

## Background

- Preconception care refers to interventions that can improve a woman's health as well as pregnancy outcomes through prevention and management of biomedical, behavioral, and social risk factors.
- It is important that all women of childbearing age receive preconception care, regardless of pregnancy intention, as approximately half of all pregnancies in the U.S. are unintended.
- Pharmacists and student pharmacists can play key roles in the provision of preconception care.
  - While pharmacist provision of preconception care in traditional healthcare settings has been reported, there have been no published examples of pharmacists providing such services through outreach efforts in the community.
- The purpose of this project is to examine the feasibility and potential impact of a pharmacist-directed preconception care outreach program.

## Methods

- A pharmacist-directed preconception care outreach program was developed.

Figure 1. ONU HealthWise Mobile Health Clinic



- It followed the model proposed for preconception health services:
  - 1) risk identification
  - 2) education
  - 3) intervention

- The outreach program was conducted via a mobile health clinic (Figure 1) at four community events such as county fairs and festivals.
- In order to identify patient-specific risks, women completed a brief, one-page questionnaire based on preconception care recommendations from the Centers for Disease Control and Prevention.
- Once a woman completed the questionnaire, she received personalized written and verbal counseling from a pharmacist, pharmacy resident, or supervised student pharmacist.
- This counseling informed her whether she met health goals as established by national guidelines and entailed education, interventions, and/or referral to local resources to address her preconception healthcare needs.
- Women who indicated on the questionnaire interest in how to have a healthy baby received an additional handout and applicable verbal counseling.
- The project was approved by the Ohio Northern University IRB.

## Results and Implications

### PRECONCEPTION HEALTH NEEDS AND BARRIERS

- One hundred thirty-five women ages 18-45 years have been impacted by the outreach program thus far.
- Table 1 shows preconception health risks identified among participants. Table 2 shows barriers to routine health care reported by participants.

Table 1. Preconception health risks reported by participants (n=135)

Barrier	%
Current use of cigarettes	20%
Not taking folic acid/multivitamin daily	67%
Insufficient physical activity	75%
Overweight or obese	80%
Hypertension	10%

Table 2. Barriers to routine health care reported by participants (n=135)

Barrier	%
No insurance to cover the cost of the visit	11%
Unable to get an appointment	13%
No transportation	11%
Too busy	33%
Unable to take time from work	19%

### EXPERIENTIAL OPPORTUNITIES

- So far, five pharmacists, two PGY-1 pharmacy practice residents and over 25 student pharmacists have worked together to deliver the outreach events.
- This type of program can be delivered by supervised student pharmacists as part of introductory or advanced pharmacy practice experiences (IPPEs or APPEs).
- Student pharmacists engaged in these outreach events gained valuable experience in patient assessment and counseling, providing them opportunities to strengthen their skills.

### FEASIBILITY, REPLICABILITY, AND POTENTIAL IMPACT

- The outreach program was feasible to implement, with over 130 women participating.
- Many preconception health-related needs that can be impacted by pharmacist education or intervention were identified; in addition, multiple barriers to receipt of routine healthcare services were reported.
- Outreach programming in the community can help fill gaps in preconception healthcare, especially for patients who are not receiving such care in traditional healthcare settings.
- This program can be replicated by colleges/schools of pharmacy as well as community or ambulatory care pharmacies. Health status can be self-reported, in which case the only materials required are the questionnaire, personalized results form, and healthy baby handout. If desired, equipment to facilitate screening for hypertension or high blood sugar can be incorporated to identify undiagnosed health risks.
- There is great potential for pharmacists and student pharmacists to improve maternal and child health outcomes through provision of preconception care across various venues.

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