

# #PlanA: Through Education and Advocacy Empower Students to Practice Safe Sex Behaviors

District IV NABP/AACP Grant Award to Pharmacy Students

Kayla Craig, PharmD Candidate 2026

Marisa Marcath, PharmD Candidate 2026

Dr. Mary Beth O'Connell, Project Advisor



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# Unintended Pregnancies in the United States

**41.6%** of all pregnancies<sup>1</sup>

**51.5%** of pregnancies in women **20-24 years**<sup>1</sup>

**65% higher** college dropout rate<sup>2</sup>

**Insufficient education** on reproductive health in grade and high school<sup>3</sup>



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# #PlanA Project Partners

- Representatives Kara Hope and Stephanie Young, Michigan legislators
- Eric Roath, PharmD, Director of Government Affairs,  
Michigan Pharmacists Association
- Students for Reproductive Justice, Wayne State University
- Planned Parenthood of Michigan



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# #PlanA Project Purpose and Interventions

- Decrease reproductive health knowledge gaps among college students
- Empower students to practice safe sex behaviors to prevent unintended pregnancies

**#1**

**Train student pharmacists**  
to become competent  
reproductive health  
educators

**#2**

Provide **reproductive  
health trivia events** across  
Wayne State's campus

**#3**

Give interactive,  
comprehensive **reproductive  
health seminars** to WSU  
students on the main and  
health campuses



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# Intervention #1: Train Student Pharmacists

## Training

- Review reproductive health pharmacotherapy module
- Attend 1 hour #PlanA training session
- Complete pre- and post-knowledge surveys
  - $\geq 90\%$  post-survey score to participate

## Student pharmacist outcomes

- **44** second to fourth year **student pharmacists**



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## Intervention #2: #PlanA Trivia Events



*Michigan Pharmacists Association Annual Meeting - Wayne Alumni Reception*



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# Intervention #2: #PlanA Trivia Events

## Events

- **14** investigator-developed trivia items
- **23 sessions across campus**
- **Candy** and/or **condoms** for answering questions
- **Birth Control Pharmacist contraception product kit**



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# Intervention #2: #PlanA Trivia Outcomes

## Participants

- **634 students**
  - 64% female, 35% male, 1% other (transgender, nonbinary)
  - 60% freshman and sophomores, 32% junior and seniors, and 8% graduate student (PhD, MS, post doc, medical student)

## Outcomes

- **Questions answered:** 3 per student (range 1-14)
  - **Correct answers:** 1.8 questions (range 0-8)
- **Time spent at table:** 2.5 minutes (range 1-13)
- **Education value:** 9.2 (range 2-10)



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# Intervention #3: #PlanA Reproductive Health Seminars

Jan

Presentation creation and student pharmacist training

Jan

Pre-, post- and follow-up survey creation

Jan - Aug

Attendee recruitment

Feb - Aug

Seminars and surveys

April - Oct

2-month follow-up surveys sent

## #PlanA: Through Education and Advocacy Empower Students to Practice Safe Sex Behaviors

Kayla Craig, Marisa Marcath and Mary Beth O'Connell, PharmD,  
Lambda Kappa Sigma Professional Pharmacy Fraternity

with the help of  
Christa Greenwald and Clara Keller, Students for Reproductive Justice  
Representative Kara Hope, Michigan 74th House District

