

Research Article

Happy Aging: Social Support and Depression among Older Filipino Immigrants

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***Corresponding author:** Liyun Wu, The Ethelyn R. Strong School of Social Work, Norfolk State University, 700 Park Ave, Norfolk, VA, 23504, USA**Received:** April 22, 2017; **Accepted:** June 08, 2017;**Published:** June 15, 2017**Abstract**

There is a paucity of research on Filipino American's adaptation to living in the United States despite this group is the second largest Asian immigrants. The current study investigated the role of social support on depression using a cross-sectional dataset of two hundred Filipino immigrants aged 65 and older living in the Southeastern region of Virginia. Depression was assessed by two instruments: the Geriatric Depression Scale (GDS) and the Center for Epidemiologic Studies of Depression (CESD). Both descriptive statistics and multivariate analysis results were reported. The research findings highlight the positive impact of strong social support on the low depression.

Keywords: Depression; Social support; Elderly; Filipino immigrants**Introduction**

The dramatic increase in the number of the elderly immigrants in the United States over the past 45 years has called for additional research on elderly immigrants' adaptation processes [1,2]. A report from the US Census Bureau (2010b) indicates that about 12 percent of the immigrant population is age 65 and older. The immigrant population that has received the least research attention is that of Southeast Asian immigrants, specifically those from the Philippines [3,4]. Several studies have identified that acculturation is a salient factor in depression. Limited income, lack of education, and limited English proficiency can have a negative effect on elderly immigrants' acculturation. Due to these limitations, acculturation can be very stressful for this population [5-7]. Consensus among researchers is that the stress of immigration, adaptation, and acculturation is far greater for elderly than for younger immigrants. According to Pumariega, Rothe, and Pumariega elderly immigrants are at the second highest risk for mental health problems following victims of warfare and torture [8]. The acculturation process can be much more stressful for them due to their inflexibility, which makes it more difficult to learn a new language and adopt new cultural norms [9].

Mossakowski concurred that despite the increasing racial and ethnic diversity in the United States, knowledge of the relationship between immigrant status and mental health has remained limited [10]. According to the National Alliance on Mental Illness (NAMI) [11], Southeast Asians (including Filipinos) suffer from particularly high rates of depression as well as posttraumatic stress disorder compared to the general Asian population, they display more than twice the need for outpatient mental health services [12]. However, despite the high prevalence of depression, they are less likely than other Asian Americans to seek treatment for mental health problems [13,14]. Therefore, the Southeast Asian-Americans, including Filipinos, may represent a salient subgroup of American immigrants whose mental health needs are not being met.

Depression is the most common risk factor for suicide in older adults [15-18]. According to the National Alliance on Mental Illness

[19], depression affects more than 6.5 million of the 35 million Americans aged 65 or older. The literature has revealed that depression may occur frequently in Asian immigrant elders because of limited resources, acculturation, and intergenerational conflict [3,10,20,21]. Therefore, elderly Asian immigrants may constitute an at-risk group for depression-related suicide. However, there is a paucity of research on depression among elderly Asian Americans and Asian immigrant groups in particular.

Despite the significant number of Filipino immigrants within the United States and their rich history, dating back more than a century [22-24], they continue to be a less visible group. Research on Filipino Americans is relatively less available than research on other Asian American groups [24]. Nesteruk and Marks noted that most recent studies of immigrants in the United States have focused on the two largest immigrant groups: Latin Americans and East Asians [25]. The few existing studies on Southeast Asian immigrants, especially, Filipinos, are often limited by insufficient sample size for meaningful statistical analysis [26].

The current study examines the role of social support, one of the major factors that contribute to depression among elderly Filipino American immigrants. The hypothesis is that higher level of social support is associated with lower level of depression among this study sample. By examining social support, it is believed that this study can lead to an increased understanding of depression among the older Filipino population, and shed light on their acculturation process in the host country.

Literature Review**Depression**

Depression is a psychological disorder that affects a person's mood, physical functioning, and level of social interactions [27]. In a qualitative study, Thai elders conceptualized depression as feeling disappointment and pressure in the mind which included symptoms of isolation, heart pounding, dissatisfaction, and negative view of self [28].

Table 1: Summary Statistics for All Variables (N=200).

