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**Title**

*Identifying patients at risk of major depression in a primary care setting*

**Priority 1 (Research Category)**

Behavioral, psychosocial, and mental illness

**Presenters**

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**Abstract**

Context: Major depression affects over 8% of the US adult population. Since most patients are first seen by their primary care provider, screening for depression at the primary care setting provides an opportunity for early detection and management. The 9-item Patient Health Questionnaire (PHQ-9) is one of the most widely used self-administered tools for depression screening in primary care. Several mental health disorders as well chronic comorbidities may be associated with depression and could mimic depression. Objective: To determine demographic and clinical covariates associated with risk of major depression. Study design and Analysis: We conducted a cross-sectional analytic study using randomly selected data of patients seen at a suburban primary care clinic between January 1, 2019 and August 31, 2021. Patients were 16 years and older and had been screened for depression using the PHQ-9 tool. Using electronic health records, we collected information on age, sex, race, comorbidities (anxiety, schizophrenia, hypertension, hypothyroidism, and diabetes) and PHQ-9 scores. The patients were categorized into 2: at risk of major depression (PHQ-9  $\geq 10$ ) and not at risk (PHQ-9  $< 10$ ). We analyzed the data descriptively and explored associations between risk of major depression and demographic and clinical covariates, using logistic regression. Associations were expressed as Odds ratios (OR) and 95% Confidence intervals (95% CI). Setting: A suburban primary care clinic. Population: Patients 16 years and older. Intervention/Instrument: PHQ-9 tool. Outcome Measures: Major depression risk. Results: Of the 1,168 unique patients selected, 837 (72%) were female, 620 (53%) were African American, 276 (24%) were Caucasian and 272 (23%) were in "Other" category. Mean age was  $50.5 \pm 17.5$  years. Risk of major depression was 22%, 2.4% had anxiety disorder, 1.2%, schizophrenia, 8.5%, hypothyroidism, 45%, hypertension and 19%, diabetes. In multivariate logistic regression analysis, female sex (OR=1.52, 95% CI=1.09-2.14), age (OR=0.99, 95%CI=0.98-0.99), anxiety (OR=3.92, 95%CI=1.79-8.56), schizophrenia (OR=3.28, 95%CI=1.08-9.94), and diabetes (OR=1.46, 95%CI= 1.01-2.11), were significantly associated with risk of major depression. Conclusions: Females, younger age, patients with anxiety, schizophrenia and diabetes may be at a higher risk for major depression. Awareness of these factors will help primary care providers identify those most likely to be at risk of major depression