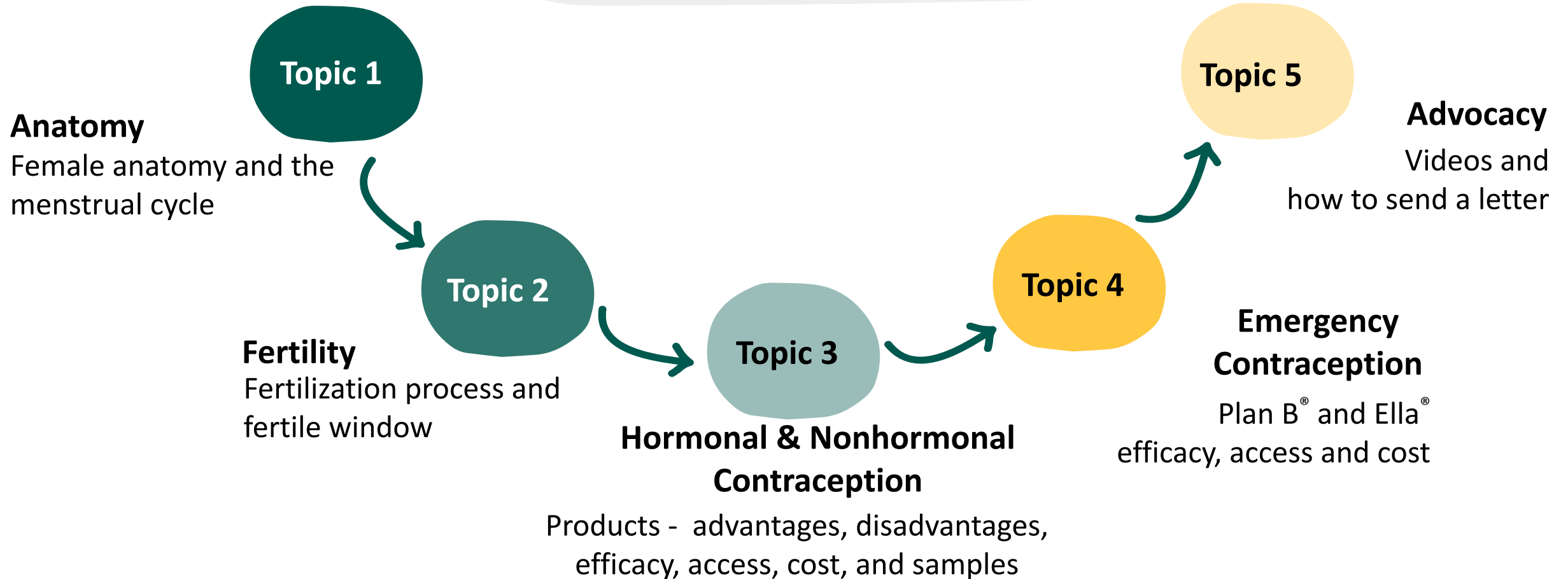
Eric Roath, PharmD, Director of Government Affairs, Michigan Pharmacists Association



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# #PlanA Seminar Topics



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# Seminar Surveys

- **Anonymous codes**
- **10-item** pre- and post-Qualtrics surveys – \$5 gift card
  - Pre-survey + **6 demographic items**
  - Post-survey + **13 program evaluation items**
- **15-item follow-up survey** two months after their seminar – \$10 gift card



