

Patterns and Predictors of Depression Treatment Among Older Adults with Dementia and Depression in Ambulatory Care Settings in the United States

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Introduction

What is the problem?

It is estimated that 6.7% of the adult population over the age of 60 in the US suffer from dementia as of 2010, with total numbers doubling every twenty years¹

There is a high financial and quality of life burden of dementia that already exists--exceeding a quarter million in costs in the last years of life²

Importance of our study

Individuals with dementia are over twice as likely to develop depression³

Depression can worsen the neurocognitive deficits caused by NCD⁴

Evidence suggests that depression may be undertreated in the elderly^{1,5}

Despite the evidence supporting the use of psychotherapy, treatment is skewed towards pharmacotherapy with a severe lack of concurrent psychotherapy⁶

There is a lack of, to our knowledge, a study that investigates the predictors and patterns in depression treatment for elderly individuals in the ambulatory care setting

What has been done already?

A study conducted by Bhattacharjee et al. looked into patterns and predictors of depression treatment in dementia patients in the community setting

Many studies have investigated both the nature of treatment and demographics of elderly treated with depression, but very few studies have looked into which factors may be predictors of depression treatment

Objectives

Identify prescribing patterns of depression treatment among older adults with dementia and co-occurring depression in ambulatory settings in the US

Identify the predictors of depression treatment among older adults with dementia and co-occurring depression in ambulatory settings in the US

Methods

Retrospective cross-sectional study design

Multiple years (2005–2015) of pooled data from the National Ambulatory Medical Care Survey (NAMCS)

NAMCS uses a multistage probability design to obtain systematic random weekly samples of patients from physicians across the nation

A weighted frequency for national level estimates were generated from our data analysis

A multivariate regression analysis was completed to determine which predisposing, enabling, and need factors were significant determinants to the nature of depression treatment

All analyses were adjusted for the complex survey structure of NAMCS

Results

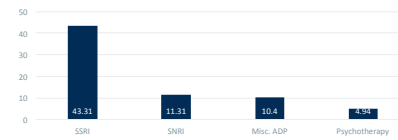
655 (un-weighted) ambulatory visits by older adults with dementia and depression were recorded by National Ambulatory Medical Care Survey, or a national estimate of 14.46 million elderly patients with both NCD and depression

Multivariate logistic regression analysis showed that the following characteristics were significantly associated with depression treatment: Gender, Geographic Region, Physician Specialty, Number of Medications, Number of Comorbidities (details available in Table 1 in light blue)

Results - Continued

Depression treatment as antidepressant treatment was recorded in 61.90% (95% CI: 58.98%– 66.82%) of the study sample visits. Figure 1 shows the distribution of depression treatment below.

Figure 1: Percent of Patients Visits Receiving Depression Treatment



SSRI: Selective Serotonin Reuptake Inhibitor; SNRI: Serotonin-Norepinephrine Reuptake Inhibitor; ADP: antidepressant

Table 1 Predictors of Depression Treatment among Adults with Dementia and Depression NAMCS 2005-2015				
Characteristics	Unadjusted Odds Ratio	95% CI	P-value	Category
Demographics				
Age				
65-74	Ref			
75+	1.36	(0.83, 2.20)	0.04	
Gender				
Female	Ref			
Male	0.70	(0.55, 0.90)	<0.001	
Race/Ethnicity				
White Only, Non-Hispanic	1.00			
Other	Ref			
Enabling Factors				
Geography/Region*				
South	0.59	(0.36, 0.95)	0.03	
Other	Ref			
Physician/Clinical Specialty				
Gen & Fam practice	Ref			
Psychiatry	0.64	(0.35, 1.15)	<0.001	
Insurance				
Good Insurance	Ref			
Other	1.05	(0.85, 1.28)	0.57	
Need Factors				
Access/Visit				
New prescription	0.60	(0.11, 3.27)	0.05	
Not new visit	Ref			
Patient Characteristics				
Yes (D-C)	Ref			
New (D-C)	1.02	(0.51, 2.00)	0.96	
Number of Medications*				
Yes	1.00			
No	Ref			
Number of Comorbidities*				
1-2	1.22	(0.78, 1.92)	<0.001	
3-4	0.87	(0.48, 0.99)	<0.001	

Limitations

The population being specified as being exclusively from the ambulatory setting in the US

A maximum of three diagnoses could be provided per patient visit, leading to the possibility of underestimation of comorbid conditions

The severity of either dementia or depression in these patients could not be, and was not assessed

Due to the retrospective nature of this study, establishing a causal link would be inappropriate.

Conclusions and Implications

Approximately one-fifth of individuals in the ambulatory care setting with dementia diagnoses reported a coexisting depression diagnosis, with about six out of ten of those individuals undergoing treatment

The majority of treatment for depression in this population is pharmacological in nature, utilizing mostly SSRIs, and psychotherapy, despite evidence of efficacy in existing literature, is sorely underutilized

Recommendations and Future Projects

Future studies should be conducted to investigate the outcomes of depression treatment in this population

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