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Association between Participant-Identified Problems and Depression Severity in Problem-Solving Therapy for Low-Income Homebound Older Adults

Namkee G. Choi¹, Mark T. Hegel², Mary Lynn Marinucci¹, Leslie Sirrianni¹, and Martha L. Bruce³

¹ University of Texas at Austin

² Dartmouth Medical School

³ Weill Cornell Medical College

SUMMARY

Objectives—The purpose of this study was to examine the relationship between the severity of baseline depressive symptoms and the problems that low-income homebound older adults ($n = 66$) identified in their problem-solving therapy (PST) sessions.

Methods—Depressive symptoms were measured with the 24-item Hamilton Rating Scale for Depression (HAM-D). Participant-identified problems recorded in the therapists' worksheets were coded into seven categories: living arrangement/housing issues; financial/healthcare expenses issues; family or other relationship issues; hygiene/task issues; social isolation issues; physical/functional health issues; and mental/emotional health issues. T-tests and ordinary least squares (OLS) regression analysis were used to examine differences in HAM-D scores between those who identified any problem in each category and those who did not.

Results—Participants who had living arrangement/housing and family or other relationship issues had higher baseline HAM-D scores than the rest of the participants. At 2-week posttest, those with living arrangement/housing issues continued to have higher HAM-D scores than the others, while those with family or other relationship issues did not.

Conclusion—The study findings provide insights into the problems that low-income, depressed homebound individuals bring to their PST sessions. It was not clear if family conflict or other relationship issues contributed to their depression or vice versa, but it appears that PST may have contributed to alleviating depressive symptoms associated with these issues. Precarious living/housing situations appeared to have had a serious depressogenic effect and could not be easily resolved within a short time frame of the PST process, as these issues required formal support.

Keywords

Homebound older adults; problem-solving therapy; family relationship

Correspondence regarding the manuscript to be sent to: Namkee G. Choi, PhD, School of Social Work, University of Texas at Austin, 1 university Station, D3500, Austin, TX 78712-0358; nchoi@mail.utexas.edu; 512-232-9590; Fax 512-471-9600.

AUTHORSHIP

N. Choi and M. Bruce designed and implemented the study, and all authors contributed to producing this paper and agree to publication.

CONFLICT OF INTEREST

None

INTRODUCTION

Medically ill, homebound older adults are more vulnerable to depression than their mobility-unimpaired peers. One study found that 13.5% of 539 older clients (age 65 or older) of a visiting nurse agency met the *DSM-IV* criteria of major depression (MDD), a rate twice as high as that in those receiving ambulatory care, and 71% of those who were depressed were experiencing their first episode of depression (Bruce *et al.*, 2002; Raue *et al.*, 2003). In other studies, 10 to 12% of homebound older adults reported clinically significant depressive symptoms—a score ≥ 10 on the Patient Health Questionnaire-9 (PHQ-9; Ell *et al.*, 2005; Sirey *et al.*, 2008). When homebound adults aged 50+ years were included, 17.5% had clinically significant depressive symptoms (PHQ-9 ≥ 10), and 8.8% had probable MDD (Choi *et al.*, 2010). In Choi *et al.*, a significantly higher proportion of those under age 60 was found to have clinically significant depressive symptoms and probable MDD. In addition to medical illness, loneliness and social isolation due to functional limitations, financial worries, family conflict, and other life demands associated with their illness are significant risk factors for depression in homebound older adults, especially among low-income homebound older adults (Choi and McDougall, 2007).

Compared to younger age groups, older adults are less likely to seek psychotherapeutic interventions. Reasons for older adults' not utilizing psychotherapy are varied, and include PCP's tendency not to refer older adults to psychotherapy (Fischer *et al.*, 2003; Unützer *et al.*, 1999). Among low-income homebound older adults, access to psychotherapy is also limited by the same problems as those that are putting them at risk for depression: lack of transportation and health insurance, lack of social support, and other daily life demands such as the management of chronic health conditions and paying for rent, food, and medications (Choi and Kimbell, 2009; Steffens *et al.*, 1997). However, studies have found that older adults, especially those who take multiple medications for their medical conditions, prefer psychotherapy to antidepressant medications (Areán *et al.*, 2002; Choi and Morrow-Howell, 2007; Gum *et al.*, 2006; Landreville *et al.*, 2001).

