

ABSTRACT

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

Purpose: Vaccine preventable infections have been a leading cause of death throughout the world prior to the use of vaccinations. Recently, there has been a decline in vaccination rates throughout the United States, most notably within the African American (AA) community. Medical neglect and abuse have led to mistrust and vaccine hesitancy in this community. The objectives of this project are to improve AA mothers' perception of vaccines and to increase their knowledge on the impact of vaccines on maternal and fetal health outcomes.

Methods: This project received Institutional Review Board approval. A vaccination-education event for pregnant AA mothers was organized and qualitative pre- and post-surveys were distributed to participants of the event. The surveys utilized the 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The pre-survey gathered current perceptions surrounding vaccinations prior to the educational intervention. The intervention included an interactive vaccine education game addressing immunization-health literacy, vaccine hesitancy and misconceptions about vaccines within historically minoritized communities. The game required each participant to indicate whether each vaccine statement was a fact or myth. After which, a pharmacy student provided more insight by leading a facilitated discussion on why each statement was a fact or a myth. Resources about vaccines and additional definitions for commonly used terms pertaining to vaccines were also provided to study participants. After the educational vaccine game, participants were issued post-surveys to evaluate impact of the game on participants' outlook on vaccinations and hesitancy.

Results: Pre- and post-surveys were completed by 20 participants. Analysis of the pre- and post-survey data demonstrated that the educational vaccine game positively affected attitudes and perceptions about vaccines during pregnancy. Surveys demonstrated a 25%-point increase in those who strongly agreed that benefits of vaccinations outweigh risks in pregnancy. There was also a 20%-point increase in participants who strongly agreed that vaccinations play an important role in healthcare. The post survey further revealed a decrease in the number of participants (according to the median scores) who initially agreed that vaccination caused health problems during pregnancy. 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.

Conclusion: Developing strategies and creative educational outreach methods are important to successfully connect with and address vaccine misconceptions among AA mothers. Implementation of the vaccine education game by a student pharmacist improved AA mothers' perception of vaccines and increased their knowledge on the impact of vaccines on maternal and fetal health outcomes. This project demonstrates a creative intervention that could be replicated or adapted to increase vaccine uptake among historically minoritized a groups in other communities.