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Integrated Care for Depression in Older Primary Care Patients

Soins intégrés de la dépression chez des patients âgés dans les soins de premiére ligne

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Abstract

For decades, depression in older adults was overlooked and not treated. Most treatment was by primary care providers and typically poorly managed. Recent interventions that integrate mental health services into primary care have increased the number of patients who are treated for depression and the quality of that treatment. The most effective models involve systematic depression screening and monitoring, multidisciplinary teams that include primary care providers and mental health specialists, a depression care manager to work directly with patients over time and the use of guideline-based depression treatment. The article reviews the challenges and opportunities for providing high-quality depression treatment in primary care; describes the 3 major integrated care interventions, PRISM-E, IMPACT, and PROSPECT; reviews the evidence of their effectiveness, and adaptations of the model for other conditions and settings; and explores strategies to increase their scalability into real world practice.

Abrégé

Pendant des décennies, la dépression chez les adultes âgés a été ignorée et non traitée. Le traitement était majoritairement prodigué par des prestataires de soins de première ligne et habituellement mal pris en charge. Les interventions récentes qui intègrent les services de santé mentale aux soins de première ligne ont augmenté le nombre de patients qui sont traités pour la dépression ainsi que la qualité de ce traitement. Les modèles les plus efficaces emploient le dépistage et la surveillance systématiques de la dépression, des équipes multidisciplinaires qui comprennent des prestataires de soins de première ligne et des spécialistes de la santé mentale, un gestionnaire des soins de la dépression qui travaille directement avec les patients avec le temps et utilise le traitement de la dépression basé sur les lignes directrices. L'article examine les difficultés et les possibilités d'offrir un traitement de la dépression de grande qualité dans les soins de première ligne, puis décrit les trois principales interventions de soins intégrés, qui sont PRISM-E, IMPACT, et PROSPECT, présente les données probantes de leur efficacité, les adaptations du modèle à d'autres conditions et contextes, et les stratégies pour accroître leur flexibilité dans la pratique réelle.

Keywords

Depression, Older adults, Integrated Care, Collaborative Care, Care Management

Introduction

Most older adults receive their health care from primary care providers. A considerable number of these patients have clinically meaningful depressive symptoms that undermine their overall health. Interventions that integrate depression treatment and management into primary care can mitigate many of the barriers to meeting the mental health needs of older adults. The following sections provide an overview of this challenge, describe primary care interventions that target depression in older patients, and provide evidence that supports their implementation.

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Depression in Older Adults

Depression is a major contributor to the global burden of disease, reflecting both its high prevalence and its consequences across the age span.[1] Depression in later life increases personal suffering, caregiver burden, and the risk of medical illness, disability, social isolation, institutionalisation, falls, hospitalisation, suicide, and non-suicide mortality.[2] Depression has a greater impact on health than chronic diseases, such as angina, arthritis, asthma, or diabetes.[3] It adversely affects the prognosis of comorbid diseases, as suggested by prolonged recovery from illness, increased medical complications, and earlier death in patients with depression.[4]

From both a clinical and public-health perspective, primary care is an ideal setting for interventions aimed at reducing the burden of depression in later life. One reason is the high prevalence of depression. Medical illness and disability are common in older primary care patients and are also risk factors for depression, resulting in a high concentration of depression in primary care.[2] Unlike the relatively low rates of depressive disorders in community samples of older adults,[5] rates are at least 2-times higher among primary care and other medical settings, with 6% to 9% meeting the criteria for major depression and 17% more patients having less severe depressive symptoms and signs.[6,7] Although the prevalence of depression is even higher in hospitalised and home health patients, the total number of older adults who use primary care far exceeds those settings.[8] Thus interventions within primary care settings can reach higher numbers of depressed older adults and have a meaningful impact on the overall burden of depression in the older population.

