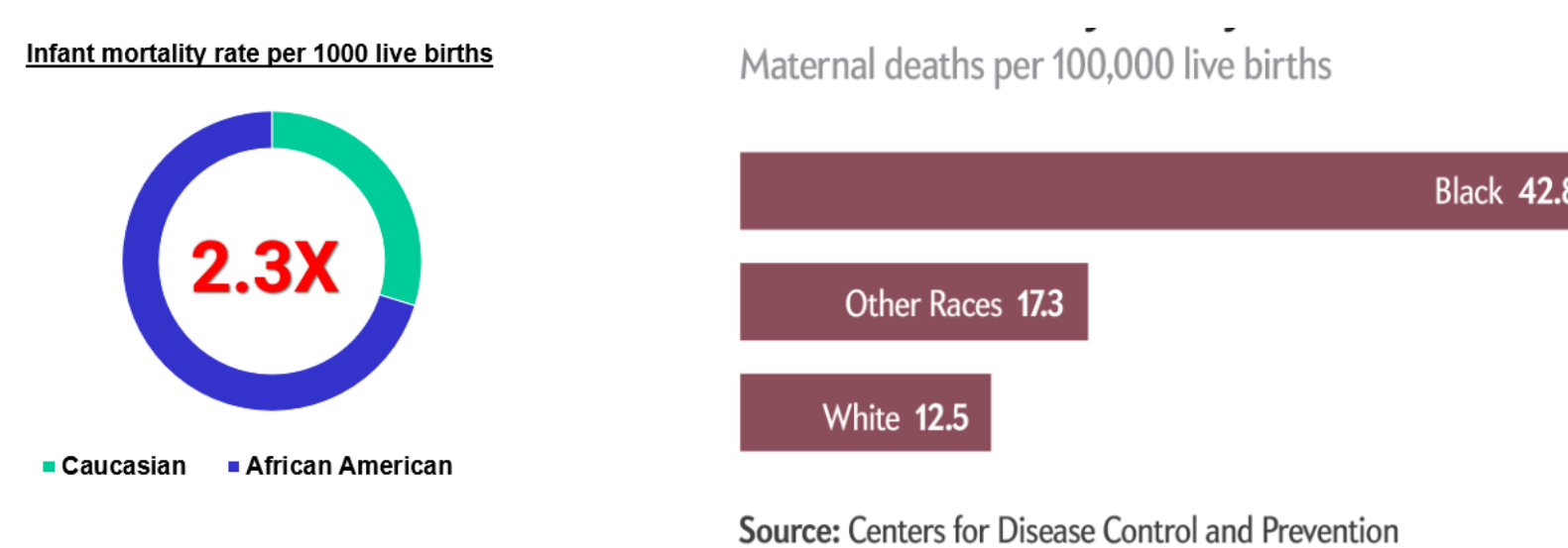


Evaluating the Impact of Vaccine Education on Vaccine Hesitancy in African American Mothers

