Cameron County Community: Social and Epidemiological Assessment

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Abstract

Introduction: This assessment sought to determine the behavioral, environmental, and health issues that impact overall quality of life in Cameron County.
Methods: The Precede-Proceed model was used to frame the assessment process. Phases of this model included the social assessment and the epidemiological phase. Data was collected from the U.S. Census Bureau, Texas Health Data, and Healthy People 2020 for national goals and objectives. A prioritization matrix was incorporated to determine what health problems were most modifiable and important.
Results: Major health concerns identified among Cameron County residents were diabetes, nephritis, and chronic liver disease. Diabetes rates were remarkably high compared to the other morbidity factors. Diabetes had the biggest rate difference between the county and state mortality rates. The age adjusted rate for the county and state was taken from the most recent data available (2015) and represented a rate per 100,000 population. Cameron County's diabetes rate was 34.1 and Texas' rate was 18.8. For nephritis, Cameron County's rate was 18.8 and 16.4 for Texas. Finally, chronic liver disease was Cameron County's third leading cause of death at a rate of 18.4 and Texas had a rate of 13.8. Diabetes was the only cause that worsened from the previous year and increased in rate from 28.5 to 34.1.
Conclusion: The prioritized need for health improvement in Cameron County is diabetes. Factors contributing to this condition may be more easily modified for residents. Programs should be created for both prevention and appropriate management of diabetes.

Community Introduction

- Cameron County is 140 miles south of Corpus Christi in the Rio Grande Plains region of South Texas.
- The City of Brownsville is Cameron County's seat.
- Cameron County's climate is subtropical and sub humid, with hot summers and mild winters.

Social Assessment

- In 2015 Cameron County is predominantly made up of the Mexican race at 89.1% of the total population, 9.4% White, 0.31% Black, and 1.07 considered Other.
- In 2013 the per capita income for Cameron County was $24,802 and for Texas it was $42,638.
- The county has a higher percent on the usage of government assisted programs compared to Texas
- The percent living in poverty for Cameron County is 29.1%, which is a significant difference compared to Texas that sits at 15.6% for all ages.
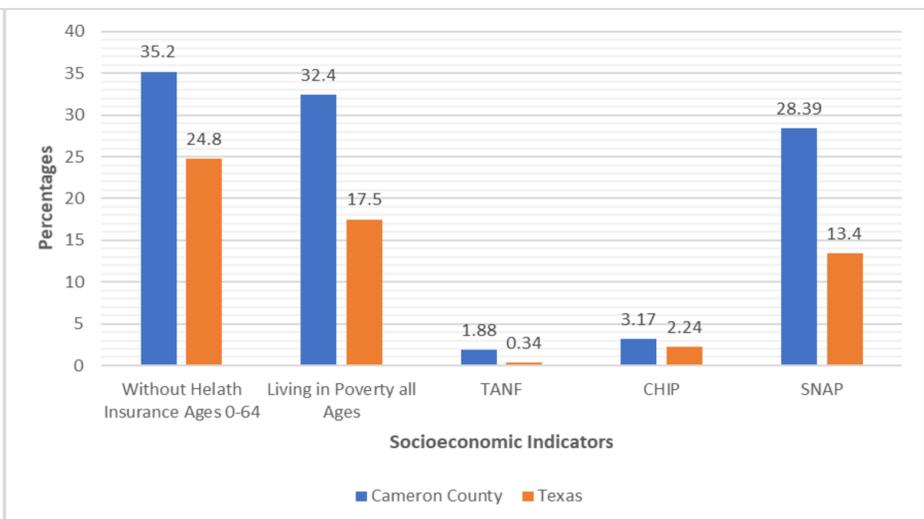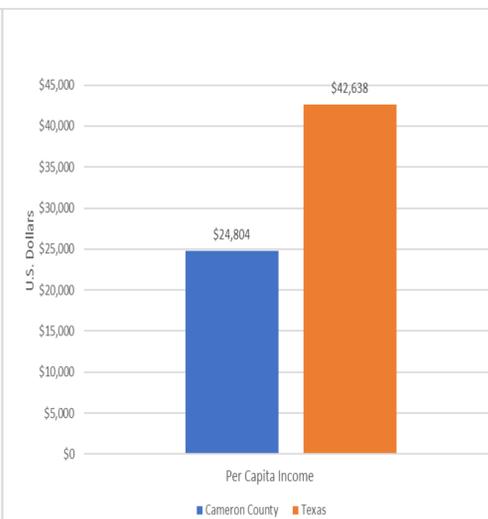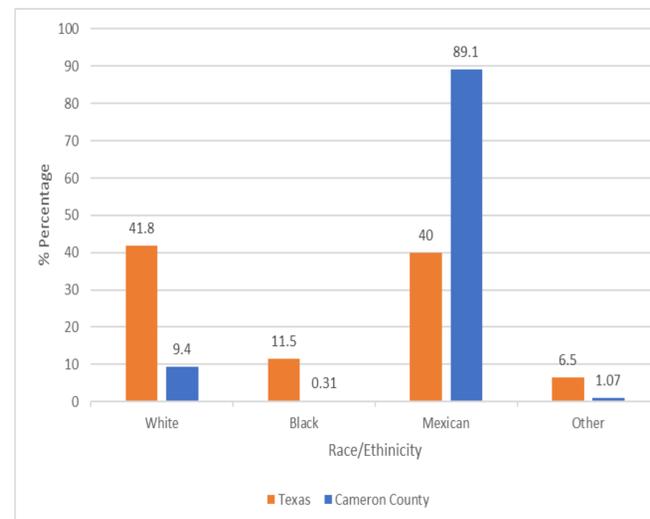
Epidemiological Assessment - Health