In recent years, significant progress has been made in establishing the efficacy of and improving the accessibility to short-term psychotherapies for depressed older adults. One such psychotherapeutic intervention is problem-solving treatment in primary care (PST-PC). Grounded in the cognitive-behavioral theory of mental health, PST-PC was originally developed in England in the 1980s (Catalan *et al.*, 1991; Mynors-Wallis *et al.*, 1995). It posits that people with deficits in problem-solving skills become vulnerable to depression because such deficits lead to ineffective coping attempts under high levels of stress (D'Zurilla, 1986; Nezu and Perri, 1989). PST-PC, adapted for delivery in fast-paced primary care settings in the United States during the 1990s, is delivered in 4–6 sessions of 30–60 minutes each (Hegel *et al.*, 2000; Hegel *et al.*, 2002). The efficacy of PST-PC has been supported in multiple randomized controlled trials (RCTs), including the IMPACT study, a multistate RCT of late-life depression treatment in primary care (Areán *et al.*, 2008; Cuijpers *et al.*, 2007; Malouff *et al.*, 2008). Other RCTs also showed the efficacy of in-home PST-PC for reducing depressive symptoms among medically ill older adults (Ciechanowski *et al.*, 2004; Gellis *et al.*, 2007).

The problem solving treatment process focuses on participants' appraisal and evaluation of specific problems, their identification of the best possible solutions, and the practical implementation of those solutions, as well as on addressing anhedonia and psychomotor retardation through behavioral activation and increased exposure to pleasant events (D'Zurilla and Nezu, 2007; Mynors-Wallis, 2005; Nezu *et al.*, 1989). By virtue of the problem solving process, the participant-identified problems in PST-PC sessions are likely to provide insights into the issues that depressed individuals face; however, no previous

study has examined the relationship between the type of problems identified by participants and their depression severity at baseline. The purpose of the present study was to examine the relationship between the severity of baseline depressive symptoms and the participant-identified problems in an ongoing RCT and an ongoing uncontrolled pilot study of PST for low-income homebound older adults. In addition, we report the kinds of participant-identified goals and solutions, and explored the relationship between depression outcome at 2-week posttest following treatment and the participant-identified problems. The problems that depressed low-income, homebound individuals identify in their PST sessions are likely to be the issues that they grapple with, while the goals and solutions that they come up with shed light on the choices that they have to solve the problems. The RCT tested the feasibility and efficacy of 6 sessions of telehealth PST or tele-PST (PST sessions conducted via Skype video calls) as opposed to 6 sessions of in-person PST and attention control (telephone support calls) for older adults with moderate to severe depressive symptoms. The uncontrolled pilot study tested the acceptability of tele-PST among homebound older adults with mild depressive symptoms.

METHODS

Recruitment process and participants

Case managers at a large Meals on Wheels (MOW) program and other agencies serving low-income homebound older adults in central Texas referred to the project potential subjects who were age 50 and older, spoke English, and scored 5 or higher on PHQ-9 or appeared to have depressive symptoms. (All participating agencies provided comprehensive case management to their clients.) Not all referred clients had PHQ-9 scores, as PHQ-9 was not administered when client privacy was not ensured (i.e., presence of a caregiver or another person). Referred individuals were administered the 24-item Hamilton Rating Scale for Depression (HAMD), and those whose HAMD scores were 15 or higher were included in the RCT and those with a HAMD score of 10–14 were included in the uncontrolled study. The exclusion criteria were (1) high suicide risk; (2) dementia (assessed with the Mini-Cog that is a composite 3-item recall and clock drawing test; Borson *et al.*, 2000); (3) bipolar disorder; (4) current (12-month) or lifetime psychotic symptoms or disorder; (5) presence of co-occurring alcohol or other addictive substance abuse; and (6) current involvement in psychotherapy. Those who had been on antidepressant medication for more than two months but still showed significant depressive symptoms were not excluded from the study. Although the final sample sizes are expected to be 90 for the RCT (30 for tele-PST; 30 for in-person PST; and 30 for attention control) and 30 for the uncontrolled study (all tele-PST), the data for this study came from 66 who completed at least 2 sessions of tele-PST or in-person PST in either study as of February 15, 2011. Of the 66 participants, 57 completed all 6 PST sessions, 4 completed 5 PST sessions, and 5 had 2–3 sessions.