	Frequency	%	Mean (Std. Dev.)	Range
Dependent Variables				
CESD			11.24(8.337)	0-54
GDS			1.71(2.247)	0-13
Independent Variables				
Social Support			19.34(6.225)	3-30
Covariates				
Age				
65-74	47	23.5		
75+	153	76.5		
Gender				
Female	103	51.5		
Male	97	48.5		
Education				
High school or below	34	17		
Technical	24	12		
College and above	142	71		
Income				
Lower than \$2,500/mo	83	41.5		
\$2,500 or more/mo	117	58.5		
Employment				
Working	56	28		
Not working	144	72		
Marital status				
Married	146	73		
Other	54	27		
Age at immigration				
18-34	151	75.5		
Other	49	24.5		
Immigration reasons				
Work for a US company	22	11		
Join US Navy (or Navy spouse)	121	60.5		
Other	57	28.5		
Health Status				
Poor or fair	47	23.5		
Good or excellent	153	76.5		
Insurance status				
Yes	191	95.5		
No	9	4.5		

Depression is a common mental health problem affecting 10% to 15% of the elderly population in North America [29]. Untreated depressive disorders can lead to increased risk for suicide and disability [30]. Identifying depression in older adults can be challenging since depression is often due to multiple losses and deteriorating health [31]. Additionally to the expected age related stressors, depression in older immigrants can be exacerbated by losses and stressors related

to immigration such as drastic changes in the social and cultural environment, lack of resources, acculturation stress, language problems, and social isolation [32-34].

While depression is a major mental health threat to many elderly populations in North America, the existing research on depression among Asian Americans is inconsistent [12]. On one hand, a number of studies have identified low rates of mental health issues among Asian Americans [12,35-37]. Sue and Chu reported that American epidemiological studies have shown that Asian Americans and Pacific Islanders have low rates of mental disorders; however, they are likely to describe themselves with more serious mental health symptoms than other immigrant groups [36]. Jackson et al. examined the occurrence of Major Depressive Episodes (MDE) among several Asian ethnic groups using the data of National Latino and Asian American Study (NLAAS) of 2004 [35]. The NLAAS is the first nationally representative survey of mental health and social conditions among several Asian ethnic groups. Among its sample of 2,095 Asian American adults, 508 were Filipinos. Jackson et al. reported that Filipinos had the lowest lifetime rate of MDE (7.2%) compared to other Asian ethnic groups and all other groups (non-Latino Whites, Hispanics, Caribbean Blacks, and African Americans). The NLAAS reported the overall lifetime rate of any mental disorder in Asian Americans was 17.30%, and the 12-month rate was 9.19% [37]. However, the Asian-American depression rate was much lower in comparison to the rates reported for other races and ethnicities in the National Comorbidity Study-Replication. According to Kalitbatseva and Leong, 17.9% of non-Latino Whites, 13.5% of Hispanics, and 10.8% of non-Hispanic African-Americans endorsed affective disorders [12]. Interestingly, the same authors reported that the Asian ethnic minorities, who were born outside of the United States, were less depressed compared to the Asian ethnic minorities who were born in the United States. Specifically, about 21% of the US-born Chinese Americans were endorsing symptoms of MDE compared to about 7% of the immigrant Chinese Americans [12].

On the other hand, research has shown that the depression rate is higher among Asian Americans than among European Americans. According to the 2007 California Health Interview Survey, which included 255 Filipino Americans ages 55 and older, Filipino and Korean Americans compared to Caucasians were more likely to report symptoms indicative of depression, even after adjusting for multiple sociodemographic characteristics, health status, and English language skills [38]. According to NAMI, the Southeast Asians (including Filipinos) suffer from particularly high rates of depression, as well as posttraumatic stress disorder; and compared to the general Asian population, they display more than twice the need for outpatient mental health services [12]. However, despite the high prevalence of depression, they are less likely than other Asian Americans to seek treatment for mental health problems [13,14]. Therefore, the Southeast Asian-Americans, including Filipinos, may represent a salient subgroup of American immigrants whose mental health needs are not being met.

Filipino immigrants

It is important to study the elderly Filipino for several reasons. First, Filipino Americans constitute the second-fastest-growing Asian American group in the United States, following Chinese Americans.

