Contraception Use in Women with Diabetes

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**Background:** Diabetes is a chronic disease state which may affect woman’s contraceptive choice. Most contraceptives are safe to use in patients with diabetes less than 10 years duration and with no current complications from the disease including retinopathy, neuropathy, nephropathy, or cardiovascular disease. Women with these complications are strongly encourage to use a contraception product without an estrogen component.

Previous studies show that misinformation regarding contraception is common among patients. According to a study conducted at the University of Arkansas for Medical Sciences (UAMS) University Women’s Clinic (UWC), of the 117 participants, 30% reported no prior awareness of EC and an average knowledge scores was only 5.4 (SD=4.1) out of 13. These results lead the investigators to explore appropriateness of contraceptive usage among a specific population in which a contraceptive choice may contribute to long-term health problems such as in diabetes.

**Objectives:**
1. Determine appropriateness of previous contraception use among women with diabetes.
2. Evaluate patients’ functional knowledge of various contraception methods.
3. Assess patient satisfaction with student pharmacist contraception counseling.

**Rationale and Anticipated Significance:** Pharmacists and student pharmacists are well-positioned to provide education regarding appropriate contraception use. Ideally, contraception counseling would include: administration, possible mechanisms of action, effectiveness, and possible side effects of the currently available contraceptive options. It is our hope that this project will have a positive impact on patient knowledge and awareness of various contraception methods.

Review of contraception use and knowledge among women with diabetes in our settings will guide the healthcare professional team to create appropriate education materials for women with diabetes at the UWC in the future.

**Methods:** This study is a pilot, retrospective cohort study a convenience sampling method. The participants will be recruited from the UWC. A self-administered survey will be adapted from a previous study will be used to assess contraception knowledge. Contraception counseling will be offered to all participants by a student pharmacist under Dr. Ragland’s supervision.

Descriptive statistics of the participants will be generated. The two-tailed paired t-test will be conducted to compare differences in the contraception knowledge scores between the two groups (appropriate contraception use vs. inappropriate contraception use). Regression analysis will be used to explore factors that might relate to the contraception knowledge scores (e.g., age, race, education level, type of diabetes, diabetes onset, etc.).

**Student Responsibilities:** The student research fellow will be responsible for recruiting and consenting patients, surveying patients, and providing contraception counseling. The student will
also have the opportunity to prepare data for analysis purposes. Ultimately, a poster presentation at a local, regional, or national level will be encouraged.

References:
4. Ragland D, Payakachat N, Pate A, Harrod SE, Ott RE. Emergency contraception counseling: a pharmacist’s role in patient-centered health care. *(In review)*