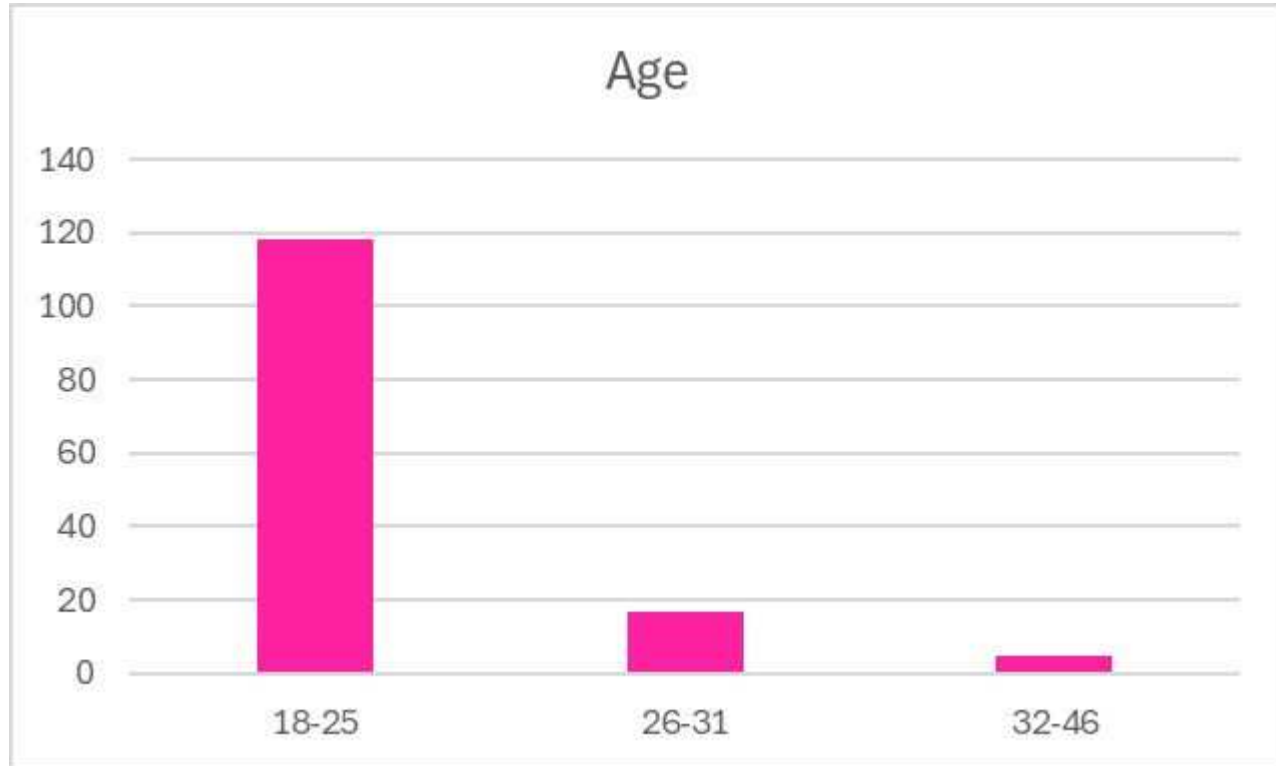
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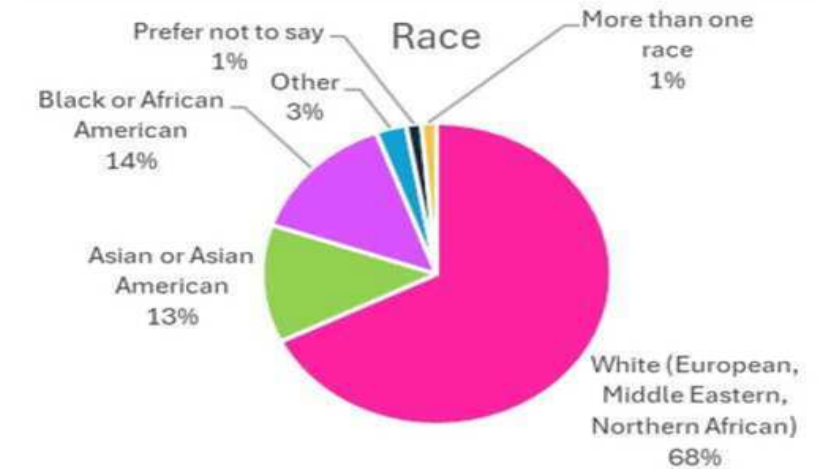
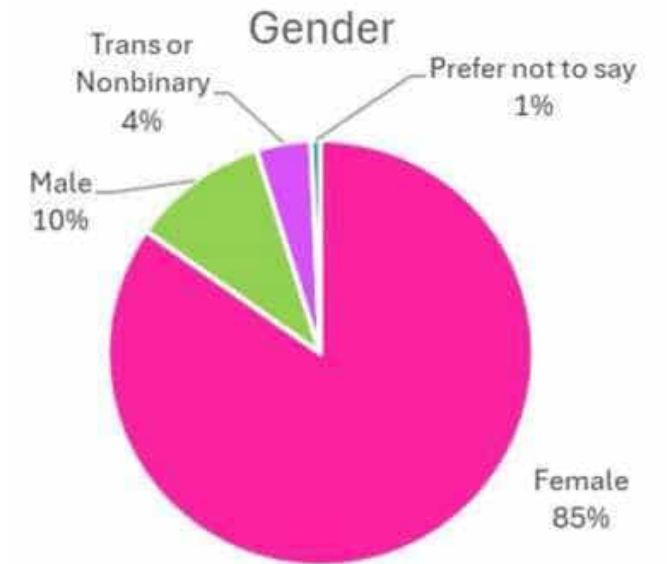
# #PlanA Seminars