Filipino-American population accounts for 19% of all Asian population (about 3.4 million). The U.S. Census Bureau predicts the population to be over four million by 2030 [38,39]. Second, there is a lack of emerging studies about the elderly Filipinos, their adaptation process and their mental health needs [38] even though 13% of Filipinos in the USA are 65 and older (American Community Survey, 3 year estimate 2011-2013). In a recent project based on the National Latino and Asian American Study, Appel, Huang, Ai and Lin examined physical, behavioral, and mental health issues among Asian American women, and found that Filipino American women reported significantly better mental health self-rating in comparison to other Asian American women (Chinese and Vietnamese) [40]. Thirdly, the majority of current evidence about the elderly immigrants' depression is derived from other Asian ethnic groups (Chinese, Korean, & Japanese) and it is imperative to obtain additional data on the elderly Filipino population due to their cultural differences. Asian Americans are not a homogenous group with respect to mental health status, even though Filipino Americans are generally categorized within the aggregate "Asian American" group [41]. It is misleading to assume that Filipinos share similar experiences, histories or cultural practices with other Asian ethnic sub-groups, as there are variations in faith, immigration, language and experiences [39,42].

The few studies about Filipino Americans' mental health suggest that they have higher rates of depression than most other Asians second only to Korean Americans, and perhaps the general population [10,41]. According to Sanchez and Gaw the prevalence of depression among Asian patients in primary care settings is estimated to be around 14%, with higher rates among Filipinos, compared with Japanese and Chinese. The author believes that this number may be underestimated due to the cultural tendency of Filipinos to deny, somatize, and endure emotional problems.

Social support

Social support often refers to strong peer and communal support. Forming social relationships and social networks through external organizations can provide a safe haven for minority immigrants. Several studies have found that socialization with friends or relatives, volunteering, good nutrition and exercise contribute to successful or vital aging [43].

The literature review pertaining mostly to Korean, Japanese and Chinese immigrants indicates that the correlates of Asian minority elders' high depression rate are: gender, shorter lengths of residence in the United States, poorer health, migration stress and grief, financial strain, poor English proficiency, service barriers, dependence on children, social isolation, and lack of social support [3,29,32,34,44,45]. Social support among Korean immigrants was discovered to benefit their psychological health. Using data from a non-probability sample of 74 Korean international college students in Pittsburg, those authors found that students who experienced severe immigrant stress and received a high level of social support expressed less mental health symptoms than students with a low level of social support. Another study of 154 Korean immigrant adults in the U.S. found social support reduced the impact of life stressors on depression [46].

Social support among ethnic minorities was found to alleviate the stress resulting from immigrants' discrimination experiences

[47]. Studies also have shown that "ethnic social support serves as a protective factor among immigrant youths from the pressure to negate their original culture" [48], which could cause acculturation stress.

Research on social support of the elderly from different ethnic groups has found that depression is higher when they have "fewer family contacts and a smaller social network" [3]. They usually seek support from family members, relatives, friends before seeking for help from external organizations. Many of the elderly of Asian descent have great emotional and instrumental support from their children due to the value of family obligation [3].

Given the dearth of research examining depression among Asian Americans, a few studies have examined the factors that may contribute to depression within the Southeastern Asian group, specifically within the Filipino subgroup [38,49]. Since the Filipino elderly are culturally different from other Asian subgroups, and because depression in elderly immigrants is a psychologically and socially complex process, more research is needed to understand the associations between social support and depression among Filipino immigrant subgroup.

Method

This study explored the impact of social support on depression among Filipino immigrants who are 65 years old or older and reside in the Southeastern region of Virginia, by using a cross-sectional quantitative research design.

As was required, approval from the University Institutional Review Board (IRB) was obtained for the research. The proposed questionnaire was pilot tested with a group of Filipino immigrants, who were selected at a site other than the one for the proposed research. The purpose of the pilot test was to determine the validity and reliability of the research questionnaires.

Following the piloting of the questionnaires, 200 active older Filipino individuals aged 65 and above were invited to complete questionnaires on scheduled days at the local Filipino Cultural Center under the supervision of the investigator. According to the US Census Bureau [1], there were 27,000 Filipino populations residing in the Southeastern region of Virginia. In addition, Filipino Americans are the largest immigrant subgroup in this region [50]. Using convenience sampling, the researcher recruited 200 respondents participating in this study. The purpose of the study, eligibility requirements, the kinds of questions that would be asked, confidentiality of data, anonymity of participation, length of time, the right to withdraw at any time or to refuse to answer any questions, and the voluntary nature of participation were explained to the participants. Participants signed the informed consent prior to completing the questionnaires. The questionnaires were administered in a group setting at the center. As the English language proficiency of the Filipinos was very good, there was no need for a translator.