Therapist training, supervision, and fidelity monitoring

The second author (MTH) trained two licensed master's-level social workers (MLM & LS) in PST and has provided ongoing clinical supervision for them and fidelity monitoring. The latter was done with a review of the audio-recordings of 2 sessions (1st and one random selection between 2nd and 5th) from 20% of all subjects throughout the study. Skype's recording function was used to automatically record all tele-PST sessions, while microcassette recorders were used to record all in-person PST sessions. Each therapist provided both tele-PST and in-person PST. The mean global adherence and competence rating score on the PST-PC Therapist Adherence and Competence Scale (Hegel *et al.*, 2004) was 4.4 on a 6-point scale (0 = very poor to 5 = very good), with no significant difference between two therapists.

Conduct of sessions

In each 60-minute PST session, the therapist and participant used a worksheet to progress through the 7-steps of PST—(1) identifying and clarifying a problem area; (2) establishing clear, realistic, and achievable goals for problem resolution; (3) generating multiple solution alternatives or appropriate solution possibilities through brainstorming; (4) implementing decision-making guidelines through identifying pros and cons of each potential solution (e.g., advantages and disadvantages, feasibility and obstacles, and other benefits and challenges); (5) evaluating and choosing solutions by comparing and contrasting them; (6) developing an action plan detailing steps the client would take to implement the preferred solutions; and (7) evaluating the outcome and reinforcement of success and continued effort. The therapist also recorded progress notes for each PST session, which provided more detailed descriptions of the session content. With the participants' consent, the therapists also worked collaboratively with their case managers at the referring agencies when the problems and solutions that the participants identified required the involvement of the case management services.

Measures

Depressive symptoms—The 24-item HAMD consists of GRID-HAMD-21 structured interview guide (Depression Rating Scale Standardization Team, 2003) augmented with 3 additional items assessing feelings of hopelessness, helplessness, and worthlessness with specific probes and follow-up questions developed by Moberg *et al.* (2001). The scoring format of the 3 additional questions was slightly modified so that both frequency and intensity of these feelings can be factored in their ratings as in the case with other comparable items (e.g., depressed mood, anxiety) in the GRID-HAMD-21. The HAMD was administered at baseline and at 2-, 12-, and 24-week posttests. In this study, the baseline and 2-week posttest HAMD scores (for those who completed the assessment) were used.

Participant-identified problems—Problems that were recorded in the therapist's worksheets for the participants were reviewed by the first, third and fourth authors, who then collaboratively developed the coding procedures and code categories. Using the code categories, the three authors independently coded all problems, goals, and solutions. Initial agreements on the codes were 93.2%. For the discrepant codes, the final decision was made based on discussions among the three authors. Most participants had different problems and goals for each session, while others had the same problems and goals for two or more sessions. When a participant was working on the same problem and goal in more than one session, we counted it only once.

Participant-identified goals and solutions—PST aims at teaching participants skills in solving problems as a means of self-management of depression and enhancing their level of self-efficacy through personal and social resourcefulness. Personal resourcefulness may include redressive and/or reformatory self-control, and social resourcefulness refers to both informal and formal help-seeking (Rosenbaum, 1990; Rapp *et al.*, 1998). Redressive self-control consists of a set of behaviors by which a person self-regulates internal responses, and reformatory self-control consists of a set of behaviors that guide the person through the process of change (Rosenbaum, 1990, p. 13). For example, for a problem of social isolation, a participant may set a goal of finding ways to connect with people outside the house, and going to Sunday church services as a solution. Action plans may include calling a church member for a ride to service and testing wheelchair maneuvering at the church. For low-income homebound older adults, both personal and social resourcefulness are important solution elements in PST. Moreover, for a majority of our participants who had been experiencing myriads of life stressors and depression for an extended period, their chosen solutions pertaining to personal resourcefulness could not be easily discernible as either

redressive or reformatory self-control. Thus, we categorized the participant-generated solutions in terms of redressive and/or reformatory of self-control, informal help-seeking, and formal help-seeking.

Other participant characteristics—Participant characteristics included sociodemographics, disability status, *DSM-IV-R* diagnosis of depression at baseline, and intake of antidepressant or antianxiety medication. Disability status was assessed using the short form (12-item) World Health Organization Disability Assessment Schedule (WHODAS-II). The original 36-item WHODAS-II was developed to “assess the activity limitations and participation restrictions experienced by an individual irrespective of medical diagnosis” in six domains: understanding and communicating; getting around; self-care; getting along with people; life activities; and participation in society (World Health Organization, 2000). The WHODAS-II assesses disabilities without asking respondents to identify whether the problem was caused by medical or mental health conditions. In consideration of the homebound state of the subjects, the last item “Your day to day work” was reworded to “Your day to day work in and around the house.”

