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Understanding COVID-19 Vaccine Hesitancy in Underserved Populations

KeNecia Dones

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Executive Summary

Introduction of the Problem

Vaccination remains one of the most effective ways to limit the spread of infectious diseases and reduce mortality and morbidity in the United States, especially in underserved populations. African Americans and Latinos are eight times more likely to die than White Non-Hispanic populations of COVID-19-related complications (CDC, 2020). Although vaccines are currently offered and approved to anyone over five years old in the United States, there continues to be vaccine hesitancy in the underserved population.

Racial and ethnic minority groups have had the highest effects of the COVID-19 pandemic. With different cultural backgrounds and experiences, the effects of COVID-19 differ among races. (Lopez, Hart, & Katz, 2021). Various social determinants of health have prevented racial minorities from receiving adequate care and resources for COVID-19. Social determinants of health among racial minorities include factors such as where people work, live, learn, play, and worship which can affect health risks and outcomes (Lopez, Hart, & Katz, 2021).

Compared to other ethnicities, African Americans and Hispanics have higher death and hospitalization rates. Among these minority groups, conditions include living in overcrowded conditions or multigenerational housing to sustain economic changes. Also, essential service jobs such as -nursing, construction, housekeeping, transportation, and retail jobs are not allowed to work remotely from home and are greatly exposed to COVID-19 (Lopez, Hart, & Katz, 2021). Before the implementation of this project, the project site did not perform screenings on vaccination hesitancy. Questionnaires revealed that more education provided, more community

events, and extended vaccination hours provided a 30% increase in vaccines received among underserved populations.

Literature Review

As COVID-19 affects the United States, it has disproportionately impacted underserved communities and racial minority groups. According to the Center for Disease Control and Prevention (CDC, 2020), Blacks or African Americans and Latinos are more likely to die from COVID-19-related complications than White, Non-Hispanic populations, five times and eight times more likely. The social determinants of health theory help to explain the population-based disparities seen with COVID-19. As such, negative environmental, societal, and economic factors contribute to the morbidity and mortality of COVID-19 in specific populations. In addition to the negative impact of social determinants of health, long-standing inequities in these groups include poverty and healthcare access.

Although vaccines have been approved and offered to everyone, there continues to be vaccine hesitancy in the underserved population. Vaccine hesitancy is the delay in acceptance or refusal of vaccination despite the availability of vaccination services (Butler, 2016). The decision to accept, delay or refuse vaccination can be complex and depend upon factors such as availability, cultural concepts, and even stigma. There is a need for healthcare providers to understand underserved populations and the vaccine hesitancy of the COVID-19 vaccine. The prevalence of hypertension, diabetes, and obesity is higher in minority populations, and all three have been associated with poorer outcomes among patients with COVID-19. Yet underserved populations are still hesitant to be vaccinated (Lopez, et. al, 2021). According to Sharp Healthcare (2021), before COVID-19 vaccines became available in the U.S., only 42% of Black Americans said they planned to get one. Currently, 49% of Black people in the U.S. are

unvaccinated, yet the prevalence and complications associated with COVID-19 impact Black people at alarming rates.

Project Methods

This quality improvement project aimed to understand vaccine hesitancy in underserved populations to promote vaccine confidence and build trust in patients to the point where they will seek to be vaccinated. Since the SARS-CoV-2 virus (COVID-19) was identified it has affected the lives of all, but most importantly the underserved populations and racial minority groups (CDC, 2020). Black or African Americans and Latinos are more likely to die from complications than White Non-Hispanic populations. The project implemented a questionnaire to identify barriers to vaccination hesitancy and education to address any misconceptions and vaccine information.

East Side Health District is a health district located in East St. Louis, IL that serves underserved populations and provides both COVID Vaccines and COVID Testing free of charge. With the demands of COVID, education is very important among patients. While patients received COVID testing and filled out screening information questions were asked about vaccination status, reasons for not being vaccinated, and offered vaccine if applicable. Implementation took place from June to August 2022. During the implementation stage, the nurse practitioner was responsible to assess every patient's registration form to identify vaccination status if the vaccine was offered, and identify barriers to vaccination hesitancy.

Evaluation

There were 565 surveys collected in the underserved community of East St. Louis, IL during free COVID-19 testing. Due to the incompletion of surveys only 506 surveys were able to be used. Survey collection took place during COVID-19 testing that was available Monday thru

Friday. The survey was six questions that included a 7-choice scale ranging from strongly disagree to agree for each item (Appendix A). In addition to the 6 questions, the survey contained demographic questions such as age, sex, race, education, primary language, and occupation to identify vaccine hesitancy among underserved populations.

During the implementation stage from June 2022 to August 2022, 283 females (56%) and 223 males (44%) completed surveys. Of the surveys collected, 180 were from ages 18-34 (36%), 193 from ages 35-54 (38%), 84 from ages 55-74 (17%), and 49 from ages 75 or older (10%). The underserved population of African American and Hispanics accounted for 96% of all surveys collected. The other 4% was Non-Hispanic White, Asian, Native American, and Mixed races. Of the surveys collected 65% had more than high school level education (community college, 4-year degree, and graduate degree) with most working in occupations of healthcare (50%) and education (30%). Information from the six questions demonstrated that everyday stressors and the belief that COVID-19 is not severe contributed to 75% of the underserved population from being not being vaccinated for COVID-19. The other 25% of the underserved population was vaccinated or planned to be vaccinated (Figure 1).

After participants were tested for COVID-19 and completed the survey, follow-up calls were made, and information was provided after COVID-19 results were provided to patients. All patients/participants were offered the COVID-19 vaccination or booster. patients had the option to receive the COVID-19 vaccination or booster as needed. Data collected from follow-up phone calls suggested past experiences or unknown fear of COVID-19 was a delay in receiving the vaccine. Some also explained that they had to make a decision between staying employed or not because the vaccines were mandated, and it was very "new". There was a 30% increase in

vaccines received among underserved populations due to an increase in education provided, more community events, and extended hours for vaccination availability.

Impact on Practice

Multiple practice improvements were achieved with the DNP project's implementation in the underserved population. Patients provided positive feedback with follow-up calls, education, and the offering of the COVID-19 vaccine which resulted in a 30% increase in the vaccination rate at the project site. With project data, the clinic used the information to make changes to support the underserved population in overcoming vaccine hesitancy, which included increasing vaccine accessibility, extending clinic hours, and addressing misconceptions about COVID-19. Even after the implementation of the project, the underserved population has continued to receive COVID-19 vaccination and boosters. The anticipated long-term impact will include a decrease in vaccine hesitancy among underserved populations and a decrease in healthcare costs for the effects of COVID-19. This project can be replicated by providing education about the vaccine, having vaccines readily available, and extending hours.

Conclusion

COVID-19 vaccine hesitancy and underserved populations continue to be a problem in the United States. With the ongoing research and evolution of the COVID-19 disease, healthcare providers play a vital role in building rapport, providing resources, and making the COVID-19 vaccine accessible. Factors including accessibility, affordability, and community engagement make a difference in the willingness to receive the COVID-19 vaccine in underserved populations. It is important as healthcare providers to reach underserved populations where they live, work, and worship. Providing education, follow-up calls, and building trust continue to

remain a priority to directly monitor hesitancy in communities affected by COVID-19 where it is needed the most.

Author Contact Information

kdones@siue.edu