Measurements

Depression is the Dependent Variable (DV), and the level of social support represents the Independent Variables (IV). Control variables were: gender, marital status, age, education, income, working status, health status, possession of insurance, reason for immigration, and age at immigration.

Dependent variable: Depression was assessed by two well established measures of depression: the 15-item Geriatric Depression Scale (GDS) developed by Sheikh and Yesavage [51] and the Center for Epidemiological Study of Depression (CES-D) created by Radloff [52] and revised by Eaton, Muntaner, Smith, Tien, and Ybarra [53].

The GDS is a self-report assessment designed specifically to identify depression in the elderly. The items may be answered yes or no. Each answer is assigned one point, and the sum of the responses will correspond to a scoring grid. For each affirmative response, a score of one is assigned, with the potential range of scores from 0 (no depression) to 15 (high depression). The GDS has been tested with the older population, and research reports that this instrument has high reliability [51].

The CES-D has been widely used to measure depression among the elderly population. Several research studies have confirmed that scores on the CES-D correlate significantly with the GDS's scores in the elderly population [54-56]. The CES-D consists of 20 items, and the scoring range is from 0-60. It takes 5-10 minutes to complete. In order to generate a total score, reverse coding was performed for four items in this instrument.

Independent variable: Level of social support was assessed by the Lubben Social Network Scale (LSNS-6), which is a six-item, self-report scale, designed to measure perceived social support (i.e., size, closeness, and frequency of contacts with family and friends) by older adults 65+. The original LSNS was developed as a modification of the Berkman-Syme Social Network Index [57,58]. It was adapted for measuring perceived social support among elderly populations. Although it measures perceived social support from family and friends; it does not differentiate between friends and neighbors, and it does not include support received from organizations or church membership [59]. This measure was also found to correlate negatively with mortality, depression, and re-hospitalization [60].

The LSNS-6 total score is an equally weighted sum of six items. Scores range from 0-30. Previous studies indicate that a score of 12 or less should be deemed as at risk for social isolation [61]. Therefore, individuals with a score of 12 or less are identified as socially isolated. Similarly, scores of less than 6 on the three-item LSNS-6 family subscale are considered to have marginal family ties. In the current study, the total social support scores ranged from 0-30.

Cronbach's alpha for the six items was 0.85 in this sample. This estimate of internal consistency reliability indicates that the LSNS-R items are sufficiently homogeneous without excessive redundancy.

Covariates: A demographic questionnaire was used to gather information about participants. Data were collected on the following demographic variables: age, gender, level of education, income, working status, marital status, self-reported health, possession of medical insurance, reason of immigration, and age at immigration. These variables were used as control variables to examine their influence on the relationships between social support and depression. The following coding was used for the demographic variables:

Age: The age of respondents was categorized and coded into three age groupings: ages 65-74; ages 75-84, and ages 85-99.

Gender: Dummy variables were created for female (=1) and male (=0).

Level of education: The initial coding used in the questionnaire was as follows: graduated from primary school (1), lower middle school (2), upper middle school (high school) (3), technical or vocational school (4), university or college (5), and master's degree or higher degree (6). The education level was recorded into three different categories: high school and below (=1), technical education (=2), and college and above (=3).

Income: The income was re-coded as follows: monthly income \$2,500 or lower (=0), and monthly income above \$2,500 (=1).

Working status: Unemployed was coded 0, and working was coded 1.

Marital status: This variable is coded as three-level categorical variable: married, widowed and other.

Self-reported health: Initially, the answers were coded as follows: excellent (1), good (2), fair (3), poor (4). Dummy variable was provided for poor health with codes 1 (poor or fair) and 0 (good or excellent).

Medical insurance: Possession of medical insurance was coded 1, and lack of medical insurance was coded 0.

Reason for immigration: The reasons for immigration were recorded as follows: came to work for a U.S. company (other than the U.S. Navy) (=1); came to join the U.S. Navy (including married to a Navy spouse) (=2); and came for other reasons (as a child, students, or grandparent) (=3).

Age at immigration: Age at immigration was re-coded as follows: age 18-34 (=1), and all other ages (=0).

Results

The characteristics of the sample were summarized in Table 1. For the two dependent variables measuring depression, the CESD scale ranged from 0 to 54 with the mean score 11.24 (SD=8.337), and the GERI scale ranged from 0-13 with the mean score 1.71 (SD=2.247). According to the literature [51,54], a total score 10 or lower for the CESD scale is indicative of no or mild levels of depression, and a total score less than 15 for the GDS scale is indicative of no or minor depression. The two mean scores from both measures suggested that respondents in this sample enjoyed a high level of psychosocial wellbeing and had very low level of depressive symptoms. As for the independent variable, social support was observed in a range from 3 to 30 with the mean score 19.34 (SD=6.225). As discussed earlier, the mean score in the range of 13-30 is indicative of having strong social support.

