Consumer Interests Annual Volume 53, 2007

## **Financial Strains and Depression among Elderly Women**

This study examined the effects of financial strains on depression, how unmarried status affects depression and what sociodemographic factors are associated with depression among women age 65 and above. HRS data from 3,523 unmarried and 2,674 married women was used for the study. Results of the t-test showed that mean levels of net worth, household income, and credit card debt were statistically significant between unmarried and married elderly women. OLS regression analysis showed that holding other factors constant, unmarried elderly women reported significantly higher depression levels than did married elderly women. Also, variables representing financial strains were all statistically significant in predicting depression levels among older women aged 65 and above

Susan Brown, Utah State University<sup>1</sup> Yoon G. Lee, Utah State University<sup>2</sup>

### Introduction

Depression is the most common psychiatric disorder among the elderly (Sidik, Zulkefli & Shah, 2003) and it is increasingly viewed as a potential risk factor among the elderly population (Black, Markedies and Ray, 2003). During 1992-2001, the portion of income coming from assets dropped from 21% to 16% and the portion coming from pensions decreased from 20% to 16% for most seniors (Loomin and Reneuart, 2006).. While 18.6% of older Americans aged 65 and above had outstanding balances on credit cards in 1992, this percentage had increased to 46% in 2000 (Dugas, 2002). When older individuals have lower income, fewer assets, and higher debts, they can be vulnerable to financial strains in later life and these financial strains can lead to depression among older individuals. A few researchers have studied the effects of financial strains on depression among the elderly and little is known how financial strains are related to depression among elderly women in particular. The purpose of this study was to examine the effects of financial strains on depression, to examine how unmarried marital status affects the level of depression among elderly women, and to investigate what socio-demographic factors are associated with depression among older women aged 65 and above.

## **Data and Sample**

Data for the study were drawn from the 2000 Health and Retirement Study (HRS). The HRS is a nationally representative, longitudinal survey of individuals over 50 years of age. The HRS is designed to investigate the dynamic experience of older individuals as they advance from work to retirement, with particular emphasis on health insurance, saving, and trajectories of economic and physical well-being. Using the 2000 HRS data file, the total sample (N=6,202) included households headed by women ages 65 and older and the sub-sample of this study consisted of 3,523 unmarried and 2,674 married women.

## **Analyses and Empirical Models**

Frequencies, percentages, means, and medians were performed to obtain the descriptive information. The ttests were conducted to compare means in the value of net worth, household income, credit card balance, financial assets, and non-financial assets. Ordinary Least Squares (OLS) regression analysis was performed to identify the effect of financial strains and socio-demographic factors on the level of depression among elderly women aged 65 and above. In the OLS regression analysis, the CES-D score which is the sum of 8-item depression battery was used to measure the level of depression. In this study, debt, net worth, and household income were included in the OLS regression model to measure financial strains. The debt, net worth, income, and family size were coded as continuous variables. To examine how unmarried marital status affects the level of depression among elderly women, a dummy categorical variable for marital status (unmarried and married women) was included in the OLS regression model. In addition, independent variables reflecting socio-demographic characteristics of the elderly women consisted of age, family size, race, education, and self-reported health. In the analyses, age was categorized

by a dummy categorical variable: ages 65-74, ages 75-84, and ages 85+; race was coded as a dummy categorical variable (White, non-White), and self-reported health status was also coded as a dummy categorical variable (poor, good, very good, and excellent). The effects of these factors on the depression level among elderly women were investigated.

#### Results

The results of the t-test show that the mean levels of net worth, household income, and credit card debt were statistically significant between unmarried and married elderly women, indicating that unmarried elderly women had much lower average net worth (\$162,004), household income (\$19,296), and credit card debt (\$779) than did married elderly women. It was noted that as for married elderly women, the mean levels of net worth, household income, and credit card debt were \$439,404, \$45,081, and \$1,371, respectively. The t-test results also indicate that unmarried elderly women held significantly lower levels of all asset types (e.g., checking/saving accounts, certificates of deposit/treasury bills, stocks/mutual funds, bonds, individual retirement accounts, business assets, equity in real estate, and transportation assets) than did married elderly women.

The OLS analysis results indicate that holding other factors constant, unmarried elderly women reported significantly higher depression levels than did married elderly women. Also, variables representing financial strains were all statistically significant in predicting depression levels among older women aged 65 and above. That is, older women with higher credit card balances, those with lower levels of income, and those with lower levels of net worth reported higher depression levels than did their counterparts. Moreover, older women with higher levels of education and those with poor health reported higher depression levels than did their counterparts.

In addition, the results of the OLS regression analysis indicate that net worth, age, education, and perceived health status were the significant factors that affected the depression levels for the unmarried elderly women. That is, this study found that as the levels of net worth increased, their depression levels of unmarried elderly women decreased; those aged 65-74 had higher levels of depression than did those aged 75-84 and those aged 85 and older; and as unmarried elderly women had higher health care expenses, naturally their depression levels also increased.

## **Conclusions and Implications**

This study examined the role of financial strains in predicting the level of depression among elderly women. The results of the OLS regression analysis for depression for total elderly women indicated that the financial strains such as higher debt, lower income, and lower net worth were all statistically significant and had positive impact on producing higher levels of depression among elderly women. Understanding how income, wealth, debt, and marital status are related to depression can help practitioners or social workers who work with elderly women households. Of particular note, unmarried elderly women had significantly lower levels of all asset types than did married elderly women. Further, lower net worth was positively associated with higher levels of depression among unmarried elderly women. It can be seen that unmarried elderly women appear to be at the greatest risk for low assets and depression than married elderly women. Since the role of financial strains is critical in predicting depression among elderly women, the findings of this study suggest that financial educators and professionals should encourage all women, regardless of their marital status, to financially prepare for retirement in early stages of the life-cycle.

## References

Black, S.A., Markides, K.S., & Ray, L.A. (2003). Depression predicts increased incidence of adverse health outcomes in older Mexican Americans with type 2 diabetes. *Diabetes Care*, 26, 2822-2828.

Dugas, C. (2002). *American seniors rack up debt like never before. USA Today* Retrieved July 18, 2006, from http://www.usatoday.com/money/perfi/retirement/ 2002-04-25-elderly-debt.htm

Loomin, D. & Renuart, E. (2006). Life and debt: A survey of data addressing the debt loads of older persons and policy recommendations. Washington D.C.: National Consumer Law Center.

Sidik, S.M., Zulkefli, N.A.M., & Y Shah, S.A. (2003). Factors associated with depression among elderly patients in a primary health care clinic in Malaysia. *Asia Pacific Family Medicine*, *2*, 148-152.

# **Endnotes**

1 Doctoral Student, Department of Family, Consumer, & Human Development, Utah State University, 2905 Old Main Hill, Logan, UT 84322-2905, Phone: (435) 797-3408, Fax: (435) 797-3845, Email: susanbrown@cc.usu.edu

<sup>2</sup> Associate Professor, Department of Family, Consumer, & Human Development, Utah State University. 2905 Old Main Hill, Logan, UT 84322-2905, Phone: (435) 797-1555, Fax: (435) 797-3845, Email: yoonlee@cc.usu.edu