Statistical analysis

We identified seven problem categories, and the number of participants who brought up a problem in each category as well as the absolute number of problems in each category were calculated. Goals and solutions in each problem category were described. T-tests were employed to examine possible differences in HAMD scores at baseline and 2-week posttest between those who identified any problem in each category and those who did not. Finally, a stepwise ordinary least squares (OLS) regression analysis was conducted first to examine the relationship between the baseline HAMD score and problem identification in each category (identified = 1 vs. not identified = 0), and then to examine the relationship controlling for baseline WHO-DASII score and intake of antidepressant medication (have taken any antidepressant in the preceding two months = 1 vs. have not taken = 0). Because preliminary analysis showed no difference in the baseline HAMD score by gender, race, or other demographic characteristics, these latter variables were not entered in the regression model. Sensitivity analysis using G*Power 3.12 (Faul *et al.*, 2006) showed that a sample size of 66 was sufficient to estimate an effect size of 0.41 or greater, with two-sided $\alpha = .05$ and $1 - \beta = 0.95$, in a linear multiple regression model with 9 predictor variables.

RESULTS

Participant characteristics

Table 1 summarizes the participants' characteristics in terms of their demographics, disability status, depression diagnosis, and intake of antidepressant medication and antianxiety medication in the preceding two months. Nearly half of them were African American or Hispanic, and nearly 80% had annual family income less than \$25,000. A little more than 60% had major depressive disorder and more than half had been taking antidepressant medication.

Problems, problem contents, goals, and solutions

In their PST sessions, 66 participants identified a total of 306 problems in the following seven categories: living arrangement/housing issues; financial/healthcare expense issues; family or other relationship issues; spatial/personal hygiene and task issues; social isolation; physical/functional health issues; and mental/emotional health issues. As shown in Table 2, of these problem categories, living arrangement/housing issues were brought up least frequently, while mental/emotional issues were brought up most frequently. Despite the fact that most participants had meager income, financial/healthcare expense issues were brought

up relatively fewer times than were family and other relationship issues, hygiene/task issues, and physical and mental health problems. The hygiene/task issues came up often because many participants, due to their disability and depression, had difficulty cleaning house, adhering to personal hygiene routines, and organizing their personal affairs.

The problem content column represents the examples of specific kinds of problems in each problem category. Specific problems most frequently raised with respect to mental/emotional health issues were loss of interest/lack of motivation (22% of the mental health issues), worries/anxiety (14%), anger/irritability (12%), feelings of frustration or down mood (10%), and feelings of worthlessness (10%). The goals column shows the specific kinds of goals chosen by the participants to alleviate or resolve the identified problems. For the problem of social isolation, “to find ways to get out of house” was the goal most frequently mentioned (37% of the goals), followed by “to find ways to meet and have contact with people (35% of the goals).”

The last column of Table 2 shows the percentages of the participant-chosen solutions in terms of personal (redressive and/or reformative self-control) and social resourcefulness (informal and formal help seeking). Examples of self-controls were “identify things to sell that I don’t need to cover overdraft charge,” “throw out garbage,” “fix my hair more often,” “call daughter to share my concerns,” and “plan for and start a walking regimen.” Examples of formal help-seeking were “call Food Stamps office to ask about reduced amount,” “call police about theft and missing items,” and “call clearinghouse and find information on knee surgery research.” Informal help-seeking included examples such as “ask a neighbor to take me to a garage sale,” and “ask son to look on the Internet for housing options.” Understandably, formal help-seeking was the solution most frequently chosen for the living arrangement/housings and financial/healthcare expense issues, while self-control was the solution most frequently chosen for the rest of the problems.

Relationship between depression severity and participant-identified problems

Table 3 shows that the participants who had living arrangement/housing issues had higher baseline HAMD scores than the rest of the participants (30.80 ($SD = 11.79$) vs. 21.41 ($SD = 7.96$), $p = .002$), and those who had family or other relationship issues also had higher baseline HAMD scores than the rest of the participants (27.29 ($SD = 9.95$) vs. 20.75 ($SD = 8.11$), $p = .013$). At 2-week posttest, those with living arrangement/housing issues continued to have higher HAMD scores than the others (20.0 ($SD = 11.12$) vs. 13.71 ($SD = 7.73$), $p = .047$), while those with family or other relationship issues were not significantly different from the rest.