Table 1 also presents the distribution of the demographic, socioeconomic and immigration characteristics among this group of elderly Filipinos. Results showed that one fourth of the respondents were young old (65-74), and the other three fourths older adults (75+). Half of them were females and another half as males. A high proportion of the sample had bachelor degrees or above (71%) and less than 17 percent had high school degrees or below. A slightly more than half of them had monthly income more than \$2,500. As expected, most of seniors were not working (72%), and married (73%). This group turned out to be healthier with 76.5% reporting good or excellent health. The insurance coverage was prevalent with

Table 2: Linear Regression on Effects of Social Support on Depression among Older Filipinos.

	DV1=CESD (N=200)	DV2= GDS (N=200)
Independent Variable		
Social Support	-.047 (.095)	-.049 (.024)*
Demographic Variables		
Age 65-74 (vs. 75+)	1.544 (1.403)	-.109 (.360)
Female (vs. Male)	-.523 (1.255)	-.034 (.322)
Socioeconomic Variables		
College and above	-2.178 (1.673)	-1.273 (.430)**
Technical school (vs. High school or below)	-1.414 (2.277)	-1.438 (.585)*
Low income (vs. High income)	3.695 (1.339)**	.726(.344)*
Working (vs. Not working)	-.958 (1.366)	.127 (.351)
Married (vs. Other)	-1.689 (1.468)	.003 (.377)
Immigration Variables		
Age at immigration 18-34 (vs. Older age)	.024 (1.600)	.389 (.411)
Reasons for Immigration		
Work for US company (Other than Navy)	-1.723 (2.232)	-.696 (.573)
Join Navy (or Navy spouse)	-1.246 (1.518)	-.761 (.390)
Health Variables		
Poor health (vs. Good or Excellent)	2.507 (1.469)	.982 (.377)**
Have Insurance (vs. None)	.754 (2.942)	-.067 (.755)
Constant	12.537 (3.930)	3.579 (1.009)***

Note: * $p < .05$, ** $p < .01$, *** $p < .001$; Regression coefficients and standard errors are reported with standard errors in the parentheses.

95.5% owning insurance. In terms of immigration characteristics, three fourths of them immigrated to US when they were young (18-24), and more than half of them came to the country by joining Navy or Navy spouse (60%).

Table 2 reports the results from Ordinal Least Square linear regression analyses to estimate the association between social support and two depression variables. For CESD, social support showed no significant impact, and lower income predicted significantly higher depression ($p=0.006$). For GDS, a higher social support reported a significant impact to reduce the likelihood of being depressive ($p=0.045$). Older adults with college education were less likely to be depressive ($p=0.003$). Low income was associated with higher depression ($p=0.036$) and poor health also predicted higher depression ($p=0.010$).

The researchers decided not to use Logistic regression to assess the association between the independent variable and depression based on the following reasons. First, the two indicators of depression had highly skewed distributions. The CES-D indicator reported that 78.5% of the sample participants had no depression or minor depression, and the GDS indicator reported that 88% were not depressed or minimally depressed. Second, the regression coefficients from linear regressions can report a more straightforward relationship between changes in the independent variable and changes in depression.

Discussion

The study addressed the research gap with respect to older

Filipino immigrants in the United States. It extended existing knowledge about the role of social support from family and friends to maintain psychological wellbeing among elderly ethnic minority groups. Using a cross-sectional dataset of 200 respondents, the present study reported that social support had significant association with depression level among Filipino Americans aged 65 years and older.

The data stated that about 80% of the respondents can access to strong family support, and about 82% had strong support from friends. The total support from either family or friends was about 87%. The multivariate analysis results indicated a positive relationship between higher social support and lower incidence of being depressive. Additionally, a lower level of depression had a positive relationship with being highly educated, having higher income, and better self-reported health status.

