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**Effect of the Postpartum “Green Star” Family Planning Decision Aid on the
Uptake of Long-Acting Reversible Contraception among Pregnant Adolescents,
Tanzania: Facility-Based Quasi-Experimental Design**

No: 19DN019

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EXECUTIVE SUMMARY

Background: Adolescent pregnancies remain a significant national problem, becoming a critical health and social priority in Tanzania. Recent data indicate a huge unmet need for postpartum family planning methods among adolescent mothers putting them at high risk of subsequent unplanned pregnancies. Researchers developed a postpartum Green Star family planning decision aid that was then evaluated for its effect in decisional conflict scale (DCS), knowledge, satisfaction and uptake of long-acting reversible contraception among pregnant adolescents in Pwani region, Tanzania.

Methods: This was a facility-based quasi-experimental study design with a control. A total of 66 pregnant women were purposively recruited in a study and assigned to an intervention group (n= 33) or a control group (n=33). Recruitment ran concurrently for both groups since the groups were in different districts. The intervention group received both routine family planning counseling and a decision aid at each visit time. Whereas the control group only received routine family planning counseling. Decisional Conflict Scale (DCS) was used at Time 1 (28 gestational weeks) and Time 4 (within 2 days after childbirth), knowledge at Time 1 and Time 3 (36-38 gestational weeks), while satisfaction and uptake were both assessed only at Time 4. Lower scores for DCS signaled lower decisional conflict. We used SPSS version 24 to analyze data, regression analysis and independent sample t-test was used to analyze the data.

Results: A total of 64 participants were included for analysis, 32 participants in each group. Mean difference score of the DCS (Time 4 minus Time1) in the intervention group was lower than in the control group (intervention group: -24.7 [SD 7.99] vs. control group: -11.6 [SD 10.9], $t=-5.53$, $p < 0.001$). The mean difference scores for the subscales uncertainty, values clarity, support and informed were significantly lower in the intervention group than in the control group ($p = < 0.001$). Mean difference score of the Knowledge (Time 3 minus Time1) was significantly higher in the intervention group than in the control group (intervention group: 4.53 [SD 2.54] vs. control group: 2.0 [SD 1.45], $t=4.88$, $p < 0.001$). Mean score of satisfaction was significantly higher in the intervention group than in the control group (intervention group: 100 [SD 0.0] vs. control group: 55.8 [SD 30.7], $t=8.112$, $p < 0.001$). The proportion of participants who used contraception was significantly higher in the intervention group 29 (45.3%) than in the control group 13 (20.3%) ($\chi^2=17.73$, $p < 0.001$). Age was a significant predictor for DCS and LARC uptake only in the control group.

Conclusion: The effect of the decision aid was significant as it lowered decision making conflict, improved knowledge and satisfaction with decision making as well as uptake of the available long-acting reversible contraception especially to the younger adolescents. The findings implicate the usefulness of the postpartum “Green Star” family planning decision aid as it will supplement the patient-provider communications during family planning counseling in Tanzania’s antenatal clinics.