According to data in Model 1 in Table 4, living arrangement/housing issues and family or other relationship issues were associated with higher HAMD scores. Social isolation issues were also marginally significantly associated with higher HAMD scores. The OLS regression model explained 31% of the variance in the baseline HAMD scores. When the WHODAS-II scores and the intake of antidepressant medication were added to the regression model (Model 2), living arrangement/housing, family or other relationship, and social isolation issues remained significant predictors of higher HAMD scores. Higher WHODAS-II scores and intake of antidepressant medication were also associated with higher HAMD scores, and these two controls explained an additional 15% of the variance in the HAMD scores (F change = 7.99, $p < .001$).

DISCUSSION

This study examined the possible association between the problems that low-income, depressed homebound older adults strove to solve in their PST sessions and their depression

severity at baseline. As expected, the problems these older adults most frequently identified included mental/emotional health, followed by physical/functional health issues and social isolation. In addition, they identified spatial and personal hygiene/task issues, family or other relationship issues, financial/healthcare expense issues, and living arrangement/housing issues. The findings show that those who brought up family conflict or other relationship issues or those who identified living arrangement/housing issues had significantly higher baseline depressive symptoms than those who did not identify these issues. The findings also show that at 2-week posttest, those who identified family or other relationship issues no longer had higher depressive symptoms than the rest of the participants. It was difficult to determine if family conflict or other relationship issues contributed to their depression or vice versa, but it appears that PST may have contributed to alleviating depressive symptoms associated with these issues. On the other hand, those with living arrangement/housing issues continued to have significantly higher HAMD scores at 2-week posttest than the rest of the participants.

Those who identified living arrangement/housing issues were small in proportion, but their precarious living/housing situations, stemming from inability to afford rent for decent housing, and/or the fear for personal safety in an unsafe neighborhood environment (e.g., drug dealing in public space and frequent theft) appeared to have had a serious depressogenic effect. Furthermore, most of these issues were beyond the participants' control and could not be easily resolved within a short time frame of the PST process, as external factors such as the availability of subsidized rental units and stepped-up law enforcement for neighborhood safety were determining factors for the resolution of the issues. It is understandable that those with these issues were still more depressed than the rest at 2-week posttest.

Given that the absolute majority of the participants had low income, the fact that some identified financial/healthcare expense and living arrangement/housing issues was not surprising. A surprise was that more participants did not identify these issues. Some participants may have decided to seek help from their case managers for these particular problems rather than trying to find solutions through the PST process. More importantly, those who identified financial/healthcare expense issues did not have greater depressive symptoms than those who did not identify financial/healthcare expense issues. This lack of significant difference in HAMD scores may be due to the fact that almost all participants were low-income and had financial issues whether or not they identified it as a problem in PST sessions. It is also probable that these older adults are accustomed to having economic problems and they have accepted these problems as facts of life.

Participant-identified goals and solutions also provide a glimpse of the limited range of personal coping resources that low-income homebound older adults can muster to alleviate or solve their problems related to financial difficulty, housing issues, and disability/lack of mobility. Although self-control is the most frequently adopted solution for a majority of their problems, informal and formal help-seeking and support appears to be an essential tool for these older adults to solve problems related to their homebound state and the lack of economic resources. As discussed in previous studies (Areán *et al.*, 2010; Ayalon *et al.*, 2010), treatment of depression in low-income, disabled and homebound older adults indeed requires both case management and PST as disability and lack of economic and other resources make it difficult for these older adults to manage their depression. Although all participants received comprehensive case management from their home agencies, the results of the present study suggest that the success of both case management and PST for low-income older adults may also depend on improved formal support systems.

This study has a couple of limitations. The sample size is relatively small, and because the study is ongoing, we limited analyses to only short-term treatment outcomes. Despite the small sample size, the diversity of the sample composition in terms of gender, race/ethnicity, and age distributions is a strength. As stated earlier, no previous research examined the relationship between baseline depression severity and the participant-identified problems in PST sessions. The present study provides insights into the problems that low-income, depressed homebound individuals face and the goals and solutions that they identify to deal with these problems. When the RCT is completed, we plan to conduct more in-depth examination of the relationship between long-term treatment outcome and the participant-identified problems, goals, and solutions.

