Aim Despite the extensive health promotion interventions to improve contraceptive uptake among sexually active adolescents, well-informed adolescents may still undertake poor contraceptive choices due to poor mental health. This study primarily sought to examine the effect of depression in adolescence on future use of modern contraception in young adulthood.

Methods We used three (i.e., 2002, 2005 and 2007) waves of the Cebu Longitudinal Health and Nutrition Survey, which used multi-stage sample of mother-child dyads from a metropolitan area in the Philippines.

In our analysis, we included a total of 453 male and non-pregnant female index children (IC) who ever had sexual activity and were not using any modern contraceptives at 18 years of age. Depression was measured when IC were approximately 18, 21 and 24 years old using the 16-item Center for Epidemiologic Studies-Depression (CES-D) Scale.

We employed a series of multivariate logistic regression analyses to examine the longitudinal effect of depression on contraceptive use. All estimates obtained were adjusted for sex, age at first intercourse, family planning awareness, religiosity, number of past pregnancies for adolescent girls or times impregnated someone for adolescent boys, number of sexual partners, and school enrolment.

Results Approximately one out of three sexually active adolescents exhibited depressive symptoms at 18 years old (CES-D >10). High proportion of non-users at 21 years were observed among those with depression (91.06%) unlike those without (79.29%) at 18 years.

Adjusted analyses showed a strong link between depressive symptoms and non-use of contraception. Adolescents with depressive symptoms at 18 years were approximately 3 times more likely not to use modern contraception at 21 years of age (Adjusted odds ratio (AOR)=3.01; 95% Confidence Interval (95% CI)= 1.44-6.23) and to consistently not use contraception at 21 and 24 years (AOR=2.91; 95% CI=1.03-8.22). Persistent depression at 21 years increased the risk of contraceptive non-use at 21 years by 3.36 times (Adjusted Risk Ratio=3.36; 95% CI=1.04-10.84).

Conclusion Depressive symptoms strongly predicts young people’s decision to use modern contraception. Our study highlights the importance of early detection of depression and of addressing mental health issues to assure non-altered cognition in making contraceptive choices particularly during education and family planning counselling activities.