IMPACT OF PHARMACIST CONDUCTED PHONE EDUCATION ON REDUCTION OF EMERGENCY ROOM ADMISSIONS IN ELDERLY VETERANS RELATED TO NEW TRICYCLIC ANTIDEPRESSANT USE

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ABSTRACT

BACKGROUND

Depression is a common mental health disorder among the American population. A 2013 survey that assessed drug use and health determined 16 million, or 1 in 6, Americans were diagnosed with depression yearly. With respect to Veterans, a Veterans Affairs (VA)/Department of Defense (DoD) 2015 report found 19.8% of Veterans had a documented diagnosis of depression, and 6.5% of these individuals had a documented diagnosis of major depressive disorder (MDD). Furthermore, the VA's National Registry for Depression found that "11 [percent] of Veterans aged 65 years and older have a diagnosis of MDD."

The diagnosis of MDD requires meeting current DSM-5 criteria. Veteran's must meet five or more criteria including the following most days: depressed mood, decreased interest or pleasure in activities, weight loss or weight gain, lack or sleep or increased sleep, "psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness, or excessive inappropriate guilt, decreased ability to think, concentrate, or indecisiveness", thoughts of death, suicidal ideation, suicide attempt, or suicidal plan. Additionally the previously listed symptoms must cause significant distress or functional impairment, and these effects cannot be correlated to another mental illness or substance use.

Current VA/DoD treatment guidelines recommend use of selective serotonin reuptake inhibitors (SSRIs), serotonin-norepinephrine reuptake inhibitors (SNRIs), mirtazapine, and bupropion as first-line pharmacotherapy agents. Additionally, the treatment guideline suggests use of tricyclic antidepressants (TCA's) only for severe, chronic, or recurrent MDD when Veterans have trialed at least two adequate treatments using first line agents or if they have previously experienced remission after use of TCA's. It additionally recommends that the Veterans must be educated regarding common adverse events of these medications.

The Office of the Inspector General (OIG) completed an unannounced visit to The Kansas City Veterans Affairs (KCVA) Medical Center the week of April 29, 2019 to provide an evaluation that assessed the "…quality of care delivered in the inpatient and outpatient settings…" One of the clinical areas of focus "spotlighted antidepressant use for elderly Veterans," primarily focusing on Veterans who were newly prescribed TCAs (amitriptyline, clomipramine, desipramine, doxepin dose greater than 6mg per day, imipramine, or nortriptyline) or paroxetine (SSRI) for the treatment of depression. These medications were assessed as they are strongly suggested to be avoided because of their strong anticholinergic side effects, per Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. Common anticholinergic side effects include sedation, orthostatic hypotension, dry mouth and eyes, dizziness, and falls.

The OIG evaluated the KCVA on the following parameters: "justification for medication initiation, evidence of patient and/or caregiver education specific to the medication prescribed, clinician evaluation of patient and/or caregiver understanding of the education provided, and medication reconciliation." Additionally, the VA/DoD Clinical Practice Guideline for MDD recommended providers complete monthly follow-up visits with Veterans after therapy initiation until remission and complete monitoring of symptoms, adherence, possible adverse effects, and additional treatment options as well as risks and benefits of the current therapy.

The OIG randomly selected 37 Veterans, aged 65 years or older, who were newly prescribed TCAs or paroxetine in the prior year. Overall, the OIG found justification for medication initiation as well as evaluation of Veteran or caregiver understanding, but only 73% of Veterans randomly selected were educated about the "safe and effective use of medications" and only 59% of the Veterans had medication reconciliations completed per chart review. The goal in both of these areas of focus are at least 90% compliance for six consecutive months. The purpose of this project was to examine the potential benefit of implementation of pharmacist conducted phone follow-up appointments, within 30 days of TCA or paroxetine initiation for depression, and the resulting increased documentation of adverse events experienced by elderly Veterans and reduction in emergency room admissions.

METHODS

This quality improvement project selected Veterans utilizing the Geriatric Patients Newly Prescribed Tricyclic Antidepressants or Paroxetine with Follow up dashboard. The parameters utilized in the dashboard were the following: VISN: 15, select site: (589) KAN, division: BELTON CBOC, CAMERON CBOC-KC, EXCELSIOR SPRINGS CBOC, HONOR VA CLINIC, JOHNSON CNTY CBOC, KAN-PRRTP, KANSAS CITY MOC, KANSAS CITY VA FACILITY DOM, NEVADA CBOC, OVERLAND PARK CLINIC, PAOLA CBOC, VAMC KANSAS CITY, and WARRENSBURG CBOC-KC. The inclusion criteria of this study included patients 65 years of age and older who were newly prescribed a tricyclic antidepressant or paroxetine. Chart reviews were completed via CPRS to assess patient's medication use history of tricyclic antidepressants or paroxetine, to assess ER admission within 30 days of medication initiation, and to assess if appropriate documentation was completed.

Initially, patients were assessed over a four-month period (09/01/2020-12/01/2020) without pharmacist intervention. Beginning 01/01/2021 through 03/01/2021 pharmacist conducted weekly phone-call visits with patients newly started on tricyclic antidepressants/paroxetine to provide education about common side effects. A cohesive phone-call template was utilized during each education session and documented in the patient's chart. Pharmacist would then alert providers if patient was experiencing common side effects from medication initiation. Results would be assessed to determine if more ER visits occurred prior to pharmacist education as well as reported side effects to patient's physicians after pharmacist conducted phone call visits were completed. The primary analysis was average number of ER visits before and after pharmacist conducted phone call education. The secondary analysis is composite number of adverse anticholinergic side effects experienced within 30 days of initial start, medication reconciliation completion at initiation, and education provided at initiation.

RESULTS

Pharmacist intervention resulted in discontinuation of three (13%) anti-cholinergic medications. Of the 26 Veterans prescribed anti-cholinergic medications, 3 were excluded from the results (i.e. traveling Veteran, duplicate treatment, and new patient medication intake), 3 were unable to be reached, and 5 calls are currently pending. Medication reconciliations were performed by PharmD in 19 of 20 visits (95%) and anti-cholinergic side effects were noted in 20 of 20 patients (100%).

CONCLUSION

Implementation of PharmD conducted telephone visits in elderly Veterans newly prescribed TCAs or paroxetine resulted in reduction of ER visits and increased discontinuation of anticholinergic medications.