# Seminar Attendee Demographics



Age N = 140



Gender and Race N = 144



# Seminar Survey Outcomes

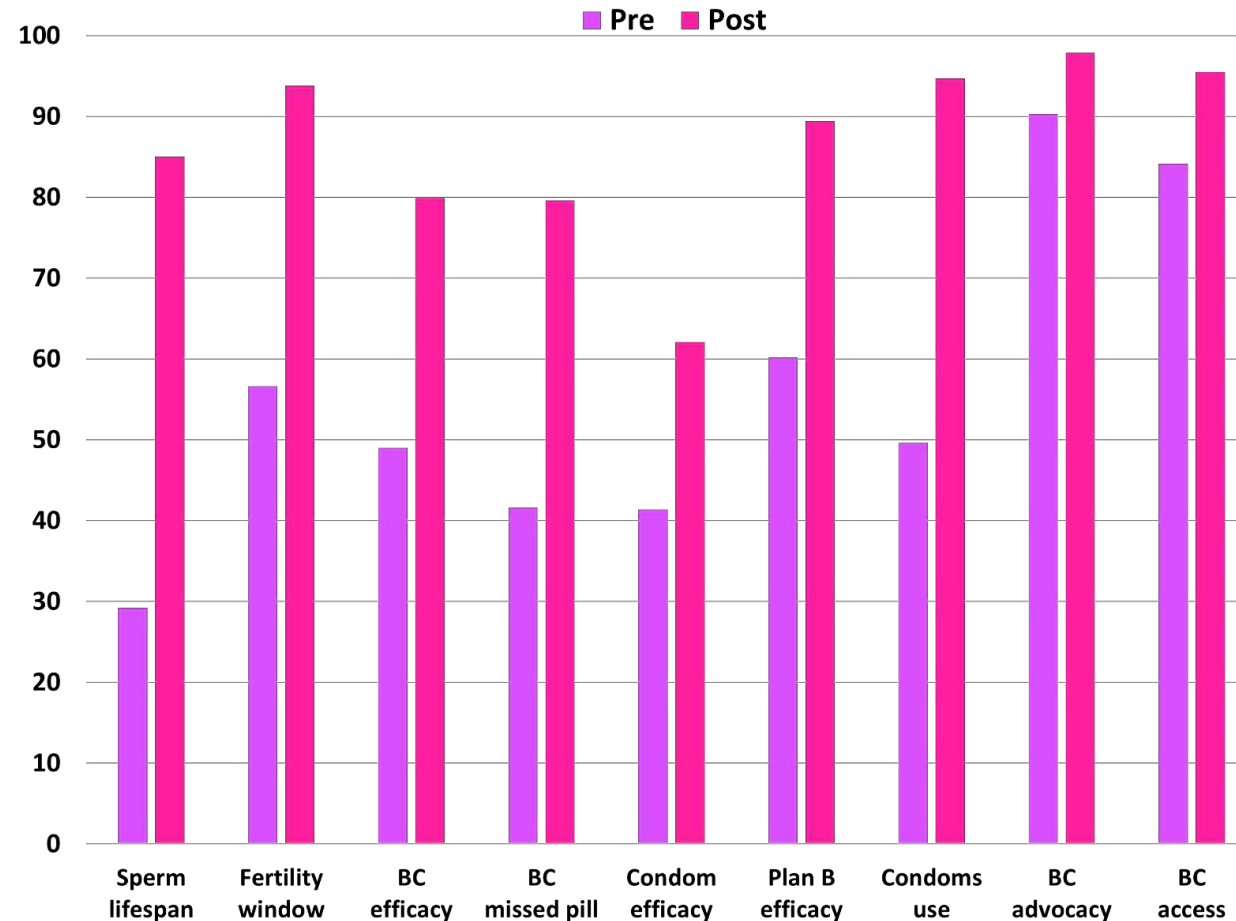
- **175** students
  - **153** survey-eligible students
  - **145** completing both surveys (**94.8% response rate**).
- Post-survey total knowledge scores were significantly higher than pre-survey total scores (**84% v. 56%**, respectively, **p = <.001**).
- **Nine of the ten** content questions were **statistically significant** documenting knowledge improvement.



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# Seminar Pre- and Post-Survey Outcomes



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# Seminar Post-Survey Program Evaluation

98.2%  
Agreed\*

My knowledge about reproductive health and safe sex behaviors greatly increased as a function of attending this seminar.

97.2%  
Agreed

The information presented today will help me prevent an unintended pregnancy.

97.1%  
Agreed

I would recommend #PlanA seminars to other students.

95.3%  
Agreed

Being able to obtain contraception from a pharmacist would help decrease unintended pregnancies.



