Screening for Depression in Primary Care: A Critical Review of the Literature

J. Hatfield, B.S., J.K. Hirsch, Ph.D., P.L. Visser, B.S., S. Kaye, A. Peake, & H. Mason

Laboratory of Rural Psychological and Physical Health
Department of Psychology, East Tennessee State University

ETSU East Tennessee State University

INTRODUCTION

•Depression is one of the most prevalent and costly disorders in the United States, estimated at $44 billion in direct and indirect costs.

•Depression is 4th leading cause of global mortality and disability, second only to ischemic heart disease in years of healthy life lost.

•Prevalence of depression in community is 2-3% for males and 4-9% for females; Primary care prevalence rates range from 5-10%.

•Most depressed individuals visit a primary care physician during the course of their depressive episode, making primary care settings an important "point of capture" for some groups who might not otherwise seek mental health care, such as older adults.

•Research suggests that that usual care by primary care physicians fails to recognize 30% to 50% of depressed patients; many patients, such as the elderly, present with somatic symptoms, potentially distracting from mental health diagnoses.

•Undetected and untreated, depression can strain physician's time and ability to deliver effective treatments as well as exacerbate a patient's other medical conditions.

•Primary care settings may provide the best opportunity for screening and treatment of depression due to decreased stigma and expense, and coordinated care.

•Accurate and valid depression screens have been developed, yet there are barriers, particularly in rural areas, that might preclude effective screening and intervention.

•We reviewed the literature on depression screening in primary care, with an emphasis on rural settings.

TYPES OF DEPRESSION SCREENING

Two broad categories can be applied to screening for mood disorders, including:

•1) Assessment and tracking of **severity** of depressive symptoms.

•2) Tentative **diagnosis** of presence of major depressive disorder, as defined by DSM-IV.

Contact Information: Jameson K. Hirsch, Ph.D., Department of Psychology, East Tennessee State University, P.O. Box 70649, Johnson City, TN 37614; Email: hirsch@etsu.edu; Phone: (423) 439-4463

METHODS

•All studies focused on screening for depression in primary care were eligible for inclusion.

•Electronic search of MEDLINE (1966–09/2008) and PsycInfo (1967–09/2008) was conducted.

•Search strategies used combinations of these keywords/index terms: primary care, family medicine, depression, screening, rural, and mood disorder.

RESULTS OF SCREENING

•Approximately 20% of screened patients meet criteria for major depression, suggesting that screening results may be a good predictor of a mood disorder.

•Screening for anxiety and somatic symptoms may improve detection of depression.

•Screening and diagnosis, with follow-up and treatment, may result in decreased depression.

•Screening has been successfully implemented across patient types (age, gender) and settings (clinics, palliative care), and cross-culturally.

•Gender, age, and subtype and severity of depression influence choice of screening instrument; however, brief measures exist that can assess both severity and achieve a diagnosis of depression.

RURAL SCREENING

•Rural areas often have equal or higher rates of depression and suicide than urban areas.

•Rural males reporting "chest pain" or fatigue, a history of depression or recent illness, or receipt of disability benefits, had greater depression.

•Depression rates for rural, female primary care patients ranges from 14% (Black) to 35% (White); this is believed be an underestimate.

•46% of rural heart patients (ACS) reported depression, and screening revealed that rural caregivers were also at risk for depression.

•In SW Virginia, 33% of community patients reported that they or a family member were experiencing depression, but were untreated.

•Rural physician assessments of depression were less accurate than patient self-reports; screening instruments can improve physician accuracy.

•Due to few referral sources, rural physicians are more likely than their urban counterparts to treat depression psychopharmacologically.

•Encouragingly, in one rural study, over 60% of physicians, physician's assistants, and nurse practitioners reported engaging in routine depression screening; in another, 43% of rural nurses reported screening for depression.

•Educating physicians about mental health resulted in increased knowledge and recognition of depression, and improved treatment.

DISCUSSION

•Screening measures appear to predict major depression; however, mixed findings exist regarding role in patient care and outcomes.

•The US Preventive Services Task Force recommend a 2-item depression screen assessing mood and anhedonia, and follow-up services, for adults; however, little empirical support exists for screening in children and adolescents.

•One-time screenings are cost effective, but physicians should screen more often based on risk factors, including chronic illness and pain, somatic symptoms, isolation or stressful home situations, and in postnatal and elderly patients.

•Brief screening measures (1 or 2-items) are effective, but may not accurately diagnose depression; dual-purpose measures assessing severity and confirming diagnosis are preferred.

•In-clinic, self-report screening strategies are the most effective in detection of depression, and many patients report an improved perception of care with screening inclusion.

•Electronic Medical Records that communicate screening results to physicians and nurses are an effective way to facilitate depression treatment, and automated scanning and transfer of screening results to EMRs is a possibility.

•Screening, followed by detailed assessment if necessary, and paired with empirically-supported treatments, improves outcomes.

SCREENING BARRIERS

▪Screening inventories may yield too many "false positives" to be efficient for routine use.

▪Lack of physician education on depression, at-risk populations, diagnostic tools, treatment protocols and follow-up and referral procedures.

▪Poverty, lack of insurance, isolation, few treatment and referral options, and sociocultural factors may limit rural screening opportunities.

▪Stigma associated with diagnosis and treatment of mental illness may hamper screening efforts and patient response.

Scale Name	Severity Measure	Diagnostic Measure	Primary Care Validity	Rural Validity	Rural Primary Care Utility
BDI: Beck Depression Inventory	O		O		O
CES-D: Center for Epidemiological Studies Depression Scale	O		O		O
GHQ-12: General Health Questionnaire	O		O	O	
PHQ-9: Patient Health Questionnaire	O	O	O		O
SDS: Zung Self-Rating Depression Scale	O		O	O	O
PHQ-2: Patient Health Questionnaire	2-item Prescreener		O		O
GDS: Geriatric Depression Scale		O	O	O	O
PC-SAD: Primary Care Screener for Affective Disorders		O	O		