This study has a number of limitations. First, sampling bias limits generalization to the larger population of older Filipino immigrants due to the non probability sampling. This convenience sample is not a random sample of the population and, certainly, is divergent. Nonetheless, the findings can be generalized to the Filipino population with the same characteristics: married higher education, higher income, better health, and greater rates of possession of medical insurance. In addition, because the data collection was taken place in the Filipino culture centers and churches, only those elderly with greater functionality can go out to participate in community-based activities on a regular base. This nature of self-selection made the sample representative of active older Filipino with relatively higher socio-economic status and better health. This sample may fail to encompass the level of depression among those who were homebound or institutionalized and were not involved in activities provided by community organizations.

Second, the study used a cross-sectional research design and could not claim any causal relationship between social support and depression. In reality, people with depression may be more likely to live in social isolation and have less social support from family and friends. Future research may employ a longitudinal design that would permit an examination of causal relationships.

Finally, there are limitations of instrument measures. The research findings from two depression measures, CESD and GDS, are not consistent. Social support predicted depression measured by GDS, not by CESD. This discrepancy may be caused by the underlying construct of two scales. One may consider that the two depression scales measure different aspects of depression. In future, further validation of these two scales among the Filipino population may be needed.

Despite these limitations, the study contributes to the literature by broadening the understanding of the role of social support on the psychological well-being of elderly Filipino immigrants. This knowledge may be informative in the training of future health care workers that are entering the growing specialization area of health care with elderly ethnic minority population. It is recommended that similar cultural, social, and religious organizations can be established within older immigrant communities to serve as a buffer for depression, and a center for mutual social support.

The public health community is recommended to pay more attention to the health needs of ethnic minority people. As the country is becoming more racially diverse, public health needs to highlight its response to new challenges to improve the health of this growing population.

Additionally, it is reported that along with Asian Americans, in general, Filipino Americans tend to underutilize mental health services [11,62] and rather request help from clergy instead of formal mental health professionals [63]. Therefore, it is recommended to provide psycho-educational trainings to religious leaders to help them identify possible risk factors of mental illness among elderly Filipino immigrants. Also, training that would improve the collaboration and relationship between clergy and mental health professionals would be beneficial.

