



USING INCENTIVES TO REDUCE CIGARETTE SMOKING DURING PREGNANCY

Presented by:

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 - Kari Beth Watts, MD (to continue project)
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Background

- Smoking is one of the most common risk factors for many health conditions worldwide
- 10% of women reported smoking during the last 3 months of pregnancy
- Out of those smoking 3 months prior to pregnancy, only 50% quit
 - 40% relapsed within 6 months after delivery

- **Research Question**

Can monetary incentives help improve smoking cessation during pregnancy?

- **Goals and Objectives**

- To improve the rates of smoking cessation during the course of pregnancy

- To determine if providing financial incentives makes a difference in quit rate

Methodology

- Pregnant smokers were recruited over a 12-month enrollment period and followed until delivery.
- They were given a quantification smoking survey and cotinine saliva test

Inclusion Criteria

- \leq 20 weeks gestation
- Smoking at first office visit
- Answered yes to smoking questionnaire and had a positive cotinine saliva test

Exclusion criteria

- $>$ 20 weeks gestation
- Quit prior to coming to first office visit
- Answered not smoking to questionnaire and negative cotinine saliva test

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- Once enrolled, they were evaluated monthly (separated by at least 24 days) until delivery.
 - They received a monthly participation gift card worth \$20.
 - If not smoking per survey and negative cotinine test, then given three additional \$20 gift cards for a total of \$80 in gift cards.

Survey

Cigarette Smoking Questionnaire

Which of the following statements best describes your cigarette smoking over the last month? (circle one)

- I have smoked daily over the last month
- I have smoked daily over the last month, but have cut down
- I have smoked occasionally over the last month
- I have not smoked at all over the last month

Cotinine Test

LOSS OF BLUE BAND AND APPEARANCE OF RED BANDS

NicAlert SALIVA TESTING AREA

1 Place strip on surface below. 2 Squeeze 8 full drops of saliva on padded end.
3 Wait 30 minutes. Blue line disappears. 4 Number of lowest colored band is result.

TEST COMPLETE WHEN BLUE LINE DISAPPEARS

SMOKER

NO TOBACCO EXPOSURE

IMPORTANT:
LOWEST COLORED BAND READING IS YOUR FINAL RESULT.
Example: Sample at right renders a result of Level 2 - not 4 or 5.

PLACE 8 DROPS OF SALIVA ON PADDED AREA
IMPORTANT:
DO NOT DEPOSIT SALIVA ABOVE GREEN ARROWS.

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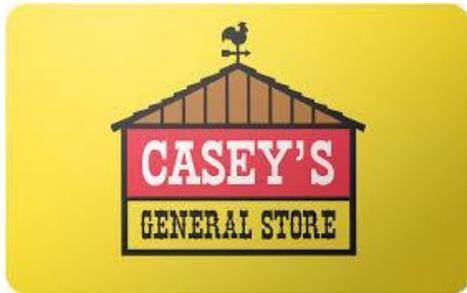
NO TOBACCO EXPOSURE

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PLACE 8 DROPS OF SALIVA ON PADDED AREA
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Gift Cards

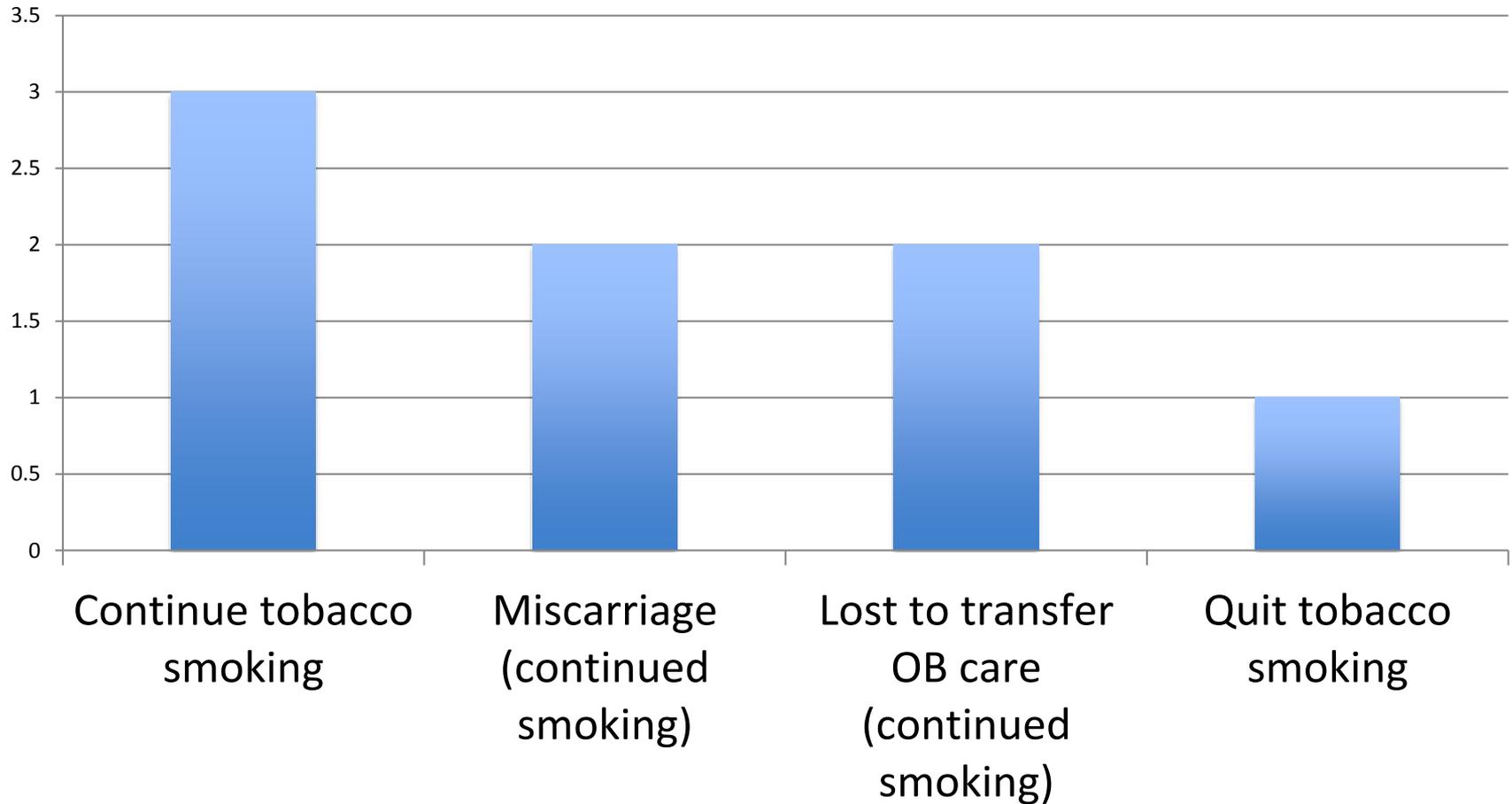
- Patients could choose from the following \$20 gift cards.
- They could not be used to buy alcohol or cigarettes



