

Journal of Psychiatry and Behavioral Health Forecast

Depression and Primary Care: A Review of the Prevalence, Burden, Costs, Screening, and Treatment Strategies

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Abstract

Depression is comprised of a group of chronic disorders with a substantial burden of disease, accounting for 598-738 per 100,000 years lived with disability and an enormous economic cost worldwide (US\$83 billion). While this group of disorders affects a large number of people and current guidelines recommend routine depression screening in primary care settings, providers are often inadequately prepared to identify those individuals at risk and lack guidance on managing the disorder in a primary care setting. Here we outline several screening instruments available to the primary care community and provide broad guidance and resources for developing a treatment strategy for depression. These tools and guidelines will better prepare primary care providers to comply with current recommendations and provide high quality, evidence-based care to their patients.

Keywords: Depression; Primary Care; Psychosomatic; Burden of Disease

Introduction

Depressive disorders are a leading healthcare concern around the world affecting 4.4% of the population [1] and accounting for between 598 and 738 years lived with disability (YLDs; per 100,000 years) [1,2]. While a psychiatric disease, depression is increasing being treated in the primary care setting [3]. Primary care providers (PCPs) are often inadequately equipped to identify these disorders [4]. Fortunately, there are efficacious and cost-effective tools available to assist in the screening of depression, allowing PCPs to identify those individuals in greatest need of further evaluation and potential referral to psychiatric care [5,6]. This article will review the prevalence and burden of depressive disorders and discuss screening tools and management approaches for the primary care setting.

Prevalence of Depression

Psychiatric illness is increasingly common with current estimates of depression at 4.4% of the global population, representing roughly 322 million people [1]. The prevalence of depression is between 14.6% and 22.6% among primary care patients [7,8]. However, depression is likely under diagnosed. Presenting with a variety of somatic symptoms [9], it predisposes to be seen in primary care settings. Tylee and Gandhi [9] estimate that roughly 66% of patients with depression present with predominantly somatic symptoms, including fatigue, sleep disturbances, appetite changes, palpitations, and concomitant organic symptoms (e.g., headache, backache, arthritis). The chronic nature of depression and the large number of people affected contribute to both the social and economic burden of the disease.

Burden & Costs of Depression

Years lived with disability (YLDs) is widely used metric to measure total illness burden within a population [10]. Psychiatric conditions account for 22.9%, with depression accounting for a substantial portion (42.5%) of the total YLD [11]. Since 1990, depression has repeatedly ranked among the top ten causes of disability worldwide [2] accounting for between 598 and 738 per 100,000 years (Figure 1). Psychiatric conditions are among the top five medical costs globally, at approximately US\$2.5 trillion dollars. Not surprisingly, depression makes up a significant proportion of this economic burden, with total associated costs of US\$83 billion [12]. The widespread prevalence and high economic costs have made depression a public health target, promoting trends toward improved detection and earlier treatment [13].

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Received Date: 28 Sep 2017

Accepted Date: 15 Jan 2018

Published Date: 26 Jan 2018

Citation: Cho SH, Crisafio A.

Depression and Primary Care: A Review of the Prevalence, Burden, Costs, Screening, and Treatment Strategies. *J Psychiatry Behav Health Forecast*. 2018; 1(1): 1002.

ISSN 2643-802X

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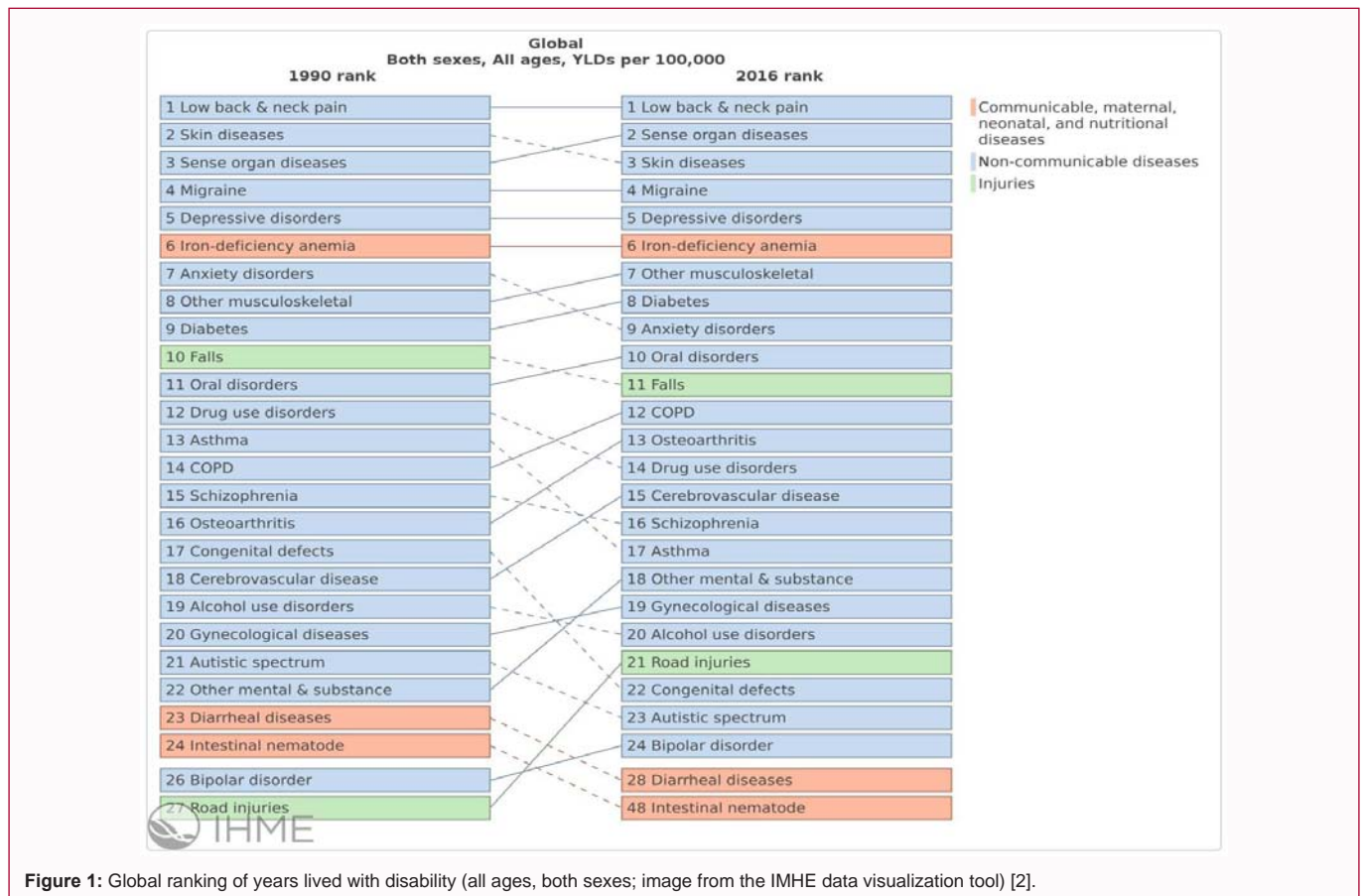