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References

1. US. Census Bureau. The Asian population: 2010.
2. Yakushko O, Watson M, Thompson S. Stress and coping in the lives of recent immigrants and refugees: Considerations for counseling. *International Journal for the Advancement of Counseling*. 2008; 30: 167-178.
3. Mui AC, Kang S. Acculturation stress and depression among Asian immigrant elders. *Social Work Journal*. 2006; 51: 243-255.
4. Stokes SC, Thompson LW, Murphy S, Gallagher-Thompson D. Screening for depression in immigrant Chinese-American elders: Results of a pilot study. *Journal of Gerontological Social Work*. 2001; 36: 27-44.
5. Black M, Miller T. Racial, ethnic, and sociodemographic differences in the level of psychosocial distress among older Americans. *Research on Aging*. 2001; 23: 131-152.
6. Hernandez M. Psychological theories of immigration. *Journal of Human Behavior in the Social Environment*. 2009; 19: 713-729.
7. Hwang W, Ting J. Disaggregating the effects of acculturation and acculturative stress on the mental health of Asian Americans. *Cultural Diversity and Ethnic Minority Psychology*. 2008; 14: 147-154.
8. Pumariega A, Rothe E, Pumariega, J. Mental health of immigrants. *Community Mental Health Journal*. 2005; 41: 581-597.
9. Gorospe E. Elderly immigrants: Emerging challenge for the US healthcare system. *The Internet Journal of Healthcare Administration*. 2005; 4.
10. Mossakowski KN. Are immigrants healthier? The case of depression among Filipino Americans. *Social Psychology Quarterly*. 2007; 70: 290-301.
11. National Alliance on Mental Illness. Asian-American and Pacific Islander mental health. 2011.
12. Kalibatseva Z, Leong FTL. Depression among Asian Americans: Review and Recommendations. *Depression Research and Treatment*. 2011; 1-9.
13. Leong FTL. Counseling and psychotherapy with Asian-Americans: Review of the literature. *Journal of Counseling Psychology*. 1986; 33: 196-206.
14. Meyer OL, Zane N, Cho YI, Takeuchi DT. Use of specialty mental health services by Asian Americans with psychiatric disorders. *Journal of Consulting and Clinical Psychology*. 2009; 77: 1000-1005.
15. Clark L, Dombrowski AY, Siegle GJ, Butters MA, Shollenberger CL, Sahakian BJ, et al. Impairment in risk-sensitive decision-making in older suicide attempters with depression. *Psychology & Aging*. 2011; 26: 321-330.
16. Conwell Y. Suicide in later life: A review and recommendations for prevention. *Suicide and Life-Threatening Behavior*. 2001; 31: 32-47.
17. Conwell Y, Brent D. Suicide and aging I: Patterns of psychiatric diagnosis. *International Psychogeriatric*. 1995; 7: 149-164.
18. Parmet S, Lynn C, Glass RM. Suicide in older persons. *Journal of the American Medical Association*. 2004; 291: 1158.
19. National Alliance on Mental Illness. Asian American women and depression (Fact sheet). 2009.
20. Choi JB, Thomas M. Predictive factors of acculturation attitudes and social support among Asian immigrants in the USA. *Journal of Social Welfare International of Social Welfare*. 2009; 18: 76-84.
21. Shen BJ, Takeuchi DT. A structural model of acculturation and mental health status among Chinese Americans. *American Journal of Community Psychology*. 2001; 29: 387-418.
22. Anderson JN. Health and illness in Filipino immigrants. *The Western Journal of Medicine*. 1983; 139: 811-819.
23. Cimmarusti RA. Exploring aspects of Filipino-American families. *Journal of Marital and Family Therapy*. 1996; 22: 205-224.
24. David EJ, Okazaki S. Colonial mentality: A review and recommendation for Filipino American psychology. *Cultural Diversity and Ethnic Minority Psychology*. 2006; 12: 1-16.
25. Nesteruk O, Marks L. Grandparents across the ocean: Eastern European immigrants' struggle to maintain intergenerational relationships. *Journal of Comparative Family Studies*. 2009; 40: 77-95.
26. LaVeist TA. Data sources for aging research on racial and ethnic groups. *The Gerontologist*. 1995; 35: 328-339.
27. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders (4th ed.)*. Washington, DC. 2000.
28. Soonthornchaiya R, Dancy BL. Perceptions of depression among elderly Thai immigrants. *Issues in Mental Health Nursing*. 2006; 27: 681-698.
29. Lai DW. Impact of culture on depressive symptoms of elderly Chinese immigrants. *The Canadian Journal of Psychiatry*. 2004; 49: 820-827.
30. Donnelly PL, Kim KS. The Patient Health Questionnaire (PHQ-9K) to Screen for Depressive Disorders among Immigrant Korean American Elderly. *Journal of Cultural Diversity*. 2008; 15: 24.
31. Fisher K, Shumaker L. Assessment of depression and cognitive impairment among elders in rural housing facilities. *Journal of the American Psychiatric Nurses Association*. 2004; 10: 67-71.
32. Chow HP. Growing old in Canada: Physical and psychological well-being among elderly Chinese immigrants. *Ethnicity & Health*. 2010; 15: 61-72.
33. Wu B, Chi I, Plassman BL, Guo M. Depressive symptoms and health problems among Chinese immigrant elders in the US and Chinese elders in China. *Aging & Mental Health*. 2010; 14: 695-704.
34. Kuo BCH, Chong V, Joseph J. Depression and its psychosocial correlates among older Asian immigrants in North America. *Journal of Aging and Health*. 2008; 20: 615-652.
35. Jackson JS, Abelson JM, Berglund PA, Mezuk B, Torres M, Zhang R. Ethnicity, immigration, and cultural influences on the nature and distribution of mental disorders: An examination of major depression. Regier D, Narrow W, Kuhl E, Kupfer D, editors. In: *Conceptual evolution of DSM-5*. Arlington, VA: American Psychiatric Publishing. 2011. 267-285.
36. Sue S, Chu JY. The mental health of ethnic minority groups: Challenges posed by the supplement to the surgeon general's report on mental health. *Culture, Medicine, and Psychiatry*. 2003; 27: 447-465.
37. Takeuchi DT, Alegria M, Jackson JS, Williams DR. Immigration and mental health: Diverse findings in Asian, Black, and Latino population. *American Journal of Public Health*. 2007; 97: 11-12.
38. Sorokin DH, Nguyen H, Ngo-Metzger Q. Assessing the mental health needs and barriers to care among a diverse sample of Asian American older adults. *Journal of General Internal Medicine*. 2011; 26: 595-602.
39. Sanchez F, Gaw A. Mental health care of Filipino Americans. *Psychiatric*