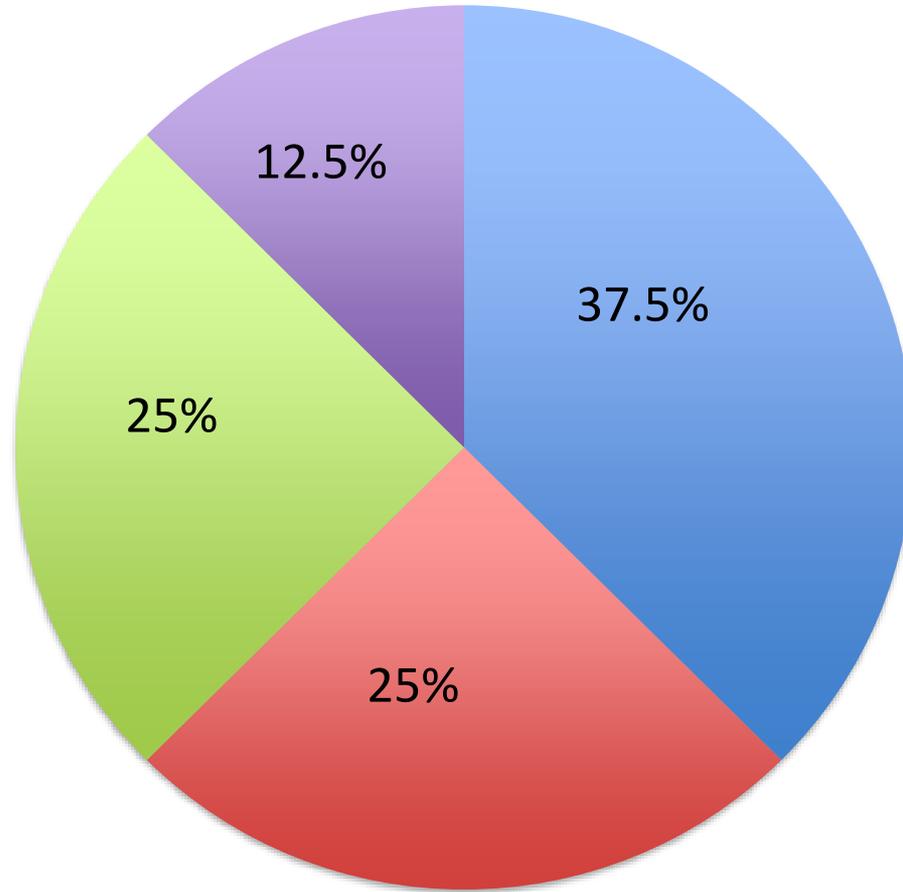
Demographics

- 100 % Caucasian
- 8 total participants enrolled to date
- 100 % Medicaid Insurance coverage
- Education level: 7/8 some high school, 1/8 some college

Tobacco Use in Pregnancy with Incentives (N=8)



Results



- Continue tobacco smoking
- Miscarriage (continued smoking)
- Lost to transfer OB care (continued smoking)
- Quit tobacco smoking

Conclusions

- Study is ongoing. We have not completed pregnancy cycle to date
- Data thus far demonstrates preliminary quit rate of 12.5 % (N=8 total participants enrolled)
- Results are not statistically significant at the time of reporting results to date ($P = 0.5959$)

Conclusions

- Challenges with use of cotinine saliva tests. Will consider switch to urinary cotinine testing in future
- Limited Sample size (N=8). Increased study size would yield higher power
- High participation loss rate in study (2 lost to miscarriage, 2 lost to transfer)

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- Dr. Lanser as our attending support
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