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## Relationships Between Adolescent Pregnancy, Income Inequality, and Incident Depression from a Panel Study in South Africa from 2013-2017

### Abstract

Unipolar depressive disorders were the second leading cause of morbidity among adolescent girls in Africa in 2012. Yet, little research had been conducted in sub-Saharan Africa to examine correlates of depression in adolescent girls. This study aimed to examine relationships between adolescent pregnancy, income inequality, and depression through a retrospective cohort analysis in South Africa from 2013 to 2017. Members of this cohort were between the ages of 15 and 19 at their baseline interview for the National Income Dynamics Study (NIDS) (N = 1,660).

Adolescents who had experienced a pregnancy were compared with adolescents who had not been pregnant over two years of follow-up. Logistic and linear regression models were employed to examine participants' risk of the onset of depression and depressive symptom severity using the Centre for Epidemiological Studies Depression Scale. The incidence of depression in the study sample was 18.4%, with 306 having developed depression. Results suggested that neither adolescent pregnancy ( $P = 0.093$ ; 95% CI: 0.935 , 2.387) nor income inequality ( $P = 0.517$ ; 95% CI: 0.945 , 1.029) were related to incident depression in this cohort. There was marginally significant evidence, however, that adolescent pregnancy was related to depressive symptom severity ( $P = 0.055$ ; 95% CI: -0.014 , 1.441). Further, none of the selected covariates showed significant relationships with either outcome. These findings were consistent with other studies looking at these exposures separately. This study aims to fill the gap in the literature on

adolescent depression in South Africa. Further research, particularly prospective cohort studies, should be conducted to examine correlates of depression among adolescents in sub-Saharan Africa. Such observational research may elucidate risk factors for incident depression in this group and inform interventions for depression.