

Overall, feedback on the peer support groups has been positive. Attendees feel participating has brought change to their lives, and many reported reduced alcohol consumption and improved mood. In their feedback, attendees gave thanks to interesting discussion themes, an open and trusting atmosphere and the importance of being able to communicate with peers of the same age.

Peer support groups are a cost-effective and functional way to support the mental health of older adults, especially in the early detection and prevention of more severe problems.

P127 Characteristics and outcomes of geriatric patients with depression who received pharmacogenomic testing for antidepressant medication selection

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Objective: Pharmacogenomic testing for antidepressant medication selection is widely available, and patients with treatment-resistant depression regularly inquire about it. Psychiatrists and primary care providers have little guidance on when to obtain pharmacogenomic testing. We reviewed the characteristics and outcomes of a sample of geriatric patients who received this testing.

Methods: Retrospective review of patients ages 65 and older with ICD-10 diagnoses of depressive disorders (F32.0-F33.9), followed at Mayo Clinic Rochester, who received pharmacogenomic testing between 1/1/2018 and 12/31/2022 to guide antidepressant medication selection. Patients were included if there were Patient Health Questionnaire 9-item (PHQ-9) depression rating scores up to 3 months before and 3 months after pharmacogenomic testing. Demographic information, cytochrome P-450 CYP2D6 and CYP2C19 phenotypes, PHQ-9 scores, ordering provider (psychiatrist or primary care provider), and resulting medication changes were collected. Paired t-tests compared differences between before and after PHQ-9, with statistical significance $p < 0.05$.

Results: Approximately 1% of patients with a depressive disorder received pharmacogenomic testing. After limiting to patients with PHQ-9 before and after testing, 287 patients met inclusion criteria. 66% were female, mean age 72.3 yrs (\pm SD 5.7, range 65.0-90.7), and 95% were Caucasian. CYP2D6 phenotypes were 9% poor, 48% intermediate, 39% extensive (normal), 3% rapid metabolizer. CYP2C19 phenotypes were 3% poor, 25% intermediate, 39% extensive, 33% rapid metabolizer. Mean PHQ-9 before testing was 10.8 (\pm SD 6.4), and after testing was 9.8 (\pm SD 6.5) ($p = 0.0041$). Data collection regarding ordering provider and medication changes were still pending.

Conclusion: The clinical utilization of pharmacogenomic testing appeared to be low. CYP2D6 and CYP2C19 phenotypes were as expected (except for more 2C19 rapid metabolizers), suggesting treatment resistance was less likely related to these genetic factors. There was a statistically significant decrease of 1 point in the mean PHQ-9, which would not be clinically significant. However, many other factors still need to be explored, such as details about medications and gene-medication interactions, ordering provider's knowledge about pharmacogenomic testing, whether medication changes were made, aging factors influencing pharmacokinetics, medical and psychosocial burdens, and other concurrent treatments. Further research will hopefully allow more practical guidance on whether and when to obtain pharmacogenomic testing.