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Key points

1. In their problem-solving therapy sessions, low-income homebound older adults identified the following problems: living arrangement/housing issues; financial/healthcare expenses issues; family or other relationship issues; hygiene/task issues; social isolation issues; physical/functional health issues; and mental/emotional health issues.
2. Those with living arrangement/housing and family or other relationship issues had higher baseline depression scores than the rest of the participants.
3. At 2-week posttest, those with living arrangement/housing issues continued to have higher HAMD scores than the others, while those with family or other relationship issues did not.
4. Most of the living arrangement/housing issues were beyond the participants' control and could not be easily resolved within a short time frame of the PST process. Formal support system factors such as the availability of subsidized rental units and stepped-up law enforcement for neighborhood safety were determining factors for the resolution of the issues.

Table 1**Participant Characteristics at Baseline**

Age (yrs; mean, SD)	65.13 (8.87)
Age group (% , n)	
50–59 years	28.8 (19)
60–69 years	42.4 (28)
70–79 years	19.7 (13)
80+ years	9.1 (6)
Gender (% , n)	
Male	21.2 (14)
Female	78.8 (52)
Race/ethnicity (% , n)	
Non-Hispanic White	53.0 (35)
African American	39.4 (26)
Hispanic	7.6 (5)
Marital status (% , n)	
Married	15.2 (10)
Widowed	18.2 (12)
Divorced/separated	53.0 (35)
Never married	13.6 (9)
Family income (\$; % , n)	
>=\$15,000	54.5 (36)
15,001–25,000	24.2 (16)
25,001–35,000	10.6 (7)
35,001–50,000	4.5 (3)
Refused	6.1 (4)
Disability score ^I (mean, SD)	35.46 (9.41)
Range	13–53
Primary <i>DSM-IV-R</i> diagnosis (% , n)	
Major depressive disorder	60.6 (40)
Depressive disorder-not specific	36.4 (24)
Dystymia	3.0 (2)
Percentage taking antidepressant medication	54.5 (36)
Percentage taking antianxiety medication	39.4 (26)

^I Measured with the 12-item World Health Organization Disability Assessment Schedule (WHODAS-II)

Table 2
Problem Categories, Number of Problems in Each Category, Problem Contents, Goals, and Solutions

Problem category	N	Problem content	Goals (Evaluate/find/seek/start...)	Solutions ¹
Living arrangement/housing issues	13	Doubled-up living arrangement	Means to afford a new place	SC (7.7%)
		Substandard structural housing conditions	Information on senior housing	IHS (23.1%)
		Cannot afford current rent	Seeking formal and informal help	FHS (69.2%)
		Wheelchair not accessible to parts of living quarters	Clearing up more space for wheelchair	
Financial/health care expense issues	25	Unauthorized access/theft in the housing property	Contacting police/adult protective service	
		Difficulty making ends meet/lots of debt	Information on financial aid/any work	SC (40%)
		Lack of means to supplement income	Assets to liquidate	IHS (12%)
		Overwhelmed with medical bills	Better money management skills	FHS (48%)
Family or other Relationship issues	32	No health care/cannot afford health care	Information on prescription drug coverage	
		Conflict with children and/or other family member	Ways to better communication with family	SC (93.7%)
		Alienation from children	Ways to take mind off worries about conflict	IHS (0%)
		Too much dependence on children	Ways not to overreact to family members	FHS (6.3%)
Hygiene/task issues	41	Unreasonable demands from children (babysitting/financial help request)	Ways not to engage in argument	
		Abusive relationships	Ways to disentangle from relationship	
		Clutter/messiness in the house/neglected housekeeping	Cleaning/organizing house/rooms	SC (92.8%)
		Disorganized bills or other accumulated papers	Information on housekeeping resources	IHS (3.6%)
Social isolation	52	Neglected personal hygiene because of safety concerns, tiredness, or depressed mood	Showering/shaving at least once a week	FHS (3.6%)
		Paperwork for legal proceedings/Medicaid or other benefits	Throwing out things that I do not need	
		Lack of will and other end-of-life documents	Information on establishing a will	
		Not knowing how to use email	Learning how to access email	
Physical/functional health issues	57	Too isolated at home and disconnected from others	Getting out of house	SC (84.9%)
		No friend/no companionship/loneliness	Meeting/contacting with people	IHS (2.6)
		Not getting out of bedroom	Projects/activities to do	FHS (13.5%)
		Lack of transportation (can't go to church; can't go out)	Information on available transportation	
		Medical issues (e.g., difficulty controlling blood sugar levels)	A diabetes specialist/PCP/dentist near home	SC (84.2)
		Too much pain	Making resolution on surgery	IHS (3.5%)
		Lack of physical activity	Exercising/increasing activity level	FHS (12.3%)
		Insomnia; poor quality sleep	Getting more sleep	