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\* = strongly agreed and agreed



# Two-Month Follow-Up Survey Findings

Statement	Strongly Agree/Agree Responses	Neutral/Disagree Responses
The #PlanA seminar was <b>very helpful</b> to me to <b>prevent future unintended pregnancies</b> .	97 (98.0%)	2 (2.0%)
After attending the seminar, I am <b>more confident in making the correct birth control and reproductive health decisions</b> for myself to prevent unintended pregnancies.	98 (99.0%)	1 (1.0%)
After attending the seminar, I am <b>more confident in incorporating safe sex behaviors</b> into my relationships.	97 (98%)	2 (2.0%)
After attending the seminar, I am <b>more informed</b> about the availability and correct use of <b>emergency contraception</b> .	88 (97.8%)	2 (2.0%)
Have you <b>emailed your Michigan House of Representatives legislator</b> a letter to support pharmacists prescribing birth control? <b>Yes</b> No, I will do so now. No, I will do later. No, I do not plan on emailing.	<b>18 (18.2%)</b> 26 (26.3%) 40 (40.4%) 15 (15.2%)	



# Discussion... A Learning Experience

- **Trivia**
  - Student recruitment
  - Timing
- **Seminar**
  - Greater seminar attendance
    - Signing up, not showing up
    - Public vs student organization seminars
    - Men and LGBTQ+
  - Quality control – how are sessions being run?



**#PlanA**  
Learn to decrease unintended pregnancies

**Learn about**

- Various contraceptives
- Condom use
- Emergency contraception
- Advocacy

**Attend a #PlanA Seminar**

- **GIFT CARDS** for participation
  - \$5 for completing both the pre and posttest
- A **FREE** goody bag (pregnancy tests, condoms and more!)

Check out the QR code below to see when and where seminars will be



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PharmD Program

For more information, please email [mmarcath@wayne.edu](mailto:mmarcath@wayne.edu)



**#PlanA Seminars**  
Learn to practice safe sex and avoid unintended pregnancies

**Why Attend?**

**Take control of your reproductive health!**

- Learn about fertility and contraception
- Opportunities for advocacy
- Contraceptive kit demonstrations
- Receive a **FREE** reproductive health goody bag with pregnancy tests, condoms, and more!

**Check us out!**

Let us know the date you plan to attend!

[Seminar Google Form](#)

**Seminar Dates**

**FEBRUARY**

- 2/7 (Wed) - EACPhS 610 11:30-12:20pm
- 2/13 (Tues) - Hilberry A 11am-12pm
- 2/23 (Wed) - Hilberry A 11am-12pm
- 2/29 (Thurs) - Hilberry A 11am-12pm

**MARCH**

- 3/9 (Tues) - Hilberry D 11am-12pm
- 3/21 (Thurs) - Hilberry D 5pm-6pm
- 3/28 (Thurs) - Hilberry A 4:30pm-5:30pm

**APRIL**

- 4/1 (Mon) - Hilberry D 1pm-2pm

**Be Informed**

Complete #PlanA Seminar surveys and get a \$5 GIFT CARD. Complete the follow-up survey and receive an additional \$10 GIFT CARD!



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**WSU APPLEBAUM PHARM D**

**\*\*Hilberry A and D are on the 2nd floor of the Student Center\*\***

# Conclusions

- Providing students with a brief presentation on critical reproductive health information and safe sex behaviors decreased their knowledge gap on these topics and changed some health behaviors among college-aged students.
- The positive student responses to our program highlight the critical need for sexual health programs available to college-aged students to fill gaps in grade and high school programs.
- Potentially, this type of reproductive health education program might decrease the high unintended pregnancy rate among college-aged students.



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# Next Steps for #PlanA Research and Programs

Two posters at  
the 2024 ACCP  
Annual Meeting  
– Finalist for  
Best Student  
Poster

Trivia paper to  
*Am J Col Health*

Seminar paper to  
*Pharmacy* journal

Trivia and  
seminars with  
APhA-ASP's  
Operation  
Reproductive  
Health



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**Thank you to District IV  
NABP/AACP for supporting us!**



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# Questions?



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# References

1. Rossen LM, Hamilton BE, Abma JC, Gregory ECW, Beresovsky V, Resendez AV, et al. Updated methodology to estimate overall and unintended pregnancy rates in the United States. National Center for Health Statistics. Vital Health Stat 2(201). 2023. DOI: <https://dx.doi.org/10.15620/cdc:124395>.
2. Prentice M, Storin C, Robinson G. Make it personal: How pregnancy planning and prevention help students complete college. Washington, DC: American Association of Community Colleges. 2012. Available from: <https://powertodecide.org/what-we-do/information/resource-library/make-it-personal>. Accessed May 5, 2024.
3. Kaye K, Suellentrop K, Sloup C. The Fog Zone: How misperceptions, magical thinking, and ambivalence put young adults at risk for unplanned pregnancy. Washington, DC: The National Campaign to Prevent Teen and Unplanned Pregnancy. 2009. Available from: <https://powertodecide.org/what-we-do/information/resource-library/fog-zone-summary>. Accessed May 5, 2024.



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