The second reason why primary care is an ideal setting for interventions is that primary care has long served as the 'de facto' mental health care system, particularly for older adults.[9] Most older adults who are treated for depression receive their care from primary care providers.[10] The predominate role of primary care in the treatment of later life depression reflects several factors, starting with patient preferences. Many older adults prefer to be treated for depression by primary care providers than mental health specialists.[11] The development of safer antidepressant medications and depression treatment guidelines have also made it easier for primary care providers to treat their patients for depression.[12,13] Another reason for treating depression in primary care is the limited availability of mental health specialists with expertise in working with older adults.[14]

Nonetheless, treating depression in primary care settings can be challenging due to the chronicity of depression, the complexities of treatment, and factors undermining patients' symptom reporting and treatment engagement. So, despite a rise in antidepressant prescriptions over the past decade,[15,16] most older adults with clinically significant depression do not receive guideline consistent—if any—depression treatment.[17-20] In some cases, depression is untreated because clinicians do not recognize depressive symptoms, attribute them to a medical illness, or chose to focus on competing clinical demands. In others, patients do not report depressive symptoms because they view them as a character weakness or normal signs of aging. Other patients refuse depression treatment because they worry about stigma or have greater reliance on faith than medicine.[21,22]

Many older primary care patients remain symptomatic despite treatment. Sometimes, patients are not taking medication as prescribed. Or, physicians start and then leave patients on sub-therapeutic doses. Very often, patients have been kept to a recommended course of treatment despite not responding. Fewer than half of older patients respond to or reach full remission from their first course of antidepressant treatment.[23] Finding an effective antidepressant regimen for a specific patient can take time and may involve changing doses, changing to a different antidepressant, or augmenting one medication with another.[24]

In sum, primary care has the potential for meeting the mental health needs of a large proportion of depressed older adults that is also consistent with their preferences. Models of integrated care, described below, build on these strengths while addressing challenges to delivering quality depression treatment in primary care.

Evidence-Based Models of Integrated Care for Depressed Older Adults

Models of integrated care are designed to promote collaboration between primary care providers and mental health specialists in planning and treating depressed older adults. Research studies have provided evidence for the effects of integrated care in improving access, quality, and outcomes of depression treatment for older adults. Most of these studies build on 3 large, randomised trials of integrated care conducted in the early 1990s in the USA. The interventions and outcomes are described below.

Co-location

This approach involves offering specialised mental health services and primary care in the same physical setting. In applications of this approach, the extent to which the 2 sets of services are truly integrated (e.g., care coordination, sharing clinical information scheduling) can vary. The effectiveness of co-location with older patients was tested by the PRISM-E study, below.

PRISM-E (Primary Care Research in Substance Abuse and Mental Health for Elders). The key features of the PRISM-E integrated model of care are: 1) co-location of a mental health specialist (social workers, psychologists, psychiatric nurses) in primary care clinics; 2) brief waiting periods between referral and receiving the first specialty care visit; and 3) structured communication between patients' primary care providers and mental health care specialists. The services available to depressed patients include medication

management, psychotherapy, and case management. No specific treatment algorithm was used.[25]

The PRISM-E effectiveness trial was conducted in 10 diverse primary care clinics across the USA.[26,27] A total of 1,297 depressed older patients were randomised on site to the co-location model or the enhanced referral model. Enhanced referral involved referral to an off-site specialty mental health service that, like PRISM-E, offered a brief waiting period and transportation support. Treatment engagement, defined as attendance at the mental health appointment, was significantly greater in depressed patients randomised to the integrated model than enhanced referral (75.2% v. 47.7%).[26] The integrated model was also associated with reduced time between the referral and visit. Clinical outcomes, including rates of remission from depression and symptoms reduction, did not differ between the 2 models.[27]

Collaborative Care

Collaborative depression care,[28] is an evidence-based approach effective in improving quality of care and clinical outcomes in geriatric primary care patients.[29,30] Variants of the model have been explored through many meta-analyses, cost effectiveness, quality improvement, and implementation initiatives.[28,31-38]

The label 'Collaborate Care' refers to a specific set of depression interventions developed directly from the Chronic Care Model,[39,40] but is also used more generally to refer to complex system interventions that meet 4 key criteria: 1) a multi-professional approach to patient care, 2) a structure management plan, 3) scheduled patient follow-ups, and 4) enhanced inter-professional communication.[41] Its cornerstone is managing depression as a chronic rather than acute illness. Thus, patients benefit from not only active treatments (e.g., pharmacological and/or psychotherapy) but also ongoing care, such as monitoring symptoms and adherence and teaching patient self-management skills. Primary care clinicians are supported by a care manager who provides much of the direct care and have access to mental health specialists for consultation as needed.[42,43] Other key elements of collaborative care models are reliance on evidence-based treatment guidelines and administrative strategies to support the program.