Problem category	N	Problem content	Goals (Evaluate/find/seek/start...)	Solutions [/]
Mental/emotional health issues	86	Eating too much and overweight	Substitute better food for unhealthy food	SC (87.2%) IHS (3.5%) FHS (9.3%)
		Poor appetite/not eating	Getting more structure to stimulate appetite	
		Medication management	Information on medication management	
		Smoking	Cutting down smoking	
		Too much time in front of computer-hurting	Engaging in healthy behaviors	
		Not finding proper care		
		Loss of interest/no pleasure/lack of motivation	Reintroducing activities that I used to enjoy	
		Worries/anxiety/hypervigilance	Engaging in relaxation techniques	
		Anger/irritability/impatience	Staying calm/adopting positive social skills	
		Feeling frustrated/down	Activities to get involved in	
		Feeling useless/empty	Ways to exercise my brain/get up/get going	
		Ruminate too much on the past	Ways to better take care of myself	
		Feeling stressed out	Ways to decompress and relieve stress	
		Difficulty concentrating/making decisions/procrastination	Cutting down distractions	
		Guilt/regrets	Information on grief/bereavement support	
		Lack of confidence	Ways to get more positive influence	

[/] Solutions were categorized into three types: Redressive and/or reformative self-control (SC); informal help-seeking (IHS); and formal help-seeking (FHS).

Table 3

Baseline and 2-week Posttest Scores on the 24-item Hamilton Rating Scale for Depression (HAMD) by Problem Category

Problem category	Baseline participants % (n)	Baseline HAMD (mean, SD)	2-week posttest participants % (n)	2-week posttest HAMD (mean, SD)
All participants	100 (66)	22.83 (9.18)	100 (51)	14.82 (8.64)
Living arrangement/housing issues	15.2 (10)	30.80 (11.79)**	17.6 (9)	20.0 (11.12)*
Financial/health care expense issues	28.2 (19)	22.89 (9.98)	33.3 (17)	15.71 (8.21)
Family or other relationship issues	31.8 (21)	27.29 (9.95)*	31.4 (16)	13.31 (7.94)
Hygiene/task issues	36.4 (24)	23.42 (9.67)	39.2 (20)	15.50 (9.06)
Social isolation	50.0 (33)	24.42 (8.72)	49.1 (25)	16.48 (8.52)
Physical/functional health issues	53.0 (35)	21.09 (7.68)	60.8 (31)	13.39 (8.29)
Mental/emotional health issues	72.7 (48)	23.31 (10.02)	76.5 (39)	15.05 (9.06)

**
 $p < .01$;

*
 $p < .05$: Denotes the scores that are significantly different from the others.

Table 4

Relationship between Baseline HAMD Scores and Problem Category: Stepwise OLS Regression Results

Predictor	Model 1 B (SE)	Model 2 B (SE)
Living arrangement/housing issues	8.70(2.84)**	7.92 (2.56)**
Financial/health care expense issues	0.59 (2.22)	−0.16 (2.03)
Family or other relationship issues	6.85 (2.26)**	6.61 (2.05)**
Hygiene/task issues	2.53 (2.13)	2.93 (1.93)
Social isolation	3.79 (2.18) [†]	3.41 (1.96) [†]
Physical/functional health issues	−0.96 (2.12)	−1.72 (1.91)
Mental/emotional health issues	2.27 (2.43)	3.54 (2.21)
Baseline disability score		0.30 (0.10)**
Antidepressant medication (Yes)		3.95 (1.89)*
R^2	0.31	0.46
Adjusted R^2	0.22	0.37
SE	8.10	7.27

**
 $p < .01$;

*
 $p < .05$;

[†]
 $p < .09$