- Diabetes was found to be the main target to approach as the health issues that needs to be addressed.
- The average costs for Cameron County on both diabetes long and short term were higher than the cost compared to the State of Texas.
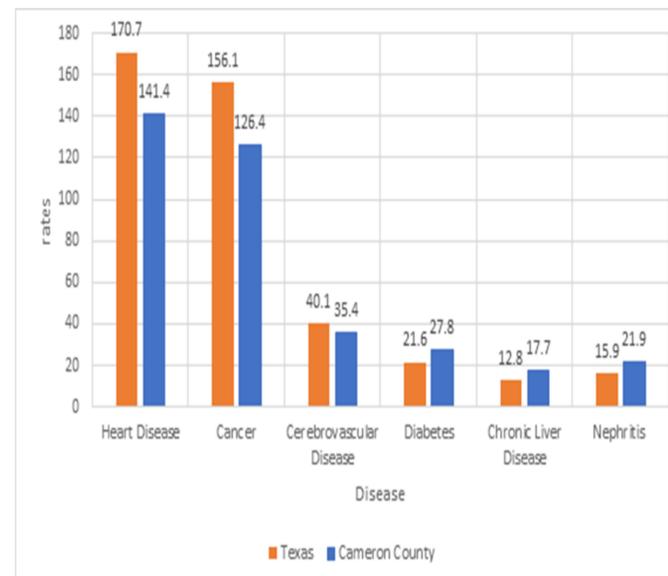
Potentially Preventable Hospitalizations	Texas	Cameron County
Angina (without Procedures)	$29,637	$26,192
Bacterial Pneumonia	$41,277	$56,409
COPD or Asthma	$37,501	$51,181
Congestive Heart Failure	$41,895	$51,064
Dehydration	$26,776	$32,454
Diabetes Long-Term Complications	$57,276	$63,627
Diabetes Short-Term Complications	$31,248	$45,869
Hypertension	$28,810	$33,450
Urinary Tract Infection	$28,883	$33,069

Epidemiological Assessment – Behaviors and Environment

- The age adjusted rate for diabetes in Cameron County was 28.5 and for Texas was 21.4 making that a 24.9% difference
- Region 11 has a higher percentage of diabetes at 14.1% compared to Texas at 9.7%.
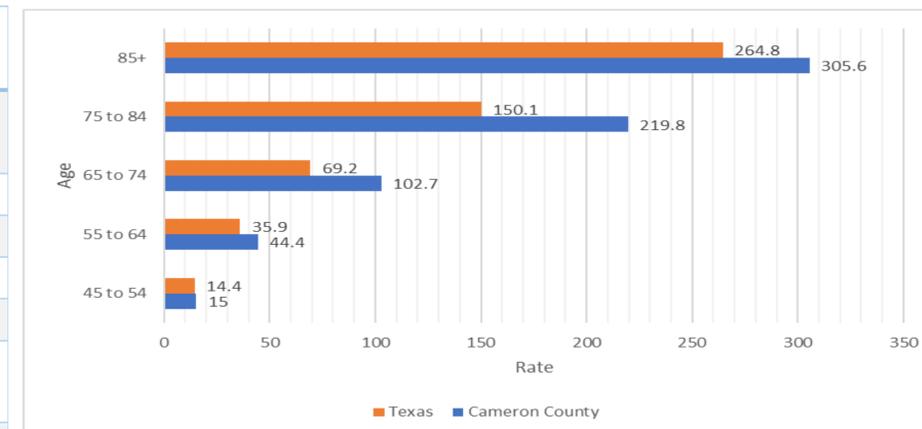
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