IMPACT (Improving Mood-Promoting Access to Collaborative Treatment). The IMPACT model was developed at the University of Washington as a modification of their Collaborative Care model developed for depression in younger adults.[44] Based on the principles of effective chronic illness care, IMPACT focussed on defined patient populations tracked in a registry, measurement-based practice, and treatment to target. Trained primary care providers and embedded behavioural health professionals provided evidence-based medication or psychosocial treatments, supported by regular psychiatric case consultation and treatment adjustment for patients who did not improve as expected.

The IMPACT intervention, as originally tested, was delivered by a team including a depression care manager (usually a primary care nurse), the patient's primary care doctor, a consulting psychiatrist, and a liaison primary care doctor. The depression care manager was based in the primary care clinic and worked with patients and their doctors for up to 12 mo to establish a treatment plan that met patient preferences and followed a stepped care algorithm. Treatment options included pharmacotherapy, behavioural activation, and problem-solving treatment (a brief, behavioural based psychotherapy).[45] The intervention included proactive follow-up and outcome monitoring by the care manager. The intervention lasted 1 y.[30]

The IMPACT model has evolved over time as investigators focus on disseminating the model and helping organizations with its implementation. IMPACT investigators define 5 core principles that should inform implementation in the real world:[46] 1) patient-centred team care focussed on the collaboration between primary care and behavioural health providers using shared care plans that incorporate patient goals; 2) population-based care that uses registries for patient monitoring and consultation; 3) measurement-based treatment that targets patient-specific outcomes that are routinely measured by evidence-based tools, with treatments are changed if outcomes are not reached; 4) evidence-based care, so that patients are offered treatments with research evidence to support their efficacy in treating depression; and 5) accountable care, where providers are reimbursed for quality of care and clinical outcomes.

The IMPACT effectiveness trial was conducted in 18 primary care clinics. Patients aged 60 y and over were recruited by screening older patients for depression and by physician referrals. Patients who met structure diagnostic criteria for major depression or dysthymic disorder were randomly assigned to the IMPACT model or usual care. The study enrolled and randomised 1,801 patients. Patients received research assessments at the 3-, 6-, and 12-mo follow-up. The intervention lasted up to 12 mo.[30]

The principal findings of the IMPACT trial were that patients receiving usual care randomised to the IMPACT model were 3.5-times more likely to respond to treatment (50% or more reduction in depressive symptoms) at 12 mo. Intervention patients, compared to usual care, were also 3.0-times more likely to receive depression treatment, 3.4-times more likely to report satisfaction with depression care, and had significantly greater decline in depression severity.[30] At 24 mo (12 mo after the intervention ended), patients in the IMPACT group v. usual care had better outcomes in terms of continuing antidepressant treatment, depression severity, and remission from depression.[27]

PROSPECT (Prevention of Suicide in Primary Care Elderly: Clinical Trial). The PROSPECT intervention was designed as a population-based, suicide-risk reduction strategy that targeted depression as the primary risk factor for suicide in older adults. Like IMPACT, the PROSPECT intervention drew on

principals of the Chronic Care Model as well as the timely use of evidence-based treatment guidelines for older adults.

The intervention included on-site care managers who were social workers, nurses, and psychologists trained in PROSPECT procedures. They collaborated with physicians and helped them recognize depression, provided algorithm-based recommendations, and monitored depressive symptoms and side effects, and provided follow-up over 24 mo. The physicians followed standard treatment guidelines for acute, continuation, and maintenance treatment of depression modified for use in older patients.[47] The first step of the algorithm was the selective serotonin inhibitor citalopram. The depression care managers were trained in interpersonal psychotherapy (IPT)[48] and offered this treatment to patients who refused or did not respond to medication. Psychiatrist investigators provided weekly group supervision to care managers and were available by telephone. PROSPECT was designed as a 24-mo intervention and provided acute, continuation and maintenance treatment for depression.

