



Risk of luteal phase pregnancy with modified intrauterine device insertion eligibility

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Background

The intrauterine device (IUD) us a highly effective, longacting and reversible form of contraception. Additionally, the initiation of the device only requires a 1-time act, eliminating adherence or user dependence. Modifying insertion guidelines may remove barriers to accessing sexual and reproductive care but may increase the risk of luteal phase pregnancies.

Modified insertion Guidelines?

Pros:

- Immediate initiation provides protection sooner
- Removes barriers to patient's
- Decreases risk of unintended pregnancy with other methods

Cons:

- May increase risk of luteal phase pregnancy
- Patient history may be unreliable
- Risk of wasting device
- Risk of patients not returning

Objective: To determine rates of luteal phase pregnancy (LPP) in adolescents and young adults (AYA) initiating intrauterine devices (IUDS) using modified insertion guidelines.





Standard Guidelines for insertion of intrauterine devices:

Negative pregnancy test **AND** insertion within 7

days of menses onset

<u>OR</u>

Switching from a hormonal form of contraception

Methods

Assessed 3,535 randomly-selected IUD insertions from a retrospective cohort of AYA receiving IUDs with modified insertion guidelines.

11-24 years old, negative pregnancy test, patient at BC4U, an adolescent-specific Title X clinic in Aurora, Colorado.

Providers inserted according to standard guidelines or modified guidelines. Modified guidelines included:

Patient reported abstinence or 100% condom use

- Since LMP
- Since discontinuation of contraceptive method

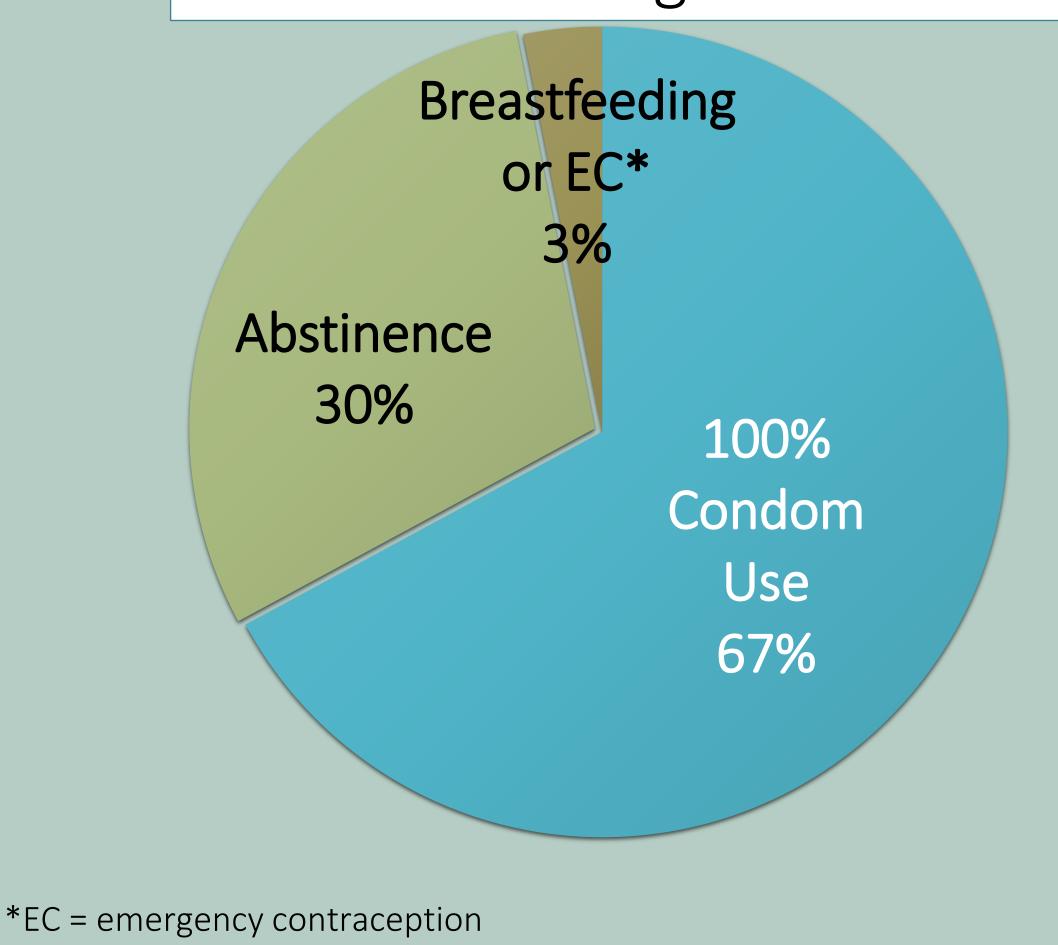
Two groups: AYA within standard guidelines and AYA outside standard guidelines with modified guidelines

Primary outcome: No evidence of pregnancy following IUD placement.

Results 3,535 IUDs 843 (42.3%) within 7 placed at BC4U days of menses 1,445 72.5% switching from a hormonal method Standard guidelines Modified Guidelines 296 (14.8%) met 1,543(43.7%) 1,992 (56.3%) both criteria Pregnancy status Pregnancy status known known 1,210 (60.7%) 926 (60%) 0 (0-0.31%) 1 (0-0.59%) Pregnant Pregnant

	Standard Guidelines n=1,992	Modified Guidelines n=1,543	P-Value
Age (Median Range)	21 (11-24.9)	20 (11-24)	0.009
Race/Ethnicity			0.05
Non-Hispanic White	53.4%	48.7%	
Non-Hispanic Black	5.9%	6.2%	
Non-Hispanic Asian	2.3%	2.2%	
Hispanic or Latino	26.4%	30.6%	
Non-Hispanic Other	11.9%	12.3%	
Days Since LMP (Median Range)	6 (0-35)	17 (8-35)	<0.001

Reasons providers followed modified guidelines



Discussion

- AYAs are at a higher risk for unintended pregnancies and may not have the resources to return to the clinic.
- Adopting a more liberal approach will allow providers to provide better care.
- The modified insertion guidelines do not result in a higher rate of luteal phase pregnancies.
- Even in an AYA population which is known to have complex reproductive behaviors and unclear medical history.

References

Nelson AL, Massoudi N. New developments in intrauterine device use: focus on the US. Open Access J Contracept. 2016 Sep 13;7:127-141. doi: 10.2147/OAJC.S85755. PMID: 29386944; PMCID: PMC5683151.

Acknowledgements

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