COVID-19 Impact, Mitigation, and Future Implications for a Central Phoenix Zip Code: 85034

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Overview

Our project was designed in collaboration with a multidisciplinary team to analyze and investigate the pandemic’s impact on the population within 85034, a historically underserved community near central Phoenix.

Important goals were to examine the following within the 85034 community:

- Education
- Transportation
- Economics
- Housing
- Food access
- Rates of infections and vaccinations
- The rollout of the COVID-19 vaccine
- Ethical dilemmas and concerns of the vaccine
Effects on Community College

- Visit to GateWay Community College - Washington Campus
- Many in-person classes transitioned to online
- Loss of clinical placements for nursing students
- Most staff made to work from home
- Some buildings on campus closed down
Effects on Transportation

- Enhanced safety protocols
- Limited number of passengers
- Change in Arizona Health Care Cost Containment System transportation billing
Effects on Transportation Cont.

- Phoenix Sky Harbor Airport main source of air travel
- Abides by federal mandates & recommendations
- Developed multiple methods & regulations to ensure passengers traveling safely

(CDC, 2021; PSHIA, 2021)
Effects on Economics & Housing

- Gross Domestic Product (GDP) decreased by 32% during second quarter
- Comparable to 2008-2009 recession
- By the fourth quarter, unemployment rate was 23%
- Approximately 180,000 Arizona households (1 in 6 who rent) are behind on payments

Effects on Food Access

- Unemployment rates rose substantially in this area leaving more families needing help.
- Food insecurity and changes in food accessibility seen in many homes → more required help through food stamps and food banks.
- To help provide relief, food stamps were made more accessible.
Testing and Vaccinations

- As of February 20, 2021:
  - 9 testing sites
  - 0 vaccination sites

- Between May 2020 and February 2021, over 5 months featured “substantial community spread”:
  - Case rate > 100 cases per 100k individuals
  - Percent positivity > 10%

- 85034 had the 11th lowest vaccination rate out of the 135 zip codes that make up Maricopa County
Vaccine Rollout

- Three-pronged approach to roll-out
  - Maricopa in Phase 1B as of 2/15
  - 8.3% of 85034 population is ≥65
    - 12.4% are essential workers
  - Both numbers are less than for Maricopa as a whole
- 85034 vaccination rate = 26.8%
  - Lower than for surrounding zip codes – may be justified by the lower percentage of essential workers and ≥65 population in this zip code
  - However 85034’s median income = $30,130 vs $68,649 for Maricopa County
Obstacles to Designing A Vaccination Clinic During a Pandemic

- Limited and rapidly changing vaccine production
- Phased vaccination roll outs
- Storage and handling of vaccine product
- Vaccine hesitancy

Future planning for efficient vaccine delivery in 85034 is needed
Vaccine Hesitancy

Reasons for Hesitancy

● Rapid innovation of vaccines
  ○ Casts doubts on safety
● Side effects: arm muscle ache/soreness, fever, chills, fatigue, headache
  ○ Hesitancy in voluntarily getting side effects
● False claims/Misinformation
  ○ The vaccine will alter the recipient’s DNA or change their genetic blueprint
  ○ That the COVID-19 vaccine will cause infertility
● Unknown how long protection will last
  ○ Studies are ongoing to see if future boosters will be needed after the initial vaccine(s)

Overcoming Vaccine Hesitancy

● Get the facts from the CDC, FDA, and AzDHS
● Motivational Interviewing
● Shared-decision making
Recommendations for 85034

Address healthcare disparities and social determinants of health within 85034:

- Institute student-run public vaccination clinics at Valley Metro Light Rail Stops
- Provide accurate information about vaccines and expected immune response in the form of brochures
- Partner with community organizations that provide care to vulnerable populations, such as Street Medicine
- Utilize a multidisciplinary team approach

(Keil, & Day, 2021)
Conclusion

- The zip code 85034 is an underserved, lower income area with high racial diversity.
- With the increase in unemployment, closures of businesses, and scarcity of jobs within 85034, the impact of COVID-19 is substantial.
- Residents’ access to healthcare services has been affected.
- Ongoing efforts are needed to improve healthcare access and quality for this population.
Thank you to all of the wonderful and inspiring mentors, faculty members, and students who are a part of the AHEC community.
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