The PROSPECT effectiveness trial was conducted across 20 primary care clinics. The unit of randomisation was the clinic. The study used a 2-stage sampling design to screen patients for depression; the final sample included 1,238 patients age 65 y and over, about half of whom, by design, did not have a diagnosis of major or minor depression. These patients were important to analyses of long-term outcomes, such as mortality (described below). Patients were followed by annual in-person interviews as well as telephone assessments at 4, 8 and 18 mo.

The principal findings of the PROSPECT trial were that depressed patients of practices randomised to the PROSPECT intervention had a higher likelihood of receiving antidepressant treatment, lower depressive symptomatology, a higher rate of response and remission, and a greater decline in suicidal ideation over 12 and 24 mo than usual care patients.[29,49] At any assessment point, 85% to 89% of intervention patients received antidepressant treatment compared to 49% to 59% of usual care patients. Severity of depression remained lower in PROSPECT than usual care patients throughout the 24 mo. The intervention was most effective in patients with major depression for whom treatment response and remission occurred earlier compared to usual care patients. Increases in response and remission rates continued in intervention patients between the 18th and 24th mo of follow-up whereas, in contrast, there was a reduction or no appreciable increase in response and remission rates in usual care patients. The intervention had no advantages among patients with minor depression.

Interpreting the Evidence

All 3 trials demonstrated that co-locating mental health specialists into primary care settings may increase patients' access to care and be acceptable to patients, but co-location alone may not affect clinical outcomes. The IMPACT and PROSPECT trials also demonstrated that primary care providers could successfully care for their depressed older patients within multi-component models that approach depression as a chronic disease, emphasised collaboration, and used evidence-based guidelines for treating depression. Both models included a masters-level depression care manager to facilitate coordination with specialists, manage medication, systematically monitor depression severity using a standard assessment, educate patients, and encourage self-management. Both offered evidence-based psychotherapy; although, this was not the first-level recommendation in the PROSPECT model.[42]

Despite differences in trial design features (e.g., unit of randomisation, sample selection, clinical measures), both studies reported comparable short-term (3 to 4 mo) effects on response rates (i.e., 50% decline in depression severity) in their Intervention group v. Usual Care group (IMPACT: 31.8% v. 14.8%; PROSPECT: 41.0% v. 23.8%) among patients with major depression.[29,30] The length of the intervention differed (IMPACT: 12 mo; PROSPECT 24 mo), but both studies reported significant differences between groups at the 24-mo follow-up (IMPACT: 15.9% v. 10.2%; PROSPECT: 45.4% v. 31.5%).[49,50]

Other Evidence

Other evidence that integrated models are effective in treating depression in older primary care patients comes from numerous studies that did not focus specifically on older adults but reported relevant findings. Recent systematic reviews and meta-analyses from a range of trials (ranging from 53 to 74 studies per review agree that collaborative care is effective for depressed primary care patients across the adult age span.[41,43,51,52] Some evidence suggests that the effect sizes of these studies (most not specifically tailored to the needs of older adults) were lower in older compared with younger adults but still clinically meaningful.[43]

Larger effect sizes were reported in patients with chronic physical conditions that disproportionally affect older individuals.[51] The results from collaborative depression interventions tailored for specific subgroups of patients reported positive effects for patients with long-term, chronic conditions generally[51,53] or specific conditions, such as diabetes,[54,55] cancer,[56] coronary artery bypass graft surgery,[57] or chronic pain.[58] Relevant to older adults, these patients are typically 10 y older than those in trials that do not select patients based on medical status.[44,53] A meta-analysis limited to studies of patients with a chronic health problem also found uniform agreement of the effectiveness of integrated care for depression in terms of symptom response.[52]

Following the publication of the primary outcomes of the IMPACT and PROSPECT studies, investigators have explored whether effectiveness depends on clinical or sociodemographic patient characteristics. They found that these models have a greater impact on patients with more severe depression 29 and with lower socioeconomic status (SES),[59,60] but little evidence that the effect varies by race.[59,61]

Mortality and Other Outcomes

Investigators from both the IMPACT and PROSPECT studies have examined the impact of their interventions on other clinically relevant outcomes. Both were associated with reduction in suicide ideation over time.[29,62] These and other studies have demonstrated positive effects on physical function, self-efficacy, and overall quality of life.[63]

