

Feasibility of Integrated Depression Care in an HIV Clinic

Depression among people with HIV infection can lead to lower antiretroviral (ARV) therapy adherence, higher viral loads, lower CD4 cell counts, and increased mortality compared to those with HIV infection who are not depressed. Effective depression management can increase CD4 counts and decrease viral loads by improving ARV adherence.

Collaborative depression care in HIV clinics using nurse care managers has shown promise as an effective management strategy. We developed an integrated approach to depression management in an HIV clinic using non-medically trained care managers (social workers) supervised by a psychiatrist as a way to further increase depression treatment options for HIV clinics, and we tested the model for feasibility and appropriateness.

We implemented our approach in an outpatient infectious diseases clinic at a tertiary care hospital in Durham, North Carolina. The clinic staff consists of five full-time-equivalent physicians, one physician assistant, five nurses, and four social workers. The clinic has 1,760 patients with active HIV infection, representing most of the stable, returning clinic population. Patients are mostly male (70%), African American (56%) or Caucasian (37%), and between ages 30 and 59 (85%).

A convenience sample of adult HIV-positive patients was screened with the self-administered nine-item Patient Health Questionnaire (PHQ-9). We selected patients with scores ≥ 10 , who gave informed consent and completed further baseline assessment with a psychiatrist. Participants with a confirmed diagnosis of major depressive disorder were eligible for inclusion in the study, whereas those with manic or psychotic history, acute suicidality, or current depression management were not. Key

demographic and clinical data were also collected, including ARV prescription, adherence, and side effects.

The care manager met with eligible participants to review clinical data and the PHQ-9 results. The care manager then used a guideline-concordant, antidepressant treatment algorithm that accounted for potential ARV interactions to determine individualized dosing recommendations. This served as decision support for the prescriber, who made the final treatment choice. Clinical data and PHQ-9 scores were examined during return visits at weeks 4, 8, and 12 by the care manager, who again used the algorithm to inform the prescriber, who made dose adjustments in collaboration with the participant. The care manager spoke with participants on the phone at weeks 2, 6, and 10 to assess for and manage incident side effects. The care manager met with the psychiatrist weekly to review each participant's treatment course; the psychiatrist did not meet personally with participants after the baseline assessment. Participants whose depression had not remitted (PHQ-9 score <5) by week 12 and those with a clinical indication were referred for psychiatric care.

A total of 144 patients were screened, of whom 45 (31%) screened positive for depression. Nineteen had excluding conditions (ten were receiving depression care, three patients declined, clinicians declined to refer three patients, two patients had manic history, and one did not have major depression), and 13 completed appointments before staff could approach them for enrollment. Thirteen (9% of total, 29% of positive screens) patients were enrolled.

Participants' mean±SD age was 38±8 years, and time since HIV diagnosis was 11±5 years. Most participants were men (N=9, 69%), single (N=8, 62%), and white (N=8, 62%). Over half self-identified as heterosexual (N=7, 54%). Most had attained at least a high school education (N=10,

77%) and were employed (N=7, 54%). Three (23%) were unemployed, and three (23%) were disabled. All participants had a concurrent anxiety disorder, and three (23%) had a substance use disorder. Algorithm fidelity was 91% (proportion of algorithm-indicated medication changes communicated by the care manager to prescribers). The care manager completed 72% of phone contacts and 82% of in-clinic visits. Nine participants (69%) completed 12 weeks of depression treatment.

The mean±SD baseline PHQ-9 score was 17.62±5.47 (N=13). Scores among the nine completers decreased from 18.33±6.06 to 11.44±7.91, which was significant (t=2.73, df=8, p=.03).

The intervention demonstrated reasonable feasibility in terms of identifying persons with depression, maintaining algorithm fidelity by the care manager, completion of study visits, and participant retention. Although the study was not powered to detect change in depressive symptoms, a decrease in PHQ-9 scores was observed. However, the mean score remained above the cut-off score for depression. The high prevalence of depression in the sample supports prior findings of increased prevalence in HIV relative to the general population. The presence of depression among individuals already receiving depression treatment suggests under treatment, and such individuals, as well as more women and persons from racial-ethnic minority groups, should be included in future research. Use of nonmedical care managers in integrated depression treatment models in HIV clinics deserves further study, particularly in clinics where nurse time may not be abundant.

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