Figure 1: Global ranking of years lived with disability (all ages, both sexes; image from the IMHE data visualization tool) [2].

Screening Tools for Depression

While depression is common among primary care patients, the rate of diagnosis by PCPs is estimated to be only 50% [4]. Screening has been shown to improve rates of diagnosis [14] with clinical outcomes improving when screening is combined with adequate support systems for treatment and follow-up [15,16]. Based on this evidence, the US Preventative Services Task Force (USPSTF) recommends depression screening in the general adult population and in adolescents ages 12-18 years [13]. The following instruments are freely available, brief, self-administered, and well-validated.

Patient Health Questionnaire-9 (PHQ-9): This nine-item screen has sensitivity of 88% and specificity of 88% for major depression. The items assess various depression criteria, including functional impairment, and can monitor symptom severity over time [17,18].

Patient Health Questionnaire-2 (PHQ-2): Comprised of the first two questions in the PHQ-9, the PHQ-2 has a sensitivity of 83% and specificity of 92% [19].

World Health Organization Well-Being Index (WHO-5): This five item index has a high sensitivity of 93% but with a specificity of 64% [20]. There is a lack of evidence to support its use in monitoring symptoms severity and treatment response.

Geriatric Depression Scale-15 (GDS-15): This is recommended for elderly patient in primary care; it has a sensitivity of 81.3% and specificity of 78.4% and increases the utility of screening with little added time invested [21,22].

Edinburgh Postnatal Depression Scale (EPDS): This scale is

widely recommended for screening and monitoring depression in perinatal women and is significantly more sensitive than the PHQ-9 for this population [23].

Primary care providers should select the screening instrument that best fits individual practice needs and whose accuracy is well-established. Ideally, screening should easily incorporate into clinic workflow with minimal cost and administrative burden. Using a well-established screening measure will provide the PCP with confidence that they are reliably screening for depression.

Principles of Depression Management in Primary Care

Integrative care models incorporate collaboration with mental health specialists, measurement based stepped care, and treatment to target to improve patients' health and functioning and reduce overall health care costs [24]. Primary care providers with limited resources can effectively manage depression by following general principles of these integrated models [17,25,26].

Establish accurate diagnosis with further assessment: Screening tools identify elevated risk and are insufficient for diagnosis [27]. Symptom severity, functional impairment, and alternative etiologies (including non-psychiatric) must be explored. It is especially important for management to screen for bipolar disorder [28,29].

Assess suicide risk: Consider risk and protective factors, suicidal intent and means (such as gun access), and interventions to mitigate risk. Tools and guides to suicide risk assessment are available [30,31].

Identify treatment options: The goal of depression treatment

should be complete symptom remission, as even mild symptoms may significantly impair function and quality of life. Base treatment on symptom severity and patient preference, as well as cost and availability. Engage the patient in choosing antidepressant based on side effects, relevant personal or family history of treatment response, and potential drug-drug interaction.

Psychoeducation and shared decision making: Patient education empowers patients to share and invest in treatment decisions and facilitates treatment adherence by managing the patient's expectations.

Close follow up and treatment modification: Early and frequent monitoring enables rapid resolution of treatment issues and facilitates treatment adjustment for lack of response. Screening tools can provide serial assessments over time.

Consultation or referral: Some patients may fail to improve despite multiple treatment trials. Consultation with a mental health specialist can provide additional recommendations and identify severe illness appropriate for specialist care.

Though not discussed here, several excellent resources review in further detail aspects of depression management in primary care, including differential diagnosis [32]; acute treatment initiation, assessment, and adjustment [29]; symptom specific augmentation strategies [26]; and common questions about pharmacologic treatment [33].

Conclusions

Depression is highly prevalent and increasingly treated in the primary care setting. The heavy burden and associated costs have necessitated new approaches to diagnosis and management. Integrated care models for depression treatment mirror aspects of chronic disease management common in primary care: screening, assessment, patient education and engagement, treatment to target, monitoring, and measurement of treatment response. Implementation of feasible and effective screening processes, in combination with systematic practices for diagnosis, treatment, and follow up, are necessary to improve treatment outcomes and relieve this global burden.

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