



Prevalence of SARS-CoV-2 Infection in Minority Student Athletes in Riverside County

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ABSTRACT

Epidemiological studies have shown a direct correlation in greater health disparities and minority populations. A 2020 review of COVID with African American adults discussed a possible association between ethnicity, incidence and outcomes of COVID-19. Early data is being collected by Riverside County Public Health regarding the demographic of adults who have been diagnosed with COVID, with Hispanic/Latinos having the highest confirmed case rate per 100,000, and Asian/Pacific Islander and African American as second and third, respectively. No information has been obtained regarding COVID prevalence and adolescents within Riverside county. This study proposes to investigate the prevalence of SARS-COV-2 in minority High School (HS) athletes when compared to non-minority HS athletes in Riverside County.



MATERIALS AND METHODS

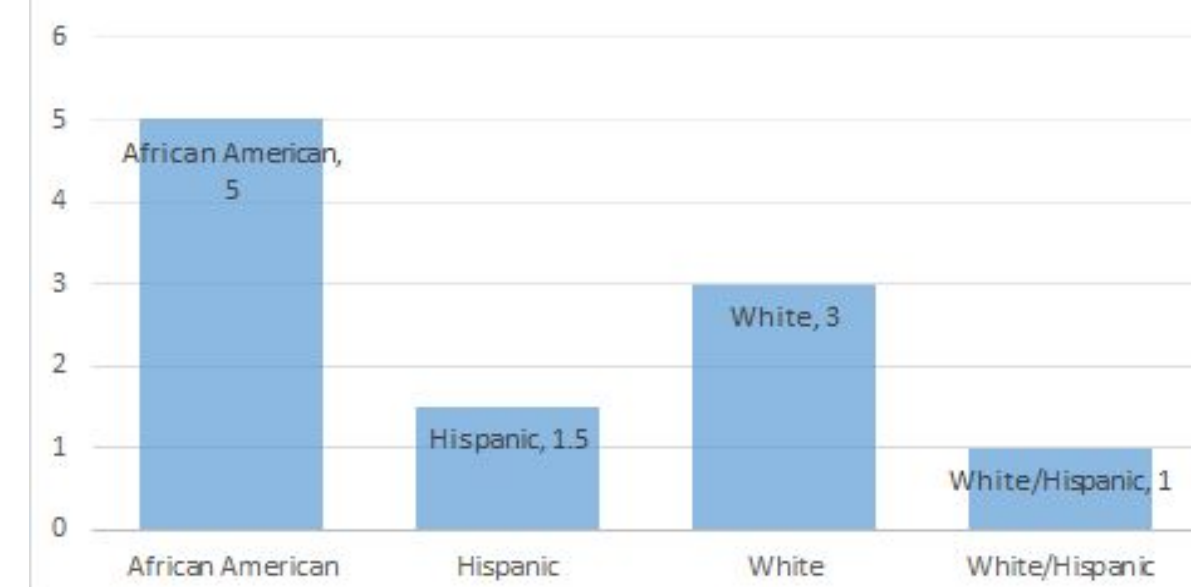
- A cross-sectional study
 - HS athletes ages 13-18 in Riverside County
- A structured questionnaire
 - Pre-participation physicals
- Prevalence determined using frequencies of COVID
 - 95% confidence interval calculated.
- Prevalence of COVID compared between minorities and non-minorities along with secondary risk factors using Fisher's exact test and chi-square with two tails.
 - P value of ≤ 0.05 as the indicator of statistical significance between the studied groups

Risk Factors	P – value	N
Minority status	0.1667	6
# of household members > 3	1.0000	5
COVID+ family members	0.3333	6
HCW family members	1.0000	6
Service worker family members	1.0000	6
Insurance status	1.0000	6
Proximity to grocery store or clinic	1.0000	6

RESULTS

Minority status of participants, members in each household, COVID+ family members, families of healthcare workers or service workers, insurance status, and proximity to a grocery store or clinic, were not found to be statistically significant risk factors for SARS-CoV-2 infection.

IDENTIFIED RACE VS. RISK FACTORS



CONCLUSIONS

- Given the COVID19 pandemic, sample size was limited due to closures of high schools and halt of sports.
- Need larger number of participants
- Methods to be changed: retrospective study, verbal consent, participants from Riverside county emergency operations center (EOC) database of documented COVID positive patients

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OBJECTIVES

- Aim 1: Determine the prevalence of SARS-CoV-2 infection in minority athletes as compared to non-minority athletes.
- Aim 2: Determine the correlation between SES/access to health care/access to healthy food options/grocery stores of athletes and prevalence of SARS-CoV-2 infection.