- Services. 2007; 58: 810-815.
40. Appel HB, Huang B, Ai AL, Lin CJ. Physical, Behavioral, and Mental Health Issues in Asian American Women: Results from the National Latino and Asian American Study. *Journal of Women's Health*. 2011; 20: 1-10.
 41. Baello J, Mori L. Asian values adherence and psychological help-seeking attitudes of Filipino Americans. *Journal of Multicultural, Gender and Minority Studies*. 2007; 1: 1-14.
 42. Verderr-Aliga R. Elderly female Filipino immigrants: a phenomenological study. *Journal of Filipino Studies*. 2007.
 43. Russell DW, Cutrona CE. Social support, stress, and depressive symptoms among the elderly: Test of a process model. *Psychological Aging*. 1991; 6: 190-201.
 44. Jang Y, Chiriboga DA. Living in a different world: acculturative stress among Korean American elders. *Journal of Gerontology: Psychological Sciences*. 2010; 65B: 14-21.
 45. Lai DW. Prevalence and correlates of depressive symptoms in older Taiwanese immigrants in Canada. *Journal of the Chinese Medical Association*. 2005; 68: 118-125.
 46. Kim E. Multidimensional acculturation attitudes and depressive symptoms in Korean Americans. *Issues in Mental Health Nursing*. 2009; 30: 98-103.
 47. Noh S, Kaspar V. Perceived discrimination and depression: Moderating effects of coping, acculturation, and ethnic support. *American Journal of Public Health*. 2003; 93: 232-238.
 48. Baek Choi J, Thomas M. Predictive factors of acculturation attitudes and social support among Asian immigrants in the USA. *International Journal of Social Welfare*. 2009; 18: 76-84.
 49. Gonzales G, Ramos-Sanchez L, Tran K, Roeder B. The relationship between masculinity, Asian values, acculturation, and depression of Filipino-American men. *Family Therapy*. 2006; 33: 139-155.
 50. The Filipino American community. 2007.
 51. Sheikh JI, Yesavage JA. Geriatric Depression Scale (GDS). Recent evidence and development of a shorter version. TL Brink editors. In. *Clinical gerontology: A guide to assessment and intervention*. 1986; 165-173.
 52. Radloff LS. The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*. 1977; 1: 385-401.
 53. Eaton WW, Muntaner C, Smith C, Tien A, Ybarra M. Center for Epidemiologic Studies Depression Scale: Review and revision (CESD and CESD-R). ME Maruish editors. In. *The use of psychological testing for treatment planning and outcomes assessment*. 2004; 3: 363-377.
 54. Bae JN, Cho MJ. Development of the Korean version of the Geriatric Depression Scale and its short form among elderly psychiatric patients. *Journal of Psychosomatic Research*. 2004; 57: 297-305.
 55. Lyness JM, Noel TK, Cox C, King DA, Conwell Y, Caine ED. Screening for depression in elderly primary care patients: A comparison of the Center for Epidemiologic Studies–Depression Scale and the Geriatric Depression Scale. *Archives of Internal Medicine*. 1997; 157: 449-454.
 56. Zhang B, Fokkema M, Cujipers P, Li J, Smith N, Beekman A. Measurement invariance of the Center for Epidemiological Studies Depression Scale (CES-D) among Chinese and Dutch elderly. *BMC Medical Research Methodology*. 2011; 11: 1-10.
 57. Berkman LF, Syme SL. Social networks, host resistance, and mortality: A nine-year follow-up of Alameda county residents. *American Journal of Epidemiology*. 1979; 109: 186-204.
 58. Biordi DL, Nicholson NR. Social isolation. PD Larsen, IM Lubkin editors. In. *Chronic illness: Impact and intervention*. 2008; 7: 85-117.
 59. Lubben J. Assessing social networks among elderly populations. *Family and Community Health*. 1988; 11: 42-52.
 60. Lubben J, Gironde M. Measuring social networks and assessing their benefits. C Phillipson, G Allan, D Morgan editors. In. *Social networks and social exclusion: Sociological and policy perspectives*. Hampshire, United Kingdom: Ashgate. 2004; 20-35.
 61. Lubben J, Blozik E, Gillmann G, Iliffe S, Von Renteln, KW, et al. Performance of an abbreviated version of the Lubben Social Network Scale among three European community-dwelling older adult populations. *Gerontologist*. 2006; 46: 503-513.
 62. Uba L. *Personality patterns, identity, and mental health*, New York, NY: Guilford Press. 1994.
 63. Tompar-Tiu A, Sustento-Seneriches J. *Depression and other mental health issues: The Filipino American experience*. San Francisco, CA: Jossey-Bass. 1995.