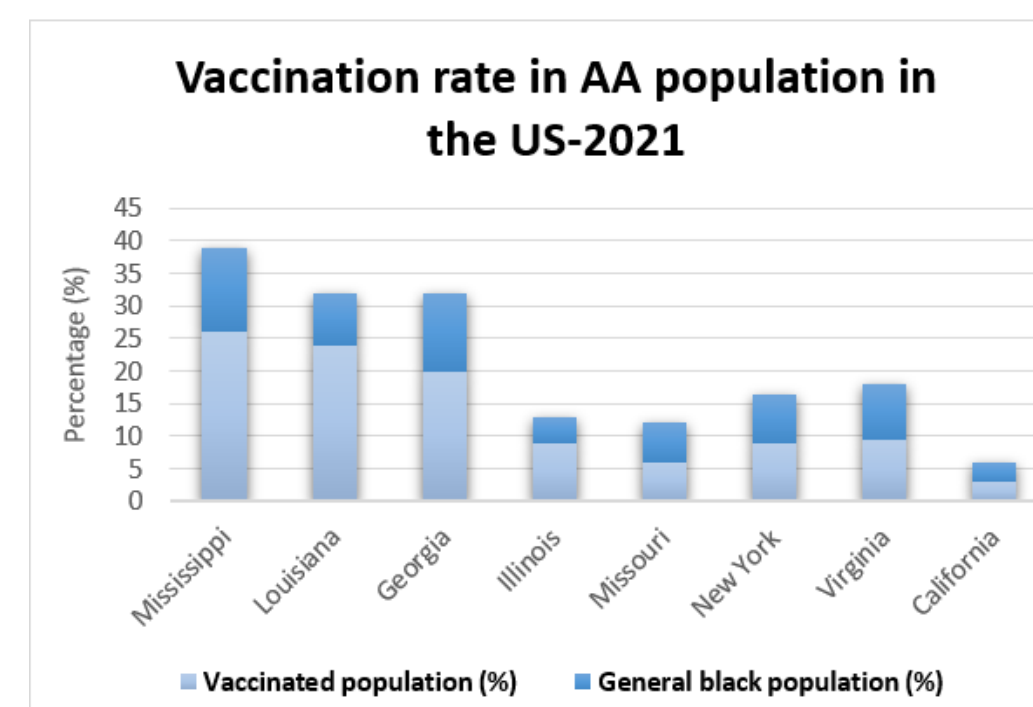
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Background

- Vaccine preventable infections have been a leading cause of death in the world, and some of the most vulnerable populations include pregnant women and children 0-5 years old.
- Recent data suggests that pregnant mothers and infant mortality is 2x higher within African Americans (AA) compared to Caucasian population¹.



- There has also been a steady decline in US vaccination rates, most notably within the AA community².



- Medical neglect and abuse have led to mistrust and vaccine hesitancy in this community¹.
- Studies have shown that providing education can increase vaccination rates amongst pregnant women^{3,4}.

Objectives

- Improve AA mothers' perception of vaccines
- Provide information on the impact of vaccines on maternal and fetal health outcomes

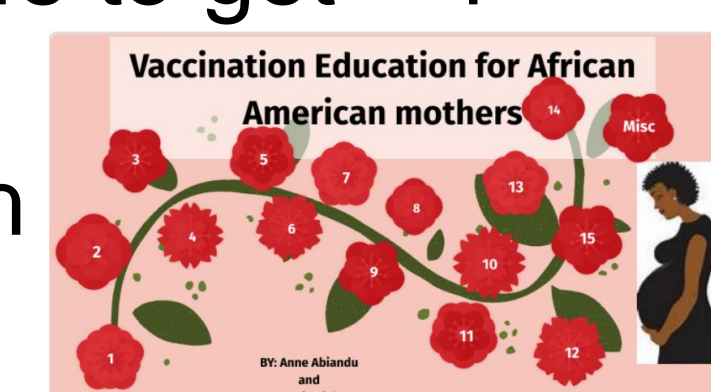
Method

Pre- survey:

- To gather info on participant perceptions of vaccines. E.g., I am very knowledgeable about the effects of vaccines on pregnancy, benefits outweigh risks when it comes to getting vaccines, etc.

Intervention:

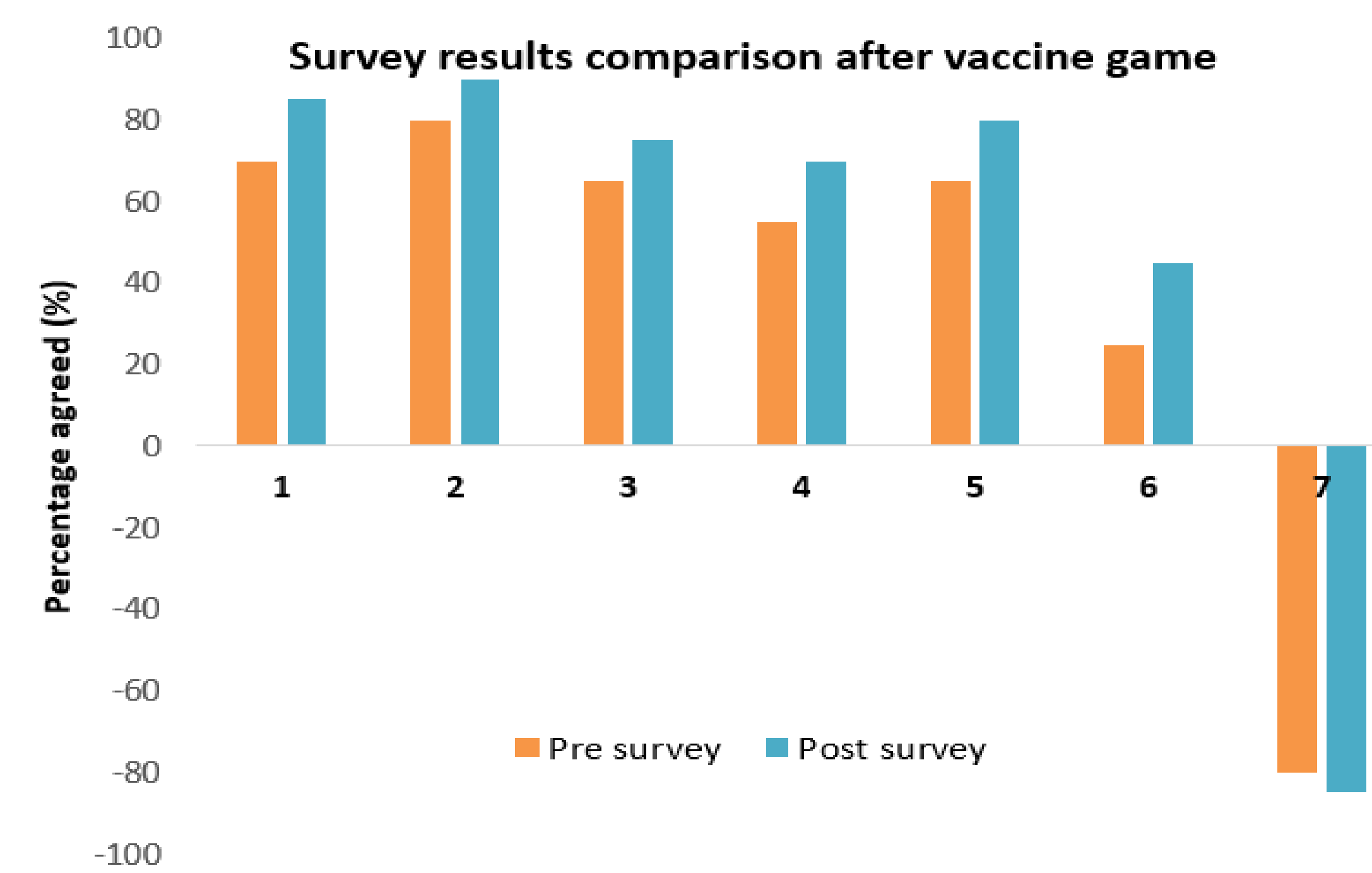
- Interactive vaccine education game addressing vaccine literacy, hesitancy and misconceptions. E.g. It is safe to get ≥ 1 vaccine per time, vaccines cause miscarriages and birth defects, etc.



Post survey:

- To evaluate impact of game on participants' outlook on vaccines and hesitancy.

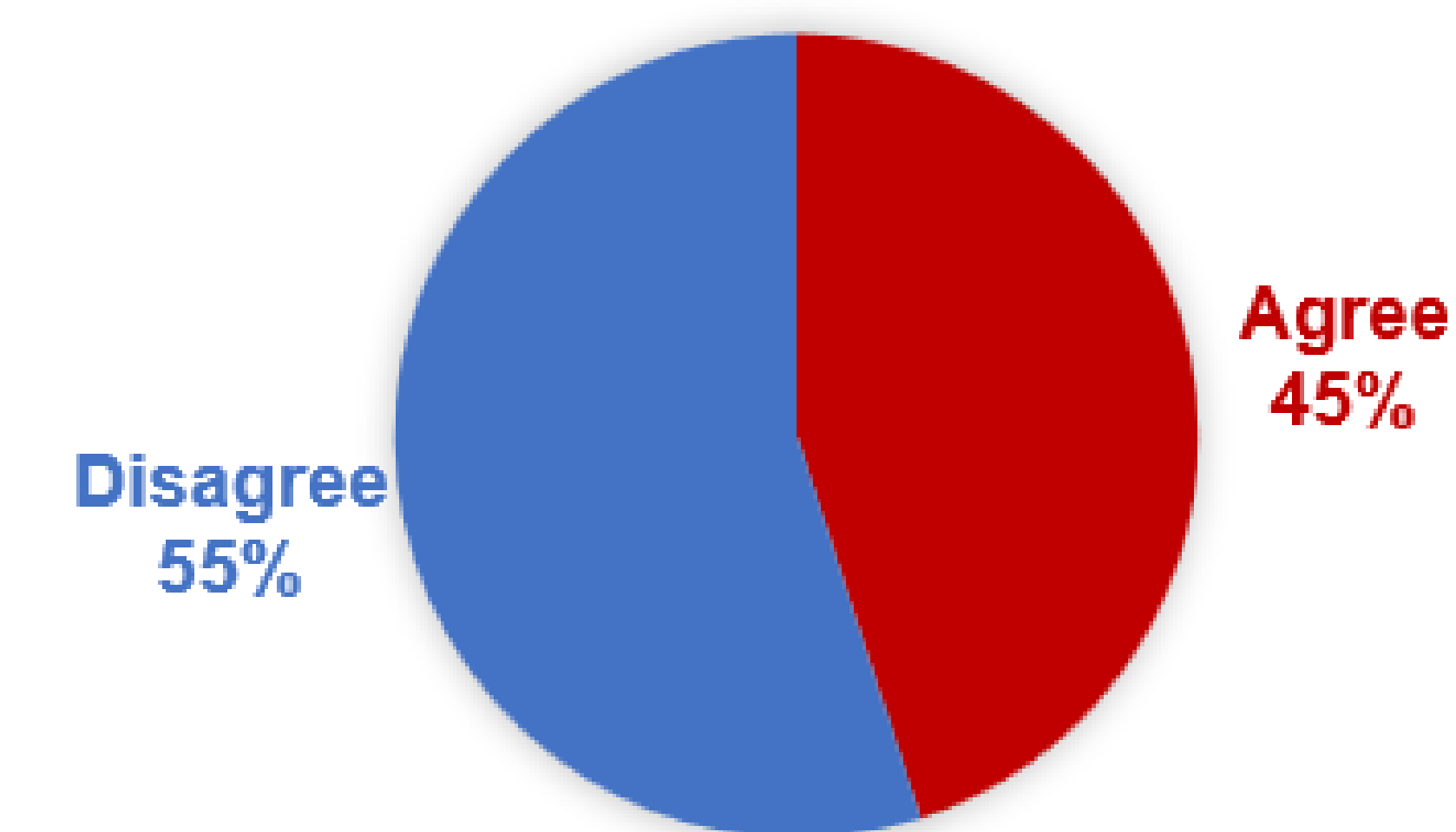
Results



KEY

- Vaccination has a very important role to play in healthcare
- I am very confident to ask my pharmacist about vaccines and my health concerns
- I have a very positive attitude towards vaccines
- I would describe myself as someone who is very health conscious
- Benefits outweigh risks when it comes to vaccinating myself and kids
- I am very knowledgeable about the effects of vaccines on pregnancy
- Vaccines are more dangerous to kids than the diseases themselves

Vaccination can cause health problems during pregnancy?



Discussion

- Though there are multiple factors that contribute to infant and maternal mortality amongst AA population, this project aims to improve outcomes by **preventing diseases** that impact mortality rates, through **increased vaccination**.

- 90% of participants noted increased confidence to ask their pharmacists about vaccines and there was increase in participants' perceptions and attitude towards of vaccination.

- Post survey showed a ≥ 20% increase in participants who agreed that:

- Benefits of vaccinations outweigh risks in pregnancy.
- Vaccinations play an important role in healthcare.
- Overall, there was a 20% increase in the number of participants who strongly agreed to be more knowledgeable about the effects of vaccines on pregnancy after the vaccine game and post survey.



Note: **No change was observed** in perception of the participants on the effects of vaccines on unborn fetus, hence more conversation about vaccine safety in pregnancy is needed amongst AA mothers.

Limitations

- Small sample size of 20 participants, hence we were unable to analyze data for statistical significance.
- This project needs more funding to conduct a larger study and provide incentives to participants.

Future program expansion

- Launch online website to increase reach to more AA mothers within and outside St. Clair county.
- Create online version of vaccine game + surveys to increase engagement and collect more data for analysis.



Conclusion

The vaccine education game:

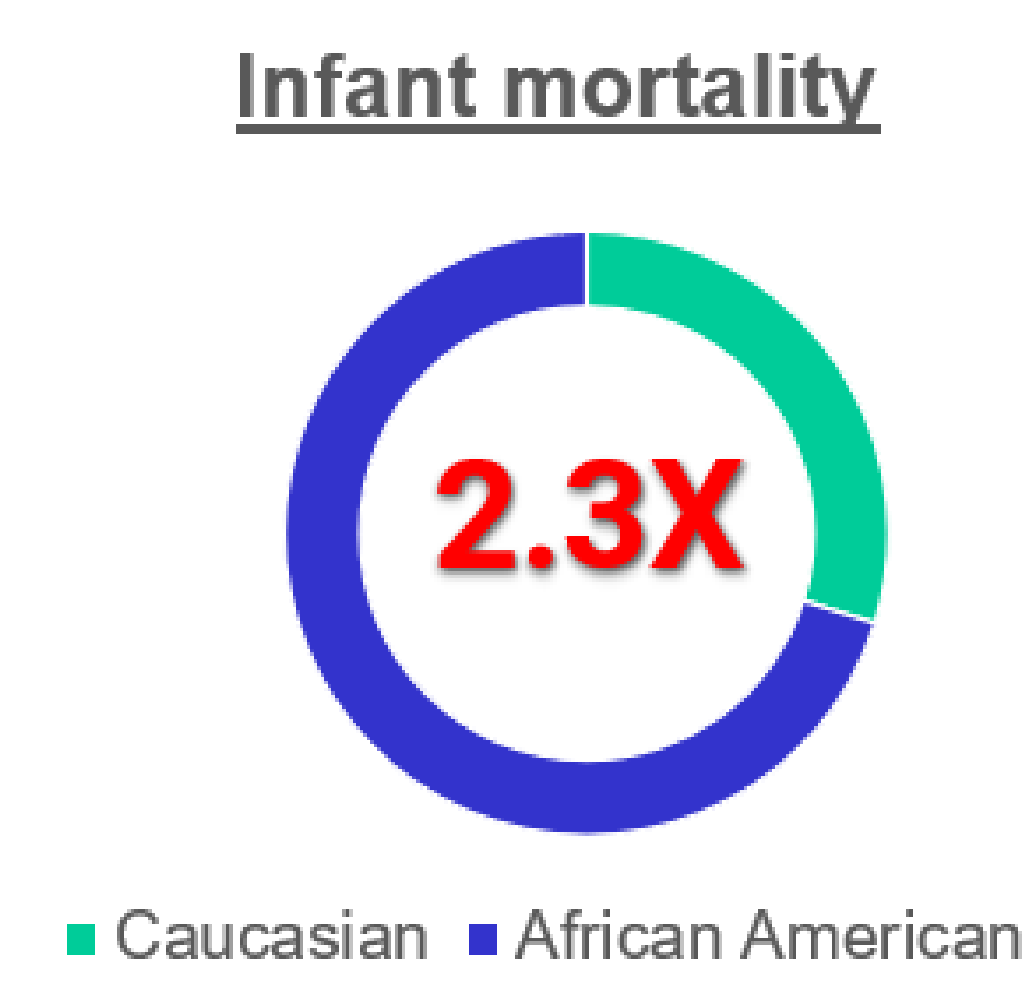
- Improved AA mothers' perception of vaccines
- Increased their knowledge on the impact of vaccines on maternal and fetal health outcomes.
- This project demonstrates a **creative intervention** that could be adapted to **increase vaccine uptake in AA mothers**.

Acknowledgements

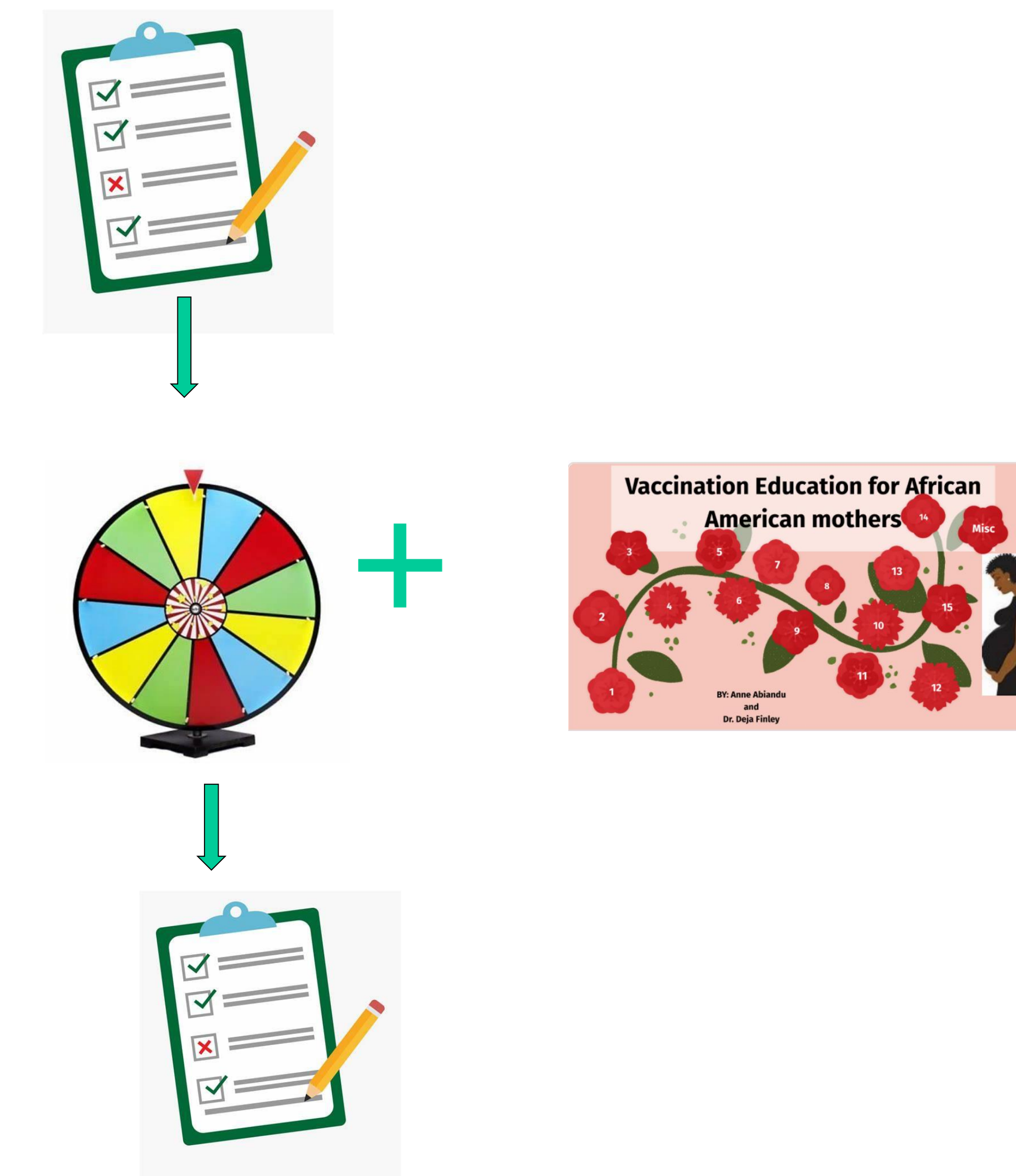
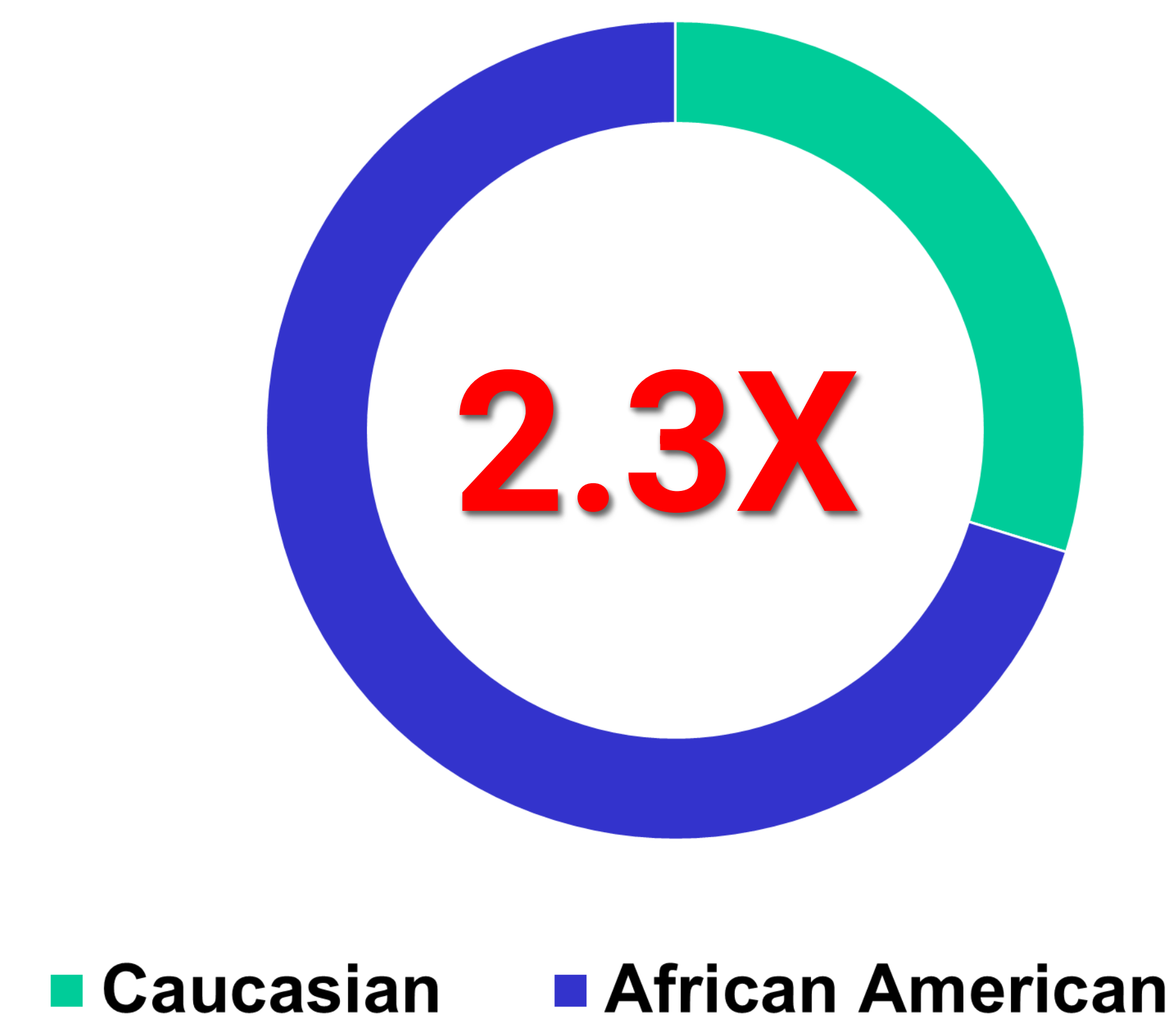
Special thanks to SIUE School of Medicine for the funding this project; Market Avenue Church of God for providing the baby shower venue and Dr. Herndon for data analysis.

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Infant mortality rate per 1000 live births



Increased confidence to ask pharmacists about vaccines, improved perception of vaccines, increased positive attitude towards vaccines, increased health consciousness, mandatory vaccines, increased trust amongst providers, benefits outweigh risks, increased knowledge
 Future: talk on effects of vaccines during pregnancy and trimesters
 cos no improvement seen