PROSPECT investigators assessed the long-term impact of the intervention on mortality risk over 98 mo. Among patients with major depression, PROSPECT patients were 24% less likely to die than those receiving usual care. Risk of mortality did not differ between intervention and usual care among older adults without depression.[64,65] These data also demonstrated that passive suicide ideation (e.g., the wish to die) was associated with increased mortality among patients with and without depression in usual care and among patients without depression in the intervention group. In contrast, the wish to die was not associated with increased morality risk among depressed patients in the intervention practices.[66]

The collaborative depression care model has been adapted for older adults with other mental health conditions. The CALM (Coordinated Anxiety Learning and Management) intervention was designed for older primary care patients with anxiety disorders. A randomised trial demonstrated the intervention's overall effectiveness in reducing symptoms of anxiety. The impact was significant for patients with social anxiety disorder or post-traumatic stress disorder but not patients with panic or generalised anxiety disorder.[67]

The effectiveness of collaborative care for primary care patients with Alzheimer disease was tested in a randomised trial of 153 patients and their caregivers. Similar to collaborative depression care, the Alzheimer collaborative care intervention included an interdisciplinary team led by an advanced practice nurse who worked with both family and primary care providers. Treatment was based on standard protocols. Compared to patients receiving enhanced usual care, patients in the collaborative care group had significantly fewer behavioural and psychological symptoms of dementia at 12 and 18 mo. Their caregivers reported significantly less distress and fewer symptoms of depression.[68]

Two Home-Based Models

Although collaborative care was developed for primary care settings, many elements are relevant to home-based care for depressed older adults with limited mobility or other disabilities. Randomised trials have demonstrated the effectiveness of 2 different collaborative care interventions delivered in the home for older adults. The PEARLS (Program to Encourage Active, Rewarding Lives for Seniors) intervention provides a home-based program of depression care management and brief behavioural psychotherapy. The effectiveness trial recruited study participants from community senior centres. It randomised 138 patients aged 60 y and older with minor depression or dysthymia to either the PEARLS program or usual care. The program was associated with a significant reduction in depressive symptoms, and depression remission and improved quality of life at 1 y.[69]

The Depression CAREPATH (Care for Patients at Home) intervention was developed in partnership with home health providers and designed to be integrated into routine care of medically ill patients. Rather than designating a depression care manager, the CAREPATH model teaches each nurse to manage depression themselves during the home visit. The effectiveness study was conducted in 6 home health agencies and randomised teams of nurses to the intervention or enhanced usual care. The study recruited 306 home health patients aged 65 y or older who screened positive for depression. Among patients with moderate or severe depression, intervention patients showed a significantly greater decrease in depression severity compare to usual care over 1 y. There was no effect with patients who screened positive for depression but reported only mild symptoms.[70] Relevant to its potential for scalability, the intervention did not affect patient's length of care, the total number of home visits, or the average duration of home visits.

Other Delivery Strategies

Although considerable evidence supports the clinical effectiveness of integrated models of depression care, its implementation and sustainability in real-world practices remain a challenge. The IMPACT investigators have developed numerous resources and programs to support implementation.[71] Other investigators have developed new strategies for delivering the model such as using: 1) virtual teams and telephone-based approaches for communication among the depression care management, primary care provider, and mental health specialist; [72,73] 2) telemedicine technology to facilitate contact between the depression care management and patient;[74] and 3) lay health counsellors, rather than masters-level specialists, as depression care managers. [75] Clinical trials of these interventions provide promising evidence that creative strategies for organizing and delivering integrated depression care may be both clinically effective and scalable.

Conclusion

Primary care is well positioned to reduce the burden of depression in older adults because it offers access to many depressed older adults, older adults tend to prefer depression treatment by their primary care provider, and primary care providers understand many of the medical conditions that commonly co-occur with later life depression. Integrated models of care that emphasize collaboration between primary care providers, mental health specialists, and patients in the delivery of evidence-based depression treatment over time have demonstrated success in overcoming many of the challenges of treating depression in primary care. The outcomes provide evidence that integrated care can improve the quality of care and outcomes in later life depression.

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