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 population.
- There has also been a steady decline in US vaccination rates, most notably within the AA community.
- Medical neglect and abuse have led to mistrust and vaccine hesitancy in this community.
- Studies have shown that providing education can increase vaccination rates amongst pregnant women.

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

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.

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.

References
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