

# A Qualitative Study for the Development of a Text-based Intervention for Smoking Cessation in Pregnant Women



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## Study Aim

To elicit qualitative feedback from pregnant smokers and recent quitters to support the development of a state of the art, interactive, and intensive text messaging program that promotes smoking cessation in pregnant women.

## Background



- Smoking during and after pregnancy can lead to many birth complications<sup>3</sup>:
  - Premature birth or low birth weight<sup>1</sup>
  - Placental abnormalities<sup>3</sup>
  - Miscarriages<sup>1</sup>
  - Sudden infant death syndrome<sup>1</sup>
  - Respiratory tract or ear infections<sup>2</sup>
- In 2010, 10.7% of the nation's pregnant mothers smoked during the last 3 months of pregnancy.<sup>4</sup>
- According to national guidelines, a mainstay of treatment for tobacco dependence among pregnant smokers is regular, tailored, and intensive counseling.<sup>5</sup>
- Text-based mobile health interventions have been shown effective in disseminating such counseling messages.<sup>6</sup>

## Methods

Study Population: 23 pregnant smokers and pregnant women who have recently quit smoking in Washington DC



Interviewed to discuss their smoking behavior and ability to quit smoking during pregnancy. General feedback for the proposed text program and prototype messages was also collected.

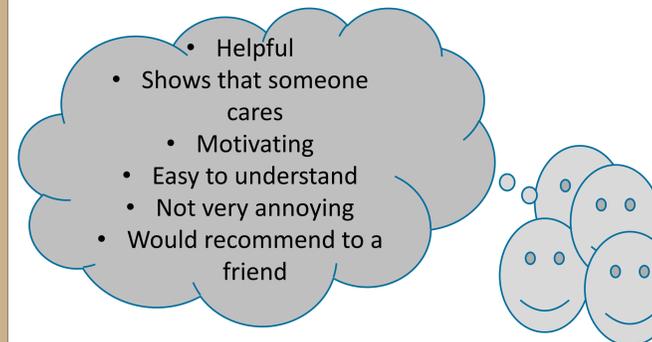
Interviews were transcribed and data was analyzed using thematic analysis.

## Population Profile

- The study population was mostly African American (78.3%) between 18-40 years old
- 47.8% were pregnant with their first child
- 60.9 % were unemployed
- 78.2% own a smartphone
- Top 3 causes of stress were Financial problems, relationships, and family
- The majority (78.7%) of participants had not used any aids to quit smoking besides counseling from a health care provider

## Program Feedback

Response to the prototype messages were overwhelming positive



- "..Seems like someone, even if it's just a phone, is there rooting for you"
- "..Sounds like the voice or person sending the message is cheering you on and letting you know that you're not out there by yourself; that you're not at it alone and you can quit"
- "It takes an extra push to get people to notice or think about things-- this can help people to better themselves"

## Emergent Themes

Desire for factual information

- "I feel like the harder hitting messages would get people's attention best: if you don't stop smoking this is the outcome for your child."
- "I like that these messages make you think about your baby and give you new pieces of information"
- "Add something about if you smoke how small your baby might be in comparison."

## Emergent Themes (cont)

De-stressors and calming techniques

- "Yes, I would do this kind of breathing routine...when I'm stressed out I need to sit myself down, breath and try and think about something else to get stress out of my mind "
- "I love music, music keeps me sane, right now I listen to music or take a walk if I'm stressed."
- "Music gets you distracted, makes you happy for a couple of minutes"

## Conclusion

- Overall the text-based intervention was regarded as a good method to guide pregnant smokers through smoking cessation, to provide encouragement, and be supportive.
- Study participants expressed an interest for the program to provide factual information and coping techniques for stress
- Our findings provide that this intervention can be an instrumental resource for pregnant women who desire to quit smoking.

## References

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