in long-term care and those who did not. Finally, the cross-sectional study design did not capture changes in level of depression over time as caregivers experiences became protracted. A larger study is recommended to include other variables that may be related to the caregiving experiences of KK and KA caregivers, such as the care-recipients severity of dementia, caregiver's level of acculturation, perceived caregiving burden and satisfaction, social support, physical health, and level of caregiving motivation based on filial piety. It is also possible that the depressive symptoms observed in these KK caregivers are the result of other factors in addition to family caregiving (e.g., living conditions). Future research should therefore examine broader contextual factors, such as support from other family members as well as formal supports available from government or health insurance that may play a role in predicting depression among family caregivers across cultures. Attention also needs to be given to how acculturation affects KA caregivers.

A major strength of this study was its examination of caregiving experiences in relation to the caregivers relationship to the care-recipient and the caregivers cultural background. Thus, the study provides a good starting point for investigating more fully the context of caregiving for KK and KA caregivers and for other caregivers whose cultural background differs from that of European descendants in the United States.

Acknowledgments

This study was supported by an Individual National Research Service Award Predoctoral Fellowship from the National Institutes of Health (1F31 NR 07285-01), an Institutional Postdoctoral Fellowship at the University of Iowa College of Nursing (T32 NR07058), the National Institute of Nursing Research Mentored Research Scientist Development Award (K01 NR 08096), and an award to Dr. Eunice E. Lee from the faculty research fund at the University of San Diego.

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TABLE 1

Demographic Data: Descriptions of Koreans in Korea (KK), Korean Americans (KA), and Caucasian Americans (CA) Caregivers

Variables	KK (N = 100)		KA (N = 59)		CA (N = 78)	
	n	%	n	%	n	%
Relationship						
Wife	16	16.0	14	23.7	38	48.7
Daughter	31	31.0	25	42.4	36	46.2
Daughter-in-law	50	50.0	17	28.8	3	3.8
Other	3	3.0	3	5.1	1	1.3
Education^a						
8th grade or less	14	14.4	5	8.5	1	1.3
9th to 11th grade	5	5.2	3	5.1	1	1.3
Complete high school	33	34.0	11	19.6	23	29.9
Some college	4	4.1	9	16.0	18	23.4
College graduate	36	37.1	25	44.6	20	26.0
Graduate study	5	5.2	3	5.4	14	18.2
Religion^b						
Protestant	35	35.0	48	81.4	24	31.6
Catholic	15	15.0	9	15.3	40	52.6
Buddhism	18	18.0	1	1.7	0	0
Judaism	0	0.0	0	0.0	9	11.8
Other religion	1	1.0	0	0.0	3	3.9
No religion	31	31.0	1	1.7	0	0.0
	M	SD	M	SD	M	SD
Age*	50.1	12.2	57.8	12.3	60.0	12.6
Education**	12.9	4.1	13.9	3.3	14.5	2.5

^a 3 KK, 3 KA, and 1 CA participants are missing.^b 2 CA participants are missing.* $p < 0.01$.

 $p < 0.001$ (Differences among groups tested by one-way analysis of variance).

TABLE 2

Demographic Data: Descriptions of Koreans in Korea (KK), Korean Americans (KA), and Caucasian Americans (CA) Care Recipients

Variables	KK(N = 100)		KA (N = 59)		CA (N = 78)	
	n	%	n	%	n	%
Gender						
Male	38	38	17	28.8	41	52.6
Female	62	62	42	71.2	37	47.4
Education ^a						
0 years	41	41.0	11	18.6	0	0
1st to 6th grade	29	29.0	21	35.6	2	2.6
7th to 9th grade	7	7.0	9	15.3	11	14.1
10th to 12th grade	10	10.0	9	15.3	11	14.1
Some college	12	12.0	8	13.6	30	38.5
Graduate study	0	0.0	1	1.7	7	8.9
Religion ^b						
Protestant	30	30.0	43	72.9	25	32.1
Catholic	11	11.0	12	20.3	42	54.8
Buddhism	14	14.0	2	3.4	0	0
Judaism	0	0.0	0	0.0	10	12.8
No religion	44	44.0	2	3.4	0	0.0
	M	SD	M	SD	M	SD
Age**	74.7	7.5	81.3	6.7	78.9	6.9
Education**	5.4	5.6	7.5	5.0	12.7	3.4

^aFor education, 1 KK and 17 CA participants are missing.^bFor religion, 1 KK and 1 CA participants are missing.** $p < .001$ (Differences among groups tested by one-way analysis of variance).

TABLE 3

Estimated Marginal Means: Comparisons of CES-D among Koreans in Korea (KK), Korean Americans (KA), and Caucasian Americans (CA) Caregivers

Scale	KK (N = 100)			KA (N = 59)			CA (N = 78)		
	M ^{**}	SD	95% Confidence Interval	M ^{**}	SD	95% Confidence Interval	M ^{**}	SD	95% Confidence Interval
CES-D	27.4	11.65	25.8–30.0	21.7	12.16	18.7–24.8	20.2	11.54	15.7–24.6

NOTE: CES-D = Center for Epidemiologic Studies—Depression Scale. Evaluated at covariates appeared in the model: caregivers' years of education = 13.63.

** $p < .001$ (Differences among groups tested by one-way analysis of variance).

TABLE 4

Estimated Marginal Means: Comparisons of the CES-D by Cultural Group and Relationship

Cultural Group Of the Caregivers	Koreans in Korea (KK)	Korean Americans (KA)	Caucasian Americans (CA)
Wives	29.9	29.9	22.2
Daughters	25.2	24.1	19.6
Daughters-in-law	27.0	11.3	18.7

NOTE: CES-D = Center for Epidemiologic Studies—Depression Scale. Evaluated at covariates appeared in the model: caregivers' years of education = 13.68.