Clinical Case Management versus Case Management with Problem-Solving Therapy in Low-Income, Disabled Elders with Major Depression: A Randomized Clinical Trial

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Objective: *To test the hypotheses that (1) clinical case management integrated with problem-solving therapy (CM-PST) is more effective than clinical case management alone (CM) in reducing depressive symptoms of depressed, disabled, impoverished patients and that (2) development of problem-solving skills mediates improvement of depression.* **Methods:** *This randomized clinical trial with a parallel design allocated participants to CM or CM-PST at 1:1 ratio. Raters were blind to patients' assignments. Two hundred seventy-one individuals were screened and 171 were randomized to 12 weekly sessions of either CM or CM-PST. Participants were at least 60 years old with major depression measured with the 24-item Hamilton Depression Rating Scale (HAM-D), had at least one disability, were eligible for home-based meals services, and had income no more than 30% of their counties' median.* **Results:** *CM and CM-PST led to similar declines in HAM-D over 12 weeks ($t = 0.37$, $df = 547$, $p = 0.71$); CM was noninferior to CM-PST. The entire study group (CM plus CM-PST) had a 9.6-point decline in HAM-D ($t = 18.7$, $df = 547$, $p < 0.0001$). The response (42.5% versus 33.3%) and remission (37.9% versus 31.0%) rates were similar ($\chi^2 = 1.5$, $df = 1$, $p = 0.22$ and $\chi^2 = 0.9$, $df = 1$, $p = 0.34$, respectively). Development of problem-solving skills did not mediate treatment outcomes. There was no significant increase in depression between the end of interventions and 12 weeks later (0.7 HAM-D point increase) ($t = 1.36$, $df = 719$, $p = 0.17$).* **Conclusion:** *Organizations offering CM are available across the nation. With training in CM, their social workers can serve the many depressed, disabled, low-income patients, most of whom have poor response to antidepressants even when combined with psychotherapy.* (Am J Geriatr Psychiatry 2015; ■:■−■)

Key Words: Case management, low income, late-life depression

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http://dx.doi.org/10.1016/j.jagp.2015.02.007

INTRODUCTION

The Institute of Medicine anticipates that the "silver tsunami" of older adults will overwhelm the mental health workforce, and their needs can only be met by changing models of care.[1] Most vulnerable among them are the 9.5% of elders who live in poverty.[2] Low-income elders have higher rates of major depression (9%) than nonimpoverished older adults (3.8%).[3] Their depressive symptoms worsen their already high medical burden and disability[4,5] and increase mortality.[6]

Most depressed, impoverished, older adults have poor outcomes.[7] Depression in low-income elders has unfavorable response to antidepressants even when combined with psychotherapy.[8] One reason for poor response may be the daily exposure to "real-life" stressors: living in high-crime neighborhoods, non–handicap accessible and often infested apartments, limited access to healthcare, isolation, and living with the restrictions of limited finances.

Case management (CM) offers access to resources and can improve the daily experience of low-income older adults. Many types of CM exist. Clinical CM in particular offers financial, legal, and housing resources; linkage to care; and psychoeducation.[9,10] CM can improve the process of care and reduce symptoms of depression, disability, and institutionalization.[11,12] For these reasons arguably, CM may reduce depression in low-income, disabled, older adults.

Case managers problem-solve for their clients but do not directly teach them skills needed to use newly available resources. For this reason, we integrated CM with problem-solving therapy (CM-PST). PST is efficacious in late-life major depression[13–15] and can enhance problem-solving skills.[16] Thus, PST may act in synergy with CM, with CM providing access to resources and PST imparting the skills needed for their utilization.

This study compared the efficacy of home-offered CM with that of CM-PST in low-income elders with major depression and disability receiving home-delivered meals services. Its first hypothesis postulates that CM-PST is more effective than CM in reducing depressive symptoms over 12 weeks. The second hypothesis is that problem-solving skills development mediates improvement of depression. Additional analyses compared the stability of improvement in depressive symptoms 12 weeks after the end of the intervention. We also compared response and remission of depression at intervention end and 12 weeks later. Finally, we explored whether improvement in depression was related to reduction in unmet social needs over 12 and 24 weeks.

METHODS

This randomized clinical trial used a parallel design to compare depression severity in participants allocated to CM or CM-PST at a 1:1 ratio.

Participants

Social workers of home-delivered meals organizations offering unstructured CM referred potential participants if they considered them to be depressed. All subjects signed written informed consent. Procedures were approved by the institutional reviews boards of both universities.

Inclusion criteria were (1) age 60 or more years, (2) recipients of home-delivered meals services with at least one impaired instrumental activity of daily living,[17] (3) major depression defined by the Structured Clinical Interview for *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (DSM-IV),[18] (4) 24-item Hamilton Depression Rating Scale (HAM-D)[19] $\geq$ 19, (5) income no more than 30% of the area median, (6) at least one unmet services need (Camberwell Assessment of Need for the Elderly [CANE]),[20,21] and (7) agreement to not start antidepressants or if on an antidepressant not to change the dosage. Exclusion criteria were (1) presence or history of any Axis I psychiatric disorder other than nonpsychotic major depression or generalized anxiety disorder; (2) intent or plan to attempt suicide in near future; (3) antisocial personality (defined by DSM-IV); (4) Mini-Mental State Exam score $<$ 24 or dementia defined by DSM-IV; (5) delirium, metastatic cancer, decompensated organ failure, major surgery, stroke, or myocardial infarction 3 months before entry or taking drugs known to cause depression; (6) currently in psychotherapy; (7) inability to perform any activity of daily living, even with assistance; and (8) inability to speak English.