Screening an Underrepresented Demographic, Lake County, Through a Cumulative Questionnaire on Cardiovascular Health and Its Relation to Diet

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Cardiovascular diseases in minority populations are grossly misunderstood and studies show clear data exemplifying disparities in screenings. Studies largely focus on exhaustively researched demographics. These demographics exclude minorities, discrediting information they have found. Tools, such as the 4Leaf survey, offer insight into areas individuals could improve to reduce their BP and LDL levels. In screening 200 Lake County residents I hoped to look at the validity of the 4Leaf survey. My cross-sectional study observed a variety of locations and demographics in Lake County. These included workplaces, retirement communities, churches, and medical offices. This diverse group showed the disparity in cardiac epidemiological studies currently. Theoretically, individuals with lower 4Leaf scores (-2), unhealthy diet, would have an increased probability of CVD or exhibiting CVD subsequently. Individuals scoring higher (1+) would be less probable. The Asian population had more prevalence of CVD with higher 4Leaf scores, opposite of what occurred in the Black and White populations. In the Hispanic population, the average of CVD to no CVD was the same for mid-range 4Leaf scores. All chi-square generated p-values were greater than 0.05, accepting the alternative hypothesis that 4Leaf scores in the Asian and Hispanic demographics were concentrated towards the opposite scores we would expect whereas the White and Black individuals were concentrated towards the other. Overall, this research shows that there are disparities in epidemiological studies and tools being used currently. Using these results to make surveys that would cover more bases when diverse populations